Summary of Trench Excavations—Housepit 1

Diana Alexander

**Housepit Location and Description**

Housepit 1 is located at the western periphery of the Keatley Creek site (EeRl-7) at the base of a slope leading to a higher terrace (Vol. III, Preface, **Fig. 1**). It is a large bowl-shaped depression with a well-defined rim and moderately steep sides. The pit diameter between the northern and southern edges of the rim crest is 22 m. The depth of the depression, measuring from the southern rim crest to the lowest point on the surface, is 1.7 m. A 50 cm wide trench (oriented to magnetic north) was excavated from the center of the housepit to approximately 1 m outside the southern rim crest (**Fig. 1**).

The diagnostic projectile points and the stratigraphic profile indicate that the housepit was occupied during at least two cultural horizons: (1) Kamloops (ca. 1,200–200 BP) and (2) Shuswap (ca. 4,000–2,400 BP). Only the floor of the Kamloops horizon occupation remains largely intact. Earlier occupational floors appear intact at the southern edge of the housepit where one or more dark soil layers underlie the Kamloops occupation. The remainder of the earlier floors and associated roof fill have been removed by subsequent cleaning of the housepit prior to the Kamloops occupation. The intact floor(s) of the earlier occupation(s) have survived only because the housepit size was somewhat smaller during the Kamloops occupation and the house depression was not excavated back to its original walls. The floor and roof fill from the earlier occupations, which were removed during the
Kamloops occupation, were displaced to the rim of the house producing a complex stratigraphy at the rim.

**Test Trench Excavation Results**

**Stratum I**

Stratum I (surface) results from aeolian and/or alluvial deposition in the housepit after the final abandonment of the housepit and collapse of the pithouse roof from the final Kamloops occupation. This black (10 YR 2/1) sandy silt is characterized by a high organic content with little gravel and cobbles and only a few scattered boulders on the surface. A well developed litter mat overlays this soil, especially at the center of the housepit where a small juniper tree is growing. Few bones, lithics, or fire cracked rocks are found in this stratum. This stratum is absent in Square E, where it was removed by pot hunters, and at the top of the rim where erosion dominates natural depositional events.

**Stratum II**

Stratum II (roof fill) represents the soil originally deposited on the roof of the pithouse during the final occupation and which collapsed into the pit following abandonment. This sandy silt has a high concentration of small gravel and a high organic content, although the organics seem less than in Stratum I. In general, this soil is a very dark brown (10 YR 2/2) but there is some color variation across the housepit and with depth. The upper part of the stratum is generally darker probably due to *in situ* development of an Ah soil horizon. The south end of the stratum (near the rim) is also darker (10 YR 2/1) possibly due to a higher organic content. Small lighter-colored
(2.5 Y 4/2) lenses also appear sporadically throughout the roof fill deposits. The roof fill contains little bone, moderate quantities of lithics, and high quantities of fire cracked rock and charcoal. The charcoal appears, in part, to represent burnt roof beams and supports. Three black basalt Kamloops points are possibly derived from this stratum, although it seems more likely that they are associated with the underlying floor. These consisted of a side notched, concave base point from Square A and two stemmed points from Square B that were recovered from a 10 cm. arbitrary level which contained both roof fill (Stratum II, and floor deposits (Strata III and IV). Therefore, it is unclear if the points are from the roof fill or floor. Stratum II is absent in part of Square E where it was removed by pot hunters. A correlation between Stratum II and the soil lenses present in Stratum V of the rim is not possible at this time due to disturbance by pot hunters.

**Stratum III**

The significance of Stratum III is problematical in that its origin is not clear. It is discontinuous along the east wall of the trench and is only represented by a few small lenses along the west wall. However, subsequent excavation strongly indicates that it is part of the Kamloops floor since Stratum IV (a definite floor deposit) in Square A appears continuous with Stratum III in Square B where not disturbed by a pit deposit (Stratum XI). Stratum III varies in color and texture from “reddish” (10 YR 3/6) silt with little gravel to dark brown (10 YR 3/2) sandy silt with small gravel. It may represent floor deposits fire-reddened by roof beams burning on the floor when the roof collapsed. This stratum contains calcined bone, some lithics, and fire cracked rock.
**Stratum IV**

Stratum IV (floor) represents the most widespread and definite occupational floor of this housepit. It was deposited during the Kamloops cultural horizon. Soil in this stratum probably originated from a number of sources including:

1. soil falling from the roof through the beams;
2. soil carried in on people’s feet and clothing;
3. ash and charcoal from hearths; and
4. aeolian silts.

