

Cariboo College

ARCHAEOLOGICAL EXCAVATION

on the

South Thompson River:

A Report

By

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and

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When looking at aerial photographs of the South Thompson River, one can see hundreds of pock marks or small craters lining either side of the bank. These pit houses of the early Indian inhabitants are very interesting because they tell a great deal about the life these people led. They range anywhere from four to forty feet in diameter and some are still as much as six feet deep. There has been little excavation in the Thompson area, and the small amounts that have been done properly are burial sites. Any pit houses that have been "excavated", were done with picks and shovels; occasionally people used bulldozers. These people were solely interested in the occasional artifact that might turn up. Consequently any other information that could have been obtained from a site was lost forever. In fact, most people preferred to destroy a burial ground rather than waste their time with something like a pit house.

The only published information we could obtain about pit houses was in Teit's book of the Thompson Indians (1900). So, in order to learn more about these habitations, we decided to excavate one ourselves. It took a long time to decide on the right place; we had to consider many factors. It had to be a place that we could get to with little trouble, and on private land. It had to be enough out of the way so it would not be torn apart by relic hunters, because it was going to be a long time before we could finish the excavation, since the actual digging could only be carried on during week-ends and the occasional holiday. The Kamloops Museum Association is supporting the excavation financially and provides a place where the materials can be studied and displayed.

In the Spring of 1969 we were ready to begin excavation at the site we had chosen. It was first owned by a rancher named A.G. Pemberton. He had the land from 1863 to 1907, when he died. His estate was bought up

by real estate speculation, and they intended to start a large orchard
and a few years later the water
rights passed and the one now owned by the Japanese. In 1910 the land was bought
by the Japanese, and took it over from the Red Creek Ranch. It is
still used for raising cattle, and all of the water on this land is very
good. In addition, however, the land is not completely irrigated from
the Red Creek, and many of the hills have become marshy with growth
of reeds and other plants. During the two years of

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The village site, BeQx:2, is located on the north bank of the South Thompson river. It is 0.8 mile downstream from the bridge that crosses the river at Pritchard. There is a seldom used gravel road which goes almost all the way to the village, and is probably incomplete. From the end of that to the village site, a dirt road crosses the small bridge over Pemberton Creek. In some places the gorge is 20 feet deep, and for most of the year there is only a trickle of water passing through it. The water is dammed at the small lake five miles from the mouth of the creek for irrigation purposes, but at one time there must have been quite a sizeable creek flowing down the gorge.

The village is on the large flood plain below the clay cliffs, formed by Glacial Lake Thompson (Fulton, 1965). The whole of the South Thompson valley is like this, and there are no known pits on the lake bench above the flood plain.

The life of the area now, is probably much the same as it would have been during Indian habitation. The obvious difference is the presence of cattle. They have had quite an effect on the plant life in the area. Most of the area that is now ranch land, used to be covered with bunch grass. Over-grazing had led to the extermination of bunch grass on range lands, and now there, the regular dry belt grasses have replaced it. The main type of bush is the sagebrush, although there is not as much of this in Pemberton Village as there is in the village about a mile down stream. In the other village there is also cactus. There are only three small trees in the village site, and other than that, there is little vegetation except mullein plants.

In the village downstream there are numerous large cottonwood trees and smaller bush-like trees. These are hawthorn trees, the same as the three in Pemberton Village. No pine trees are found near either

of these villages, but the bench overlooking the flood plain is covered with the Ponderosa pine common to the area, and it is partially logged out.

The animals of the area include mule deer, black bear, coyote, mink, porcupine, marten, beaver and other rodents, most of which played an important part in the economy of the early Indians. One of the most important items is the fish life of the area. Sockeye salmon and Chinook are seasonally the most numerous varieties present in the Thompson today. There are also trout, whitefish, squaw, and suckers. There are also many different types of migratory water birds that use the river; these include Canada goose, snow goose, swans, and a wide variety of ducks. Most of these were more important than the year-round birds like grouse, and ptarmigan.

The climate near Pritchard is extreme. In the spring and summer months, it is always very hot or very windy, and in the fall and winter the temperature goes very low. Beacause of the way the land in the village is situated, and projects out into the river, there is no protection from the wind that sweeps down the valley in an east to west direction. The few larger poplar and cottonwood trees that remain, stand a good chance of being blown down in the annual spring winds. The hawthorn trees which are lower to the ground, are a much better survival risk.

EXCAVATION METHODS

Our first year of excavation was one of experimentation in field techniques, digging and recording. We were guided mainly by Heizer's "A GUIDE TO ARCHEOLOGICAL FIELD METHODS". We started running a trench across the pit house, from South to North. The trench consisted of 4'X4' squares, taken down in 8" layers. We devised a symbol method for marking down all relevant artifacts, including detritus materials such as basalt flakes, fire-cracked rocks and bone fragments, shells, and other faunal remains. Trowels were used for digging and the

loosened soil was moved to a screen that was hand-held. Any artifacts that seemed to be of any importance when first touched were uncovered with a brush and fine pointed tool, and photographs and/or drawings made of them in their undisturbed position. In this way, for instance, the tool-kit was uncovered intact in its original position.

As the season progressed, we turned from trowels to small paint-scrappers to loosen the soil. A paint-scraper works very well in the hard dry soil of the Interior. Also, a screen sling was put up so the screen could be suspended by ropes. This immensely speeded the slow job of screening.

A fence was erected to prevent the late Brigadier Bostock's cattle from breaking down the walls of the trench and their own necks in the process. Unfortunately we still had some problem with this, to a lesser degree, after the trench was raised. Because of the difficulty of working out a good digging system, we only did a small amount of excavation the first season.

The beginning of the second season brought the refinement of 4" layers from 8" layers, and marking concentrations of detritus and faunal materials, instead of recording each bone fragment, basalt chip, etc. individually. We removed about three times as much volume as the previous year, owing to our experience and refined techniques.

STRATIFICATION

This site revealed only one cultural level which was evidently not stratified. However, there are several interesting points which have shown up in the wall and floor stratifications (see drawings). The stratification of the 'D' trench is very similar to that of the '4' trench except for where the '4' trench cuts into the storage pit.

There are three main types of soil. The lowest type consists of

the natural stratified layers of sand and gravel. It did not contain any artifacts or other remains except in one place that we believe to have been a rodent hole. The gravel and sand layers come to an abrupt end and are replaced by the cultural level, showing clearly where the old inhabitants dug out their pit.

The next layer is not directly above, but more to the perimeter of the hole. It contained artifacts and other remains, but its only difference from the main habitation layer is that the soil is sandier and probably a transition between the type of soil which surrounds the pit house and that which is in it. The main layer is darker with far more humus, and contained most of the artifacts. At one spot, between sections D-4 and D-5 in the 'D' trench, this layer drops sharply into the natural sand and gravel layers. There is no composition change in this depression, but it could possibly have been a small storage pit within the pit house. Between the main layer and the gravel layers there is a layer of very dark soil. As this contained many very small pieces of charcoal and much fire-cracked rock, this was probably the fire place.

In the third layer of the '4' trench there was a light patch about 1½" wide that ran for almost 10". Cross-sections of it are seen in the stratification drawings.

The large storage pit (?) which is cut in half by the '4' trench is very interesting in terms of stratification. It cuts off the shell layer that is located in that side of the pit house and also the other stratification layers. The composition of the main layer of the storage pit is similar to that of the pit house. It is also characterized by a series of dark and light coloured soil layers which extend far deeper into the gravel layers than the lowest habitation level of the pit house. The way in which it cuts off the pit house stratification is one of the reasons why we believe the storage pit is more recent than the pit house.

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The layer is not directly above, but more to the perimeter of the house. It contained artifacts and other remains, but its only difference from the main habitation layer is that the soil is sandier and probably a transition between the type of soil which surrounds the pit house and that which is in it. The main layer is darker with far more humus, and contained most of the artifacts. At one spot between sections 2 and 3 in the '4' trench, this layer drops sharply into the natural sand and gravel layers. There is no composition change in this depression, but it could possibly have been a small storage pit within the pit house. Between the main layer and the gravel layers there is a layer of very dark soil. As this contained many very small pieces of charcoal and much fire-cracked rock, this is probably the fire floor.

In the third layer of the '4' trench there was a light brown about 14" wide that was for almost 10". Cross-sections of it are seen in the excavated drawings.

The small storage pit (?) which is cut in half in the '4' trench is very interesting in terms of stratification. It cuts off the shell layer that is located in that side of the pit house and also the other stratification layers. The composition of the main layer of the storage pit is similar to that of the pit house. It is also characterized by a series of dark and light colored soil layers which extend far deeper into the level layers than the lowest habitation level of the pit house. The very shallow cut off the pit house stratification is one of the reasons why we believe the storage pit is more recent than the pit house.

The other reason is the layer of almost sterile (it contains small pieces of shell and bone) gravel located directly above sections A-4 and most of X4. Because of the extra depth of the storage pit, there must have been a great quantity of gravel and dirt, so it was just thrown onto the edge of the pit house, raising that end almost 6 inches above the datum stake at the other end of the pit house.

Probably the reason for the more than 2 feet of continuous inhabitation layer was seepage of dirt through the roof. According to Teit (1900), there was a great deal of seepage of insulating soil. He said that there was a warning cry before entry into a pit house to enable exposed food and tools to be covered. The resulting shower of dirt, coupled with smoke and poor light, could quite conceivably cover up small artifacts such as projectile points, awls and even needles. This seepage could explain the unlayered habitation level because 2 feet of earth could easily come down within the years of use of the pit house.

ARTIFACTS

We have found many more artifacts than we had expected, and most of them fit into what is termed the Kamloops Phase (Sanger). To date there are 127 artifacts from the excavation and 93 stone surface finds. The surface finds will be dealt with separately. The type of artifacts found in the dig are chipped stone, abrasive stone, bone, antler and tooth. To contrast with these primitive stone age tools, a modern shot shell was found in the turf of one square.

PROJECTILE POINTS

This category alone included 48 artifacts, 7 of which are broken tips and cannot be classified as any particular type. The remaining were categorized on the basis of outline, giving eight different types. The most common is a small triangular side notched point with one or more notches on either side. They range from 0.8" to 1.3" long, and from 0.4"

edge, because of the adaptability of the human hand.

There were in all, six end scrapers which had a shaft portion for mounting. They are very thick at one end with long vertical grooves struck out of the end. These were probably used for harder substances like wood. They are made from woodgrain basalt or black basalt, and are up to one and a half inches long.

The most common type of scraper found was the one worked on one side and one face only, but a few were worked on both faces. Most are long and narrow, up to $2\frac{1}{2}$ " long and $\frac{1}{2}$ " wide. Most of them could have doubled as cutting edges like a knife, and were probably used for both cutting and scraping.

Another common type of scraper was the one worked on both edges for almost the total circumference of the scraper and only on one face. The largest one is about $2\frac{1}{2}$ " long and $1\frac{1}{2}$ " wide, and quite thin. It is made from a woodgrain type of rock. They are not usually worked all of the way around and have one flat end. In fact there were no really large oval or discoid scrapers found in the dig. The only ones of that shape were about one inch long.

Four very crudely worked or possibly unfinished pieces were found, all approximately the same shape and size. They are 2" long and $\frac{1}{2}$ " thick. Two are made from woodgrain chalcedony and two of black basalt.

AWLS AND DRILLS

All the awls and drills were made of black basalt. By awl, we mean a tool used for punching or scratching holes, and not necessarily used for drilling. The awls come to a point more gradually than the drills, but, in fact, none of the drills we found have long straight sides and a flat tip.

There are 5 drills and the longest is about 2" long. The smallest

is very exquisitely worked and has a very fine sharp point. The blunt end of the drills are usually worked, but in this instance it is unsmoothed.

HAND AXE

There is only one hand axe type of tool. This was found in the A-4 square and is not finely finished like most adzes. But rather, it is a slightly retouched spall of agate, with a crystalline core and a rough exterior. The distal end is flat, giving a cross section of the interior. The working at the sharp end takes advantage of the natural shape of the rock. It was probably used for cutting wood or small branches.

ABRASIVE STONES

Only two examples of abrasive sandstone tools were found in the whole excavation; the larger is of a finer grained sandstone than the smaller. It is six inches long by three inches wide and about one half inch thick. The corners are almost all square, so it makes a large rectangle. The two ends are snapped off and are flat, but both of the long sides are rounded and smoothed off. This was found in conjunction with several other tools and a worked piece of bone, and will be discussed later.

The other abrasive tool is approximately a two by two inch square, three quarters of an inch thick. It has grooves running horizontally and vertically on both faces and almost all sides. There are approximately ten individual grooves. It was most likely not a naturally shaped square, but rather, fashioned that way to make best use of all six faces.

SMOOTH OR POLISHED ROCK

Several pieces of rock were found that could have been from a

polished metamorphic rock artifact. None of the three found were related to each other, and the largest is only about an inch long. Most of them have a slight curvature on the smooth face. The most interesting piece of polished or smoothed rock is a chunk that is about $\frac{1}{2}$ x $\frac{1}{2}$ x $\frac{1}{2}$ inches. The smooth surface has two completely flat levels, one very slightly above the other. There are very small longitudinal scratches running along the surface which might indicate the type of smoothing technique used, or the actual use of the rock itself. The underside and all of the edges are very rough, showing the natural structure of the rock. Only one whole polished rock was found. It has a very smooth surface and a small fracture at one end. It is $2\frac{1}{2}$ inches long and $1\frac{1}{2}$ inches in diameter. This rock might have been a tool flaker, but the ends are not very battered and, judging from the glossy surface, it might have been used for polishing.