It is a black (7.5 YR 2/0) organic sandy silt with little of the small gravel present in the roof fill (Stratum II). Although little bone is present in this stratum, more is present here than in the roof fill. The quantity of lithics, charcoal, and fire cracked rock varies throughout the trench but all three are present in each square. The three Kamloops points mentioned in the discussion of the roof fill (Stratum II) are most likely from this floor. The floor was easy to locate in Squares A, B, and C at the center of the housepit. However, two large pit features in Square D make it difficult to trace the floor in this square. There are two clear floor levels at the south end of Square D, the upper of which may prove to be continuous with the floor in Squares A, B, and C. This upper floor in Square D was truncated by pot hunters further south. The lower floor (Stratum VI) appears to be a floor remnant from an earlier occupation. It is a black (7.5 YR 2/0) sandy silt with small gravel found just above sterile deposits in Squares D and E. It represents a pre-Kamloops floor, probably Shuswap given the discovery of a
Shuswap point in the rim spoil (Stratum XIII). This level contains little or no bone, but relatively high quantities of lithics and fire cracked rock.

**Stratum IV and VI**

Strata IV and VI (floors) are separated by Stratum V which appears to be rim spoil (see Stratum XIII) which was used as roof fill or slumped into the housepit after the initial occupation and prior to the Kamloops occupation. It is a dark brown (10 YR 3/2) sandy silt mottled with irregular black lenses. This stratum has little bone and moderate quantities of fire cracked rock, lithics, and charcoal. It is only present in Squares D and E where it was partially removed by pot hunters.

**Stratum VII and VIII**

Strata VII and VIII are both comprised of firm, olive brown (2.5 Y 4/4) sandy silt with a lot of gravel and cobbles. Both strata are sterile, but Stratum VII differs from Stratum VIII in that it has less silt, more gravel, dries more quickly, and is slightly less consolidated. Since Stratum VII overlies a pit feature in Squares B and C, it is assumed that the deposit comprising Strata VII is at least partially culturally modified. It may represent: (1) spoil from the excavation of a pit elsewhere in the house, or (2) a natural *in situ* deposit which was spread or leveled-off to cover an early pit prior to reoccupation of the housepit. No artifacts can be clearly assigned to either strata. Stratum VIII represents the natural sterile sediments which underlie the site.

**Stratum IX, X, and XI**

Strata IX and X are deposits which have accumulated in Feature B-1, a large rock-lined pit. Stratum X is an olive brown sandy silt with gravel and
cobbles, virtually identical to the surrounding sterile matrix. It contained many articulated fish bone and some lithics. Stratum IX represents a later excavation and filling of a second pit within the original pit fill. This stratum is black with less gravel and cobbles and contains much bone, lithics, and fire cracked rock. Both strata are covered by the Kamloops floor (Stratum IV) indicating that they may be associated with an earlier, possibly Shuswap occupation. A second large pit feature, intersected in the east wall profile, contains a side-notched Kamloops point near the bottom. This second pit is therefore assumed to be associated with the later Kamloops occupation. Stratum XI is a black sandy silt with small gravel. It represents a small pit excavated through the Kamloops roof fill and floor deposits. It is assumed to represent a brief, post-occupational use of the housepit depression.

Stratum XII and XIII

Stratum XIII is classified as rim spoil and is only present in the south end of the trench. It appears to represent soil which was intentionally dumped on the house rim during the excavation and cleaning of the pithouse prior to each occupation, as well as soil from the roof which slumped onto the rim after the house was abandoned. This complex of soils is distinctive of the rim and is difficult to relate to the deposits in the rest of the trench due, in large part, to the pot hunters disturbance on Squares D and E. A parallel-stemmed point with slight shoulder was found in Level 4 of Square F, indicating the presence of a Shuswap occupation in the housepit.

Stratum XII is an unusual layer contained within the rim spoil (Stratum XIII). It is a thick layer of organic material which has the appearance of bark and may represent an old roof surface. It is continuous throughout Square F.
Excavation Summary and Conclusions

Housepit 1 appears to have been initially constructed and occupied during the Shuswap horizon (4,000–2,400 BP). This conclusion is based on the presence of an early floor under the later Kamloops occupation and the presence of a Shuswap point in the rim spoil. Remnants of this early floor can be seen at the outer edge of the house depression. The remainder of this Shuswap floor and the associated roof fill were removed and deposited on the rim when the housepit was cleaned down to sterile prior to the final Kamloops occupation. The slightly smaller diameter of the Kamloops house has allowed for the preservation of some of the earlier floor at the outer edge of the housepit depression. There are no diagnostic points which would indicate a Plateau horizon occupation (2,400–1,200 BP), although the west wall profile suggests the possibility of a third floor between the two aforementioned floors.

Following the occupation of the Kamloops pithouse and the deposition of the floor, the pithouse was abandoned and the roof collapsed. The soil from the roof was later covered by aeolian and/or alluvial deposits.