HAMMER STONES

There was only one pestle found in the excavation. It is a natural granite cobble about 5 inches long and $2\frac{1}{2}$ inches in diameter. The exterior of the rock is reddish in colour, and there are small mica particles throughout the rock. It was found very close to several molar teeth of elk or deer and some were shattered. Both ends of the hammer or mallet are battered and it was not reshaped for use like most of the hammers common near the Thompson River. It was situated with the teeth and three basalt flakes and a few small pieces of bone, between the lowest level of habitation and sterile gravel layers.

TOOL FLAKER

It is surprising that only one definite chipping pebble was found in the excavation. This pebble is almost spherical and is battered

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HAND AXES

There is one hand axe type of tool. This was found in the A-1
and is a small, hand-sized, somewhat triangular piece of rock, with a
slightly notched edge and a small notch at the base. The shape of the
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heavily on one half. It is a coarse grained type of rock and fairly heavy for its $1\frac{1}{2}$ inch diameter. Almost any shape and size rock could have been used for flaking basalt as long as it didn't crack itself from the impact, and it is probable that most of the other cracked rocks found in the excavation were used for this purpose.

ANTLER ARTIFACTS

The antler industry does not seem to be very extensive. There were only two antler artifacts found and neither had any ornamental designs. These were both wedges. They are both the same type of wedge and are in very good condition. One is 5 inches long and the other is 4 inches long, and they taper from the blunt end to the point very smoothly. The larger is two inches wide at the proximal end and the smaller is only $1\frac{1}{2}$ inches. The antler cortex runs the whole way along the center of each wedge almost to the point, so they are the shape of half a cone. The proximal ends are well battered from being hammered, and both have had pieces flaked off. The tips are polished from use, and on the larger wedge the tip is cracked perpendicularly to the long axis of the wedge. They were found two feet from each other in the same layer and very near to the centre of the pit.

One interesting piece of antler, in fact the only other one found, is what appears to be the waste product of the manufacture of a wedge. It is the stub or crown of an antler that has been removed from the main part which would have been cut in half lengthwise and fashioned into one or two wedges. Cutting marks incise the hard outer part of the antler around the whole circumference, and the softer cortex was snapped off.

polished metamorphic rock artifacts. None of the three found were related to each other and the largest is only $\frac{1}{2}$ inch long. Most of them have a slight curvature on the smooth side. The most interesting piece of polished or smoothed rock is a chunk that is about $\frac{1}{2}$ x $\frac{1}{2}$ x $\frac{1}{2}$ inches. The smooth side is completely flat level, one very small longitudinal scratch on the smooth side might indicate the type of smoothing used on the rock itself. The underside of the piece is very rough, showing the natural structure of the rock. One whole polished rock was found. It has a very smooth surface and a small fracture at one end. It is $2\frac{1}{2}$ inches long and $\frac{1}{2}$ inch in diameter. This rock might have been a tool flaker, but the ends are not very battered and, judging from the glossy surface, it might have been used for polishing.

HAMMER STONES

There was only one hammer stone found in the excavation. It is a natural granite cobble $5\frac{1}{2}$ inches long and $2\frac{1}{2}$ inches in diameter. The exterior of the stone is reddish in color, and the interior is a light gray. It was found very near the base of the hammer stone. It was not great and for use like a hammer. It was battered and some were shattered. It was found with a few small pieces of flint and a few small pieces of bone, between the lowest level of habitation and the level of the excavation.

BONE ARTIFACTS

There were 12 bone artifacts found in the excavation. Some were very near the bottom of habitation and others were close to the surface. Eight of the twelve are points, two are needles, one is a bone tube, and one an unfinished tool found with the tool kit. Much of the bone has a darker texture than the other and is more porous. This could indicate that they have weathered before being buried. All of the pieces are polished from much use and are very smooth. There are no ornamental incisions on any of the artifacts.

NEEDLES

Two needles were found, both from opposite ends of the 'D' trench. One was found in four separate pieces and later reconstructed. The tip and a section of the eye were not recovered. It is 5 inches long and $\frac{3}{8}$ of an inch wide, and if unbroken would have been approximately six inches. Both ends would have been pointed. The eye is scratched through from both sides and is located an inch from the remaining end. It was made from a rib and is darker and probably older than the other needle. The needle has a quarter of an inch of curvature. All of the pieces were located in the first layer of excavation, just below the soil layer.

The second needle is in far better condition than the first. It has the same basic shape as the other, but was probably made from a longitudinally split long bone or cannon bone as it has no curvature. It is very light in color and was probably less used than the dark needle. There are no signs of workings on either one, but this one is especially smooth. It is exactly 6 inches long and $\frac{1}{4}$ inch at the widest point near the eye. This eye is also scratched through from both sides and is about $\frac{1}{4}$ of an inch long compared to the other one which is $\frac{1}{2}$ inch long. Both needles are $\frac{1}{16}$ inch thick.

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There are 15 bones of the skull found in the excavation. Some were very near the bottom of the pit and others were close to the surface. Right of the twelve are 14, two are needles, one is a bone pipe, and one is an unfluted tool. Much of the bone was a darker texture than the other and is more porous. This could indicate that they have weathered before being buried. All of the pieces are polished from much use and are very smooth. There are no ornaments or anything in any of the pits.

BONE POINTS

There was only one large awl found in the dig. It is made from a long-bone splinter which is yellowish-white, as is the unbroken needle. It is approximately 8 inches long and has a finger and thumb hold that are polished smooth from use.

PALEONTOLOGY

Two needles were found, both from opposite ends of the 'C' trench. One was found in four separate places and later re-examined. The tip and a section of the eye were recovered. It is 2 inches long and 5/8 of an inch wide, and the eye would have been approximately six inches. The eye is covered through from both ends and is located in the center. It was made from a single piece of metal and the other needle. The needle has a quarter of an inch of a groove. All of the pieces were located in the first layer of excavation, just below the surface. The second needle is a few inches longer than the first. It has the same basic shape as the other, but was probably made of a different material. It is very light in colour and was probably less used than the first needle. There are no signs of workings on either end, but this may be especially smooth. It is exactly 6 inches long and 1/2 inch at the widest point near the eye. This eye is also covered through from both ends and is 1/2 of an inch long compared to the other one which is 1/2 inch long. Both needles are 1/16 inch thick.

TUBE

The only bone tube was found very close to where the storage pit cut into the pit house. It is 2 inches long and $\frac{1}{2}$ inch in diameter. The walls of the hollow tube are $\frac{1}{16}$ of an inch thick. Both ends were cut off by cutting and scratching, but one was cut straight off, and the other end was probably snapped as well because it is irregular. Similar tubes have been found in the Chase area. There are longitudinal scratches running along the whole circumference of the tube.

TOOL KIT

This tool kit consists of four parts; an abrasive stone, a basalt knife, a beaver tooth incisor and a half-completed bone tool. The tooth, knife and bone were all resting on top of the stone.

like a jade saw at one time. Both ends have been snapped off. It now shows signs as having been used as an abrader; a shallow groove runs near the center on each face.