The Kamloops house floor is clearly seen in both profile and in excavation for the central portion of the housepit i.e., Squares A, B, and C. It is darker and contains less small gravel than the roof fill above it but is no more compact. However, two large pit features in Square D, including a pit from the Kamloops occupation, make it difficult to isolate the floor in this part of the trench. Two floors are visible in the southern half of Square D which have a similar color and texture to the Kamloops occupation floor. In fact the higher floor in Square D appears to be a continuation of the
Kamloops floor. Some form of clearly distinguishable floor deposits were present in all parts of the house that were tested.

**Figures**

Figure 1: Housepit 1 east wall profile and floor plan.

**Figure 1: Stratum Legend for Housepit 1**

I Surface = Black organic silt; Origin: organic litter, aeolian, and alluvial deposits; Few artifacts, bone, or fire-cracked rock.

II Kamloops roof fill = Black sandy silt with pea gravel; Origin: collapse of roof for last occupation; A lot of fire-cracked rock, little bone, moderate lithics.

III Upper portion of Kamloops floor (?) = Sandy silt with pea gravel, considerable variation in color from dark grayish brown to strong brown, fire reddening (primarily in Sq. B) associated with less gravel; Origin: possibly upper part of floor with less organics to darken soil, red lenses could be the result of burnt roof beams, less fire-cracked rock, little bone, numerous lithics.

IV Kamloops floor = Black sandy silt with pea gravel, darker than overlying stratum; Origin: thin deposition of charcoal, organics, and sediments falling from roof; A lot of fire-cracked rock in some places, some bone and lithics.

V Rim spoil (?) = Dark brown sandy silt mottled with irregular black lenses; Origin: possible rim spoil which slumped into housepit following Shuswap occupation, which was not removed prior to Kamloops occupation.
VI Shuswap floor (?) = Black sandy silt; Origin: same as IV, moderate quantities of lithics and fire-cracked rock.

VII Subfloor matrix = Olive brown sandy silt with high gravel content; Origin: culturally modified sterile contents(?).

VIII Sterile = Olive brown sandy silt with a lot of gravel and cobbles, darker with higher silt content than VII.

IX Shuswap (?) pit = Black sandy silt; Origin: pit from Shuswap (?) occupation filled in with floor and roof fill (?); A lot of bone, lithics, and fire-cracked rock.

X Shuswap (?) pit = Dark olive brown sandy silt with gravel and cobbles, similar in color and texture to sterile, pit is rock lined; Origin: filled in prior to excavation and use or IX.

XI Post-Kamloops pit = Black sandy silt with pea gravel; Origin: pit excavated into Kamloops floor and roof fill after Kamloops occupation.

XII Organic layer = Possibly bark.

XIII Rim spoil = A complex of soil layers built up on the rim of the housepit resulting from house re-excavation and cleaning, and collapse of roof onto rim.
Figure 1: Stratum Legend for Housepit 1

I  Surface = Black organic silt; Origin: organic litter, aeolian, and aluvial deposits; Few artifacts, bone, or fire-cracked rock.
II Kamloops roof fill = Black sandy silt with pea gravel; Origin: collapse of roof for last occupation; A lot of fire-cracked rock, little bone, moderate lithics.
III Upper portion of Kamloops floor (?) = Sandy silt with pea gravel, considerable variation in color from dark grayish brown to strong brown, fire reddening (primarily in Sq. B) associated with less gravel; Origin: possibly upper part of floor with less organics to darken soil, red lenses could be the result of burnt roof beams, less fire-cracked rock, little bone, numerous lithics.
IV Kamloops floor = Black sandy silt with pea gravel, darker than overlying stratum; Origin: thin deposition of charcoal, organics, and sediments falling from roof; A lot of fire-cracked rock in some places, some bone and lithics.
V Rim spoil (?) = Dark brown sandy silt mottled with irregular black lenses; Origin: possible rim spoil which slumped into housepit following Shuswap occupation, which was not removed prior to Kamloops occupation.
VI Shuswap floor (?) = Black sandy silt; Origin: same as IV, moderate quantities of lithics and fire-cracked rock.
VII Subfloor matrix = Olive brown sandy silt with high gravel content; Origin: culturally modified sterile contents(?).
VIII Sterile = Olive brown sandy silt with a lot of gravel and cobbles, darker with higher silt content than VII.
IX Shuswap (?) pit = Black sandy silt; Origin: pit from Shuswap (?) occupation filled in with floor and roof fill (?); A lot of bone, lithics, and fire-cracked rock.
X Shuswap (?) pit = Dark olive brown sandy silt with gravel and cobbles, similar in color and texture to sterile, pit is rock lined; Origin: filled in prior to excavation and use or IX.
XI Post-Kamloops pit = Black sandy silt with pea gravel; Origin: pit excavated into Kamloops floor and roof fill after Kamloops occupation.
XII Organic layer = Possibly bark.
XIII Rim spoil = A complex of soil layers built up on the rim of the housepit resulting from house re-excavation and cleaning, and collapse of roof onto rim.