The basalt knife (23 b) is a flake with wood-grain type banding in it. It shows very little retouching, only one small edge, and what are possibly worn chips on another. It seems likely that it was a graving tool, used for making grooves to break bone accurately (as with the bone in this set) and to make needle-eyes.

A beaver tooth (23 c) was part of the tool kit. This tooth had been extensively re-ground, indicating much use. The point has been ground down on the inside face. This part has rough scratch marks on it. The inside edges 1 inch from the tip have also been ground down, tapering towards the end. This part has a polished glossy face, not like the rough, coarse scratches near the tip. This was also a graving tool.

The last of the group is a half-finished bone tool (23 d). One face and both edges are completely covered with rough scratch marks. On the opposite face a long straight groove runs the length of it. There are also a few scratches on this side. At one end there is a partially sharpened tip, made by grinding down the edges.

The tool kit is one of the most interesting finds of the excavation, and one that is unusual, because its position was undisturbed from the time the craftsman left his work. It seems rather unlikely that this set of tools would have been left like this under normal circumstances.

FAUNAL REMAINS

The greatest amount of material found in the excavation was of faunal origin. However, this category refers only to the unworked faunal material. This includes bone, another tooth, and shell. Some

FOUR POINTS

There was only one large owl found in the dig. It is made from a long bone which is yellowish-white, as is the rest of the bone. It is approximately 8 inches long and has a finger and thumb hole that are polished smooth from use.

The medium sized owl is 4 inches long and made from the same type of bone as the large owl. Its tip has been ground to a very sharp point not like the large owl which was fashioned from a naturally shaped

Four types of owl bone were found at the same level as the medium sized owl, and one is only the broken tip of a larger owl. One is a small, approximately 2 inches long and pointed at both ends, could have been used in a like hole. It is notched around the center, probably to allow for holding.

TOOL KIT

The bone tool was found very close to where the storage pit was into the pit house. It is a finger and thumb hole. The hollow bone was 1 1/2 inches long and 1/2 inch thick. Both ends were out of the digging and extending, but one was out straight and the other was probably snapped as well because it is irregular. Similar bones have been found in the Green area. There are a number of scratches running along the whole circumference of the bone.

TOOL KIT

This tool kit consists of four parts: an arrowhead, a knife, a beaver tooth incisor and a half-completed bone tool. The arrowhead and bone were all resting on top of the stone. The arrowhead (23 a) is made from a fine grained sandstone. It has been worked to a definite shape, and has been

of the material was burnt and charred, but most was not.

The bone remains are from all of the animals mentioned earlier. None of them are very large because they have been splintered, so that the average is about 1½ inches long; but there are several pieces that are from 6 to 7 inches in length. With most of the bones being so small, accurate identification of each is almost impossible. The highest concentration of bone was in the central part of the pit, as were the artifacts; there was less concentration nearer the perimeter of the hole.

There was quite a large percentage of fish bone scattered throughout the pit. Some was found in almost complete spinal columns, but the majority was dismembered. Approximately 25 gorge teeth and 400 fish vertebrae were found.

Several mouse jaws and larger rodent jaws were discovered; some were probably remains from the later inhabitants of the pit house. Roughly six beaver incisors were found, all unworked.

Smaller pieces of antler were categorized with bone because of their similarity, and the fact that so little of it was probably antler.

Many small pieces of molar teeth from deer, and possibly elk, turned up in the screens. Most were not whole individual teeth, but cracked into many sections. Only one portion of a jaw containing teeth was found in the excavation. It seems surprising that not more than one was found, because, in all, there was quite a large variety of animal bone found.

The only type of shell found in the excavation was the fresh water clam (*Anodonta*. Sp.). It was found in largest concentrations near the perimeter of the excavation, especially where the storage pit cut into the pit house. At first this large band of shell appeared to be part of the storage pit, but after complete excavation it was clear in the stratification that this layer of shell was deposited earlier than the

storage pit. Shells were deposited at the side of the pit after being washed. This is evident because of the way the shells were attached into each other. A large quantity of the shell was burnt and flaking apart. The shell was cooked right in, or over the fire. This shell is approximately 2 1/2 in. wide and 3 to 4 inches deep in most places. The only shell found in the central part of the pit house was very small and finely cracked, making the dark soil partly in some spots.

DEFINITE MATERIALS

Large amounts of unworked rock were found in the soil. Most were either natural water-worn boulders, or rocks cracked from being used in the fireplace. The other type of rock flaked from the manufacture of stone implements. Most of the flakes were small, which showed no signs of alteration. Other types were obsidian, chert, agate and "wood-grain" basalt. Usually these chips were very small and thin, but some shells are 2 1/2 inches long. These were all very irregular in shape and were found scattered all over the pit. The five-cracked rock was usually between 4 and 5 inches long with some up to 8 inches. Length and relatively unworked. Most was very coarse grained and in texture with the rest. Some clumps of rock were found near the edge of the pit, but most was located in the central portion. There were no definite "linepieces" on the whole. Central portion has large masses of unworked rock. Only pieces of wood found in the pit. The only large piece of wood found in the pit was 4 inches thick, with a small amount of exposed wood in the center.

None of this charcoal would have been suitable for radiocarbon dating, as it was almost all completely permeated with small rootlets. Some of these cracked rocks could have doubled as bone crackers, which could explain the wide scattering of this type of rock.

SURFACE FINDS

During seasons of low water, the gravel beach at the site stretched out for fifty yards in some spots. This provided excellent relief from the sometimes boring excavating, and also contributed to the numbers of artifacts found. Altogether there were 88 stone surface beach finds, as compared with only 5 stone surface finds inside the village. There were no bone surface finds because of the decomposition of exposed bone.

Most of the projectile points were either side-notched or stemmed; there were only a few wholly leaf shaped points. The main material used was black basalt, but there was also "wood-grained" basalt, chalcedony, agate and quartz.

There were 12 side-notched points, 11 stemmed points, and 3 triangular-shaped points. These three may be drills, but the tips are not smooth. There were 14 tips found that could not be classified. Of the leaf shaped variety only 4 were bipoins. Two of the others were stemmed and 3 had flat bases.

There were 9 drills and awls found; some were worked for hafting but most were hand held. All of the rest (35) were classified as scrapers or knife-like tools. Of these, 13 were bifacial with all edges worked; 3 were bifacial with only one edge worked; 5 were worked on one face and two sides; 7 were worked on only one face, and one side; 7 were worked on one face, and this side was rounded.

CONCLUSIONS

We are not able to make any concise conclusions about the structure of this pit house other than the shape. No signs of post holes were found, and there was almost a complete absence of wood. There is not enough charcoal and ash to suggest that the wood structure was burnt, so perhaps it was removed by the inhabitants or other people. There is also the possibility that the wood was washed away in a flood, or that it completely decayed on the surface. The storage pit was definitely erected after the pit house, and possibly after it collapsed.

A rough estimate of the length of occupation of the pit house is approximately ten years. The bone and shell deposit would probably have been far greater if it was inhabited for much longer. Of course much of the waste could have been hauled outside, but there is no evidence of a midden heap; the roof, if anything, was probably used for this purpose.

All of the artifacts conform to what is already known about the Late Kamloops Phase. There is a close similarity to those tools found at the Chase Burial Site, excavated by Sanger. He approximates this period to last from 1250 A.D. to roughly 1800 when a good quantity of post-contact trade goods were finding their way into the Interior Plateau. The whole village site was probably in semi-continuous use for a few hundred years, and it would be impossible to get the exact date, except from carbon-14 dating. However, the pit is no doubt a maximum of 400 to 500 years old, judging from the amount of surface erosion and the quality of preservation of some of the small wood samples.

Much more work should be done on pit houses, because they are capable of yielding excellent information about the daily lives of the early Indians. If more trained people do not study these van-

ishing sites, the expanding development of the Thompson Valley will soon erase them forever. The Provincial Government must also enforce its Archeological Sites Protection Act, because the vast majority of people do not realize the damage they do with pick and shovel on week-end afternoons.

REFERENCES

- BAKER, James (1970) Archaeology of the Lytton-Lillooet Area
B.C. Studies No. 6 - 7 .
- HEIZER, Robert F. (1959) A Guide to Archaeological Field
Methods.
- SANGER, David (1968) The Chase Burial Site Esqw :1
National Museums Bulletin 224.
- TEIT, James (1900) The Thompson Indians of British Columbia
Volume Two.

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ATTACHED HERETO.

We would like to express our gratitude to the many people who have helped us with the excavation and transportation, to make this dig possible. Most particularly our parents Mr. & Mrs. Eldridge and Mr. and Mrs. Blake who put in many miles of driving during their weekends and holidays. Others who have helped us with both digging and transportation are Mr. & Mrs. Huggins, Mr. & Mrs. Needham, Mrs. Middleton, Mrs. Rose, John Sbrocci, and Jim Fulton. We would also like to thank the many people who gave rides to two dirt-covered students while we stood at the roadside hitch-hiking.

The excavation was supported by the Kamloops Museum Association, and they also supplied a place where the information recovered was correlated. Curator Mrs. Mary Balf has been the greatest help with proof-reading, typing and general all round encouragement. Mrs. Rose also helped tremendously with the typing.

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Measurements in inches

31

Type	Length	Width	Thickness	Location	Notes
Beam	1.0	1.0	0.1	B-1	
Beam	1.0	1.0	0.1	B-2	
Beam	1.0	1.0	0.1	B-3	
Beam	1.0	1.0	0.1	B-4	
Beam	1.0	1.0	0.1	B-5	
Beam	1.0	1.0	0.1	B-6	
Beam	1.0	1.0	0.1	B-7	
Beam	1.0	1.0	0.1	B-8	
Beam	1.0	1.0	0.1	B-9	
Beam	1.0	1.0	0.1	B-10	
Beam	1.0	1.0	0.1	B-11	
Beam	1.0	1.0	0.1	B-12	
Beam	1.0	1.0	0.1	B-13	
Beam	1.0	1.0	0.1	B-14	
Beam	1.0	1.0	0.1	B-15	
Beam	1.0	1.0	0.1	B-16	
Beam	1.0	1.0	0.1	B-17	
Beam	1.0	1.0	0.1	B-18	
Beam	1.0	1.0	0.1	B-19	
Beam	1.0	1.0	0.1	B-20	
Beam	1.0	1.0	0.1	B-21	
Beam	1.0	1.0	0.1	B-22	
Beam	1.0	1.0	0.1	B-23	
Beam	1.0	1.0	0.1	B-24	
Beam	1.0	1.0	0.1	B-25	
Beam	1.0	1.0	0.1	B-26	
Beam	1.0	1.0	0.1	B-27	
Beam	1.0	1.0	0.1	B-28	
Beam	1.0	1.0	0.1	B-29	
Beam	1.0	1.0	0.1	B-30	
Beam	1.0	1.0	0.1	B-31	
Beam	1.0	1.0	0.1	B-32	
Beam	1.0	1.0	0.1	B-33	
Beam	1.0	1.0	0.1	B-34	
Beam	1.0	1.0	0.1	B-35	
Beam	1.0	1.0	0.1	B-36	
Beam	1.0	1.0	0.1	B-37	
Beam	1.0	1.0	0.1	B-38	
Beam	1.0	1.0	0.1	B-39	
Beam	1.0	1.0	0.1	B-40	
Beam	1.0	1.0	0.1	B-41	
Beam	1.0	1.0	0.1	B-42	
Beam	1.0	1.0	0.1	B-43	
Beam	1.0	1.0	0.1	B-44	
Beam	1.0	1.0	0.1	B-45	
Beam	1.0	1.0	0.1	B-46	
Beam	1.0	1.0	0.1	B-47	
Beam	1.0	1.0	0.1	B-48	
Beam	1.0	1.0	0.1	B-49	
Beam	1.0	1.0	0.1	B-50	
Beam	1.0	1.0	0.1	B-51	
Beam	1.0	1.0	0.1	B-52	
Beam	1.0	1.0	0.1	B-53	
Beam	1.0	1.0	0.1	B-54	
Beam	1.0	1.0	0.1	B-55	
Beam	1.0	1.0	0.1	B-56	
Beam	1.0	1.0	0.1	B-57	
Beam	1.0	1.0	0.1	B-58	
Beam	1.0	1.0	0.1	B-59	
Beam	1.0	1.0	0.1	B-60	
Beam	1.0	1.0	0.1	B-61	
Beam	1.0	1.0	0.1	B-62	
Beam	1.0	1.0	0.1	B-63	
Beam	1.0	1.0	0.1	B-64	
Beam	1.0	1.0	0.1	B-65	
Beam	1.0	1.0	0.1	B-66	
Beam	1.0	1.0	0.1	B-67	
Beam	1.0	1.0	0.1	B-68	
Beam	1.0	1.0	0.1	B-69	
Beam	1.0	1.0	0.1	B-70	
Beam	1.0	1.0	0.1	B-71	
Beam	1.0	1.0	0.1	B-72	
Beam	1.0	1.0	0.1	B-73	
Beam	1.0	1.0	0.1	B-74	
Beam	1.0	1.0	0.1	B-75	
Beam	1.0	1.0	0.1	B-76	
Beam	1.0	1.0	0.1	B-77	
Beam	1.0	1.0	0.1	B-78	
Beam	1.0	1.0	0.1	B-79	
Beam	1.0	1.0	0.1	B-80	
Beam	1.0	1.0	0.1	B-81	
Beam	1.0	1.0	0.1	B-82	
Beam	1.0	1.0	0.1	B-83	
Beam	1.0	1.0	0.1	B-84	
Beam	1.0	1.0	0.1	B-85	
Beam	1.0	1.0	0.1	B-86	
Beam	1.0	1.0	0.1	B-87	
Beam	1.0	1.0	0.1	B-88	
Beam	1.0	1.0	0.1	B-89	
Beam	1.0	1.0	0.1	B-90	
Beam	1.0	1.0	0.1	B-91	
Beam	1.0	1.0	0.1	B-92	
Beam	1.0	1.0	0.1	B-93	
Beam	1.0	1.0	0.1	B-94	
Beam	1.0	1.0	0.1	B-95	
Beam	1.0	1.0	0.1	B-96	
Beam	1.0	1.0	0.1	B-97	
Beam	1.0	1.0	0.1	B-98	
Beam	1.0	1.0	0.1	B-99	
Beam	1.0	1.0	0.1	B-100	

Table 1 cont.

Type	Length	Width	Thickness	Location	Section Layer
Tips of points					
EsQx:2-78	.4	.4	.1	C-4	5a
EsQx:2-105	.8	.6	.1	X-4	1a
EsQx:2-77	.6	.5	.1	C-4	4a
EsQx:2-16	1.0	.5	.1	D-3	4
EsQx:2-85	.7	.9	.1	A-4	2b
EsQx:2-113	1.7	.9	.4	X-4	3b
EsQx:2-74	.7	.6	.3	B-4	3b
EsQx:2-104	1.7	.9	.3	A-4	5b

Table 2

DRILLS AND ANLS

Type	Length	Width	Thickness		
Drills					
EcQx:2-52	1.2 (1.9)	1.0	.3	D-6	1
EcQx:2-26	1.8	1.4	.4	D-1	1
EcQx:2-35	2.1	.9	.3	D-4	4
EcQx:2-101	1.6	.8	.3	A-4	5a
EcQx:2-133	1.5	.9	.3	D-3	4
Awls					
EcQx:2-54	1.9	1.3	.2	D-6	3a
EcQx:2-97	1.6	.9	.2	A-4	4a
EcQx:2-64	1.6	.9	.1	C-4	4b
EcQx:2-63	.8	.7	.2	C-4	4a

Table 3

SCRAPERS AND KNIVES

Type	Length	Width	Thickness		
End Scrapers					
BoQx:2-47	1.0	.9	.3	D-5	5a
BoQx:2-51	1.2	1.4	.4	D-5	4b
BoQx:2-86	1.7	1.0	.5	A-4	3a
BoQx:2-81	1.5	1.2	.3	B-4	5b
BoQx:2-60	.8	1.0	.3	C-4	3b
BoQx:2-132	1.6	1.1	.4	D-3	5
Single side Single face					
BoQx:2-128	1.7	.7	.1	K-4	5a
BoQx:2-99	1.1	.4	.2	A-4	4a
BoQx:2-84	1.2	.9	.2	A-4	2a
BoQx:2-83	.8	.3	.1	B-4	5b
BoQx:2-62	1.2	.6	.1	C-4	3b
BoQx:2-23b	1.6	1.2	.3	D-2	2
BoQx:2-73	1.5	.6	.3	B-4	3b
BoQx:2-121	1.2	.7	.1	K-4	4b

Location Layer	Section	Thickness	Width	Length	Weight
24	A-1	1.0	1.1	0.7	0.1
23	A-1	1.0	1.1	0.7	0.1
22	A-1	1.0	1.1	0.7	0.1
21	A-1	1.0	1.1	0.7	0.1
20	A-1	1.0	1.1	0.7	0.1
19	A-1	1.0	1.1	0.7	0.1
18	A-1	1.0	1.1	0.7	0.1
17	A-1	1.0	1.1	0.7	0.1
16	A-1	1.0	1.1	0.7	0.1
15	A-1	1.0	1.1	0.7	0.1
14	A-1	1.0	1.1	0.7	0.1
13	A-1	1.0	1.1	0.7	0.1
12	A-1	1.0	1.1	0.7	0.1
11	A-1	1.0	1.1	0.7	0.1
10	A-1	1.0	1.1	0.7	0.1
9	A-1	1.0	1.1	0.7	0.1
8	A-1	1.0	1.1	0.7	0.1
7	A-1	1.0	1.1	0.7	0.1
6	A-1	1.0	1.1	0.7	0.1
5	A-1	1.0	1.1	0.7	0.1
4	A-1	1.0	1.1	0.7	0.1
3	A-1	1.0	1.1	0.7	0.1
2	A-1	1.0	1.1	0.7	0.1
1	A-1	1.0	1.1	0.7	0.1

Table 5

HAND HAMMER STONE

	Length	Width	Thickness	Location Section	Layer
EeQx:2-123	4.0	3.3	2.5	X-4	5a

Table 6

NEEDLES

	Length	Width	Thickness	Location Section	Layer
EeQx:2-37	6.0	.4	.1	D-5	3
EeQx:2-19	4.8 (5.8)	.4	.1	D-1a2	1

Table 7

BONE POINTS

Type	Length	Width	Thickness	Location Section	Layer
Large					
EeQx:2-36	8.1	.8	.4	D-5	3b
Medium					
EeQx:2-38	4.5	.6	.4	D-5	3b
Small					
EeQx:2-41	2.6	.6	.3	D-2	5a
EeQx:2-120	3.0 (3.2)	.4	.1	X-4	4b
EeQx:2-22	2.2 (2.8)	.4	.2	D-1	2
EeQx:2-125	1.6	.3	.2	X-4	5a
EeQx:2-89	1.0	.2	.1	A-4	3a
Fish Barb					
EeQx:2-21	2.0	.3	.3	D-1	2

Table 8

TUBE

	Length	Width	Thickness	Location Section	Layer
EeQx:2-107	2.0	.6	.1	X-4	1b

Table 9

WORKED BONE (Unfinished)

	Length	Width	Thickness	Location Section	Layer
EeQx:2-23d	7.1	.6	.3	D-2	2
EeQx:2-24	6.3	1.0	1.0	D-3	3

Table 10

WEDGES

	Length	Width	Thickness	Location Section	Layer
EeQx:2-20	4.8	2.0	.7	D-3	4
EeQx:2-25	4.0	1.9	.5	D-3	4

Table 11

WORKED ANTLER (Unfinished)

	Length	Width	Thickness	Location Section	Layer
EeQx:2-66	2.7	1.6	1.9	C-4	3b

Location Section Layer	Thickness	Width	Length	Table 8
B-4 D-182	2.2	3.3	4.0	Eqx:2-123
Table 9				
B-2 D-182	1	4	6.0	Eqx:2-39
B-2 D-182	1	4	6.0	Eqx:2-19
Table 10				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 11				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 12				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 13				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 14				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 15				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 16				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 17				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 18				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 19				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 20				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 21				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 22				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 23				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 24				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 25				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 26				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 27				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 28				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 29				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 30				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 31				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 32				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 33				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 34				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 35				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 36				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 37				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 38				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 39				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 40				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 41				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 42				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 43				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 44				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 45				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 46				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 47				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 48				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 49				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 50				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 51				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 52				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 53				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 54				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 55				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 56				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 57				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 58				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 59				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 60				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 61				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 62				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 63				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 64				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 65				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 66				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 67				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 68				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 69				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 70				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 71				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 72				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 73				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 74				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 75				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 76				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 77				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 78				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 79				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 80				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 81				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 82				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 83				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 84				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 85				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 86				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 87				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 88				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 89				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 90				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 91				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 92				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 93				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 94				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 95				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 96				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 97				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 98				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 99				
B-2 D-182	1	4	6.0	Eqx:2-19
Table 100				
B-2 D-182	1	4	6.0	Eqx:2-19

Table 12

BEAVER TEETH			Location	
Length	Width	Thickness	Section	Layer
Eqx:2-23c	1.2	.3	B-2	2
Eqx:2-119	1.2	.2	K-4	4a

Table 13

OTHER TEETH			Location	
Length	Width	Thickness	Section	Layer
Polished Eqx:2-117	.8	.6	K-4	2b
Notched Eqx:2-129	.9	.2	B-2	3
Unworked Eqx:2-124	2.1	.6	K-4	5a

Table 14

POLISHED ROCKS			Location	
Length	Width	Thickness	Section	Layer
Eqx:2-130	1.0	.5	B-4	4a
Eqx:2-131	.9	.4	A-4	1a
Eqx:2-116	.7	.3	A-4	4b
Eqx:2-137	2.4	1.6	B-4	5b

Table 15

TOOL FLAKER			Location	
Length	Width	Thickness	Section	Layer
Eqx:2-136	1.9	1.7	C-4	5a

Table 18

WEIGHTS OF BONE, SHELL, AND BASALT, (ounces)
ANTLER.

Layer	B.&A.	Shell	Basalt
D-1, 1	3.0	1.0	2.5
D-1, 2	3.5	4.0	1.0
D-1, 3	1.0	4.0	0.5
D-1, 4	3.0	0.25	0.5
D-1, 5	-	-	-
D-1, 6	-	-	-
D-2, 1	3.0	0.5	0.5
D-2, 2	3.5	1.5	0.5
D-2, 3	9.0	4.5	2.5
D-2, 4	7.0	14.5	2.5
D-2, 5	4.0	1.0	0.5
D-2, 6	3.5	0.5	0.5
D-3, 3	3.0	0.5	2.5
D-3, 4	8.5	0.25	4.0
D-3, 5	6.5	0.25	1.0
D-3, 6	-	-	-
D-4, 3	3.5	-	0.5
D-4, 4	8.5	0.5	1.5
D-4, 5a	2.5	-	1.0
D-4, 5b	1.5	-	0.5
D-4, 6	-	-	-
D-5, 3a	1.0	-	0.5
D-5, 3b	3.0	3.5	2.0
D-5, 4a	2.5	12.0	2.0
D-5, 4b	3.0	11.5	1.5
D-5, 5a	5.0	10.0	0.5
D-5, 5b	1.0	0.5	-
D-6, 6	-	-	-

Table 16

EIGHTH OF NOV. SHELL AND BASALT

(continued)

Layer	B.&A.	Shell	Basalt
D-6, 1	1.0	0.25	0.5
D-6, 2	3.0	1.5	0.25
D-6, 3	1.0	0.5	1.5
D-6, 4	0.5	5.0	0.25
D-6, 5	0.25	1.0	0.25
D-6, 6	-	-	-
C-4, 3a	2.0	-	-
C-4, 3b	5.5	-	0.5
C-4, 4a	8.0	-	1.0
C-4, 4b	9.5	-	1.25
C-4, 5a	5.0	0.5	1.0
C-4, 5b	1.0	0.25	0.25
C-4, 6	-	-	-
B-4, 2	2.5	-	0.5
B-4, 3a	7.0	0.25	0.5
B-4, 3b	9.0	-	1.0
B-4, 4a	7.0	-	1.0
B-4, 4b	2.5	-	1.5
B-4, 5a	2.5	-	0.5
B-4, 5b	1.5	0.5	0.5
B-4, 6	-	-	-
A-4, 1	0.5	0.25	0.25
A-4, 1a	2.0	0.5	0.5
A-4, 1b	1.0	-	0.5
A-4, 2a	1.5	-	-
A-4, 2b	7.0	-	1.0
A-4, 3a	3.5	2.0	0.5
A-4, 3b	1.0	13.0	1.5
A-4, 4a	2.0	13.5	1.0
A-4, 4b	1.0	9.5	0.5
A-4, 5a	1.0	11.0	0.5
A-4, 5b	0.5	2.5	0.25
A-4, 6	-	-	-

Table 16 cont.

Layer	B.&A.	Shell	Basalt
D-6, 1	1.0	0.25	0.5
D-6, 2	3.0	1.5	0.25
D-6, 3	1.0	0.5	1.5
D-6, 4	0.5	5.0	0.25
D-6, 5	0.25	1.0	0.25
D-6, 6	-	-	-
C-4, 3a	2.0	-	-
C-4, 3b	5.5	-	0.5
C-4, 4a	8.0	-	1.0
C-4, 4b	9.5	-	1.25
C-4, 5a	5.0	0.5	1.0
C-4, 5b	1.0	0.25	0.25
C-4, 6	-	-	-
B-4, 2	2.5	-	0.5
B-4, 3a	7.0	0.25	0.5
B-4, 3b	9.0	-	1.0
B-4, 4a	7.0	-	1.0
B-4, 4b	2.5	-	1.5
B-4, 5a	2.5	-	0.5
B-4, 5b	1.5	0.5	0.5
B-4, 6	-	-	-
A-4, 1	0.5	0.25	0.25
A-4, 1a	2.0	0.5	0.5
A-4, 1b	1.0	-	0.5
A-4, 2a	1.5	-	-
A-4, 2b	7.0	-	1.0
A-4, 3a	3.5	2.0	0.5
A-4, 3b	1.0	13.0	1.5
A-4, 4a	2.0	13.5	1.0
A-4, 4b	1.0	9.5	0.5
A-4, 5a	1.0	11.0	0.5
A-4, 5b	0.5	2.5	0.25
A-4, 6	-	-	-

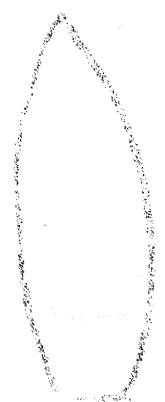
Table 16 cont.

Basalt	Shell	B.&A.	Layer
0.5	0.5	0.5	1, 0-0
0.5	0.5	0.5	2, 0-0
0.5	0.5	0.5	3, 0-0
0.5	0.5	0.5	4, 0-0
0.5	0.5	0.5	5, 0-0
0.5	0.5	0.5	6, 0-0
0.5	0.5	0.5	7, 0-0
0.5	0.5	0.5	8, 0-0
0.5	0.5	0.5	9, 0-0
0.5	0.5	0.5	10, 0-0
0.5	0.5	0.5	11, 0-0
0.5	0.5	0.5	12, 0-0
0.5	0.5	0.5	13, 0-0
0.5	0.5	0.5	14, 0-0
0.5	0.5	0.5	15, 0-0
0.5	0.5	0.5	16, 0-0
0.5	0.5	0.5	17, 0-0
0.5	0.5	0.5	18, 0-0
0.5	0.5	0.5	19, 0-0
0.5	0.5	0.5	20, 0-0
0.5	0.5	0.5	21, 0-0
0.5	0.5	0.5	22, 0-0
0.5	0.5	0.5	23, 0-0
0.5	0.5	0.5	24, 0-0
0.5	0.5	0.5	25, 0-0
0.5	0.5	0.5	26, 0-0
0.5	0.5	0.5	27, 0-0
0.5	0.5	0.5	28, 0-0
0.5	0.5	0.5	29, 0-0
0.5	0.5	0.5	30, 0-0
0.5	0.5	0.5	31, 0-0
0.5	0.5	0.5	32, 0-0
0.5	0.5	0.5	33, 0-0
0.5	0.5	0.5	34, 0-0
0.5	0.5	0.5	35, 0-0
0.5	0.5	0.5	36, 0-0
0.5	0.5	0.5	37, 0-0
0.5	0.5	0.5	38, 0-0
0.5	0.5	0.5	39, 0-0
0.5	0.5	0.5	40, 0-0
0.5	0.5	0.5	41, 0-0
0.5	0.5	0.5	42, 0-0
0.5	0.5	0.5	43, 0-0
0.5	0.5	0.5	44, 0-0
0.5	0.5	0.5	45, 0-0
0.5	0.5	0.5	46, 0-0
0.5	0.5	0.5	47, 0-0
0.5	0.5	0.5	48, 0-0
0.5	0.5	0.5	49, 0-0
0.5	0.5	0.5	50, 0-0
0.5	0.5	0.5	51, 0-0
0.5	0.5	0.5	52, 0-0
0.5	0.5	0.5	53, 0-0
0.5	0.5	0.5	54, 0-0
0.5	0.5	0.5	55, 0-0
0.5	0.5	0.5	56, 0-0
0.5	0.5	0.5	57, 0-0
0.5	0.5	0.5	58, 0-0
0.5	0.5	0.5	59, 0-0
0.5	0.5	0.5	60, 0-0
0.5	0.5	0.5	61, 0-0
0.5	0.5	0.5	62, 0-0
0.5	0.5	0.5	63, 0-0
0.5	0.5	0.5	64, 0-0
0.5	0.5	0.5	65, 0-0
0.5	0.5	0.5	66, 0-0
0.5	0.5	0.5	67, 0-0
0.5	0.5	0.5	68, 0-0
0.5	0.5	0.5	69, 0-0
0.5	0.5	0.5	70, 0-0
0.5	0.5	0.5	71, 0-0
0.5	0.5	0.5	72, 0-0
0.5	0.5	0.5	73, 0-0
0.5	0.5	0.5	74, 0-0
0.5	0.5	0.5	75, 0-0
0.5	0.5	0.5	76, 0-0
0.5	0.5	0.5	77, 0-0
0.5	0.5	0.5	78, 0-0
0.5	0.5	0.5	79, 0-0
0.5	0.5	0.5	80, 0-0
0.5	0.5	0.5	81, 0-0
0.5	0.5	0.5	82, 0-0
0.5	0.5	0.5	83, 0-0
0.5	0.5	0.5	84, 0-0
0.5	0.5	0.5	85, 0-0
0.5	0.5	0.5	86, 0-0
0.5	0.5	0.5	87, 0-0
0.5	0.5	0.5	88, 0-0
0.5	0.5	0.5	89, 0-0
0.5	0.5	0.5	90, 0-0
0.5	0.5	0.5	91, 0-0
0.5	0.5	0.5	92, 0-0
0.5	0.5	0.5	93, 0-0
0.5	0.5	0.5	94, 0-0
0.5	0.5	0.5	95, 0-0
0.5	0.5	0.5	96, 0-0
0.5	0.5	0.5	97, 0-0
0.5	0.5	0.5	98, 0-0
0.5	0.5	0.5	99, 0-0
0.5	0.5	0.5	100, 0-0

Table 16 cont.

Layer	B.&A.	Shell	Basalt
X-4, +1	0.5	0.25	0.25
X-4, 1a	0.7	0.25	-
X-4, 1b	3.0	0.5	1.5
X-4, 2a	0.5	3.5	-
X-4, 2b	3.5	27.5	0.5
X-4, 3a	1.5	24.0	0.25
X-4, 3b	2.0	21.0	2.5
X-4, 4a	2.5	39.0	0.5
X-4, 4b	1.5	22.0	1.0
X-4, 5a	8.0	1.5	0.5
X-4, 5b	-	1.0	1.0
Totals	12 lb. 7 oz.	17 lb. 1 oz.	3 lb. 3 oz.

PROJECTILE POINT OUTLINES



Simple Point



Notched Point



Notched Point



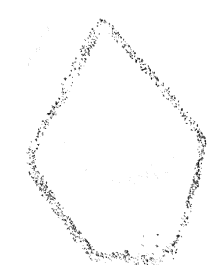
Serrated Point



Notched Point



Simple Point



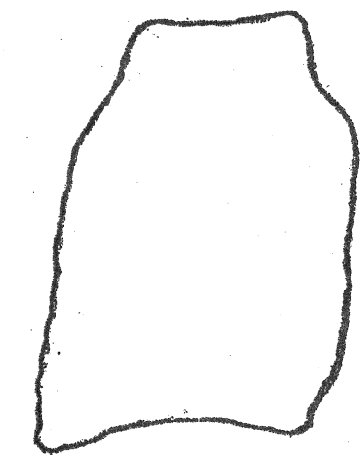
Diamond Point



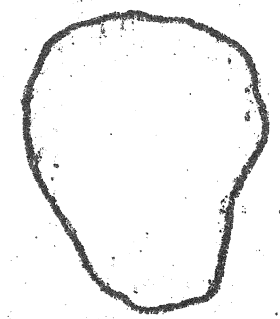
Notched Point

Fig. #2

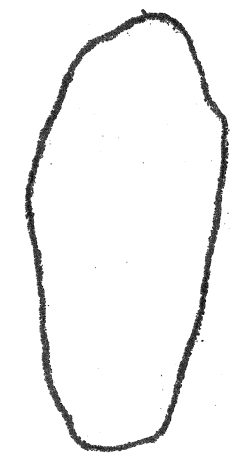
SCRAPERS AND KNIVES



Two Sides Single Face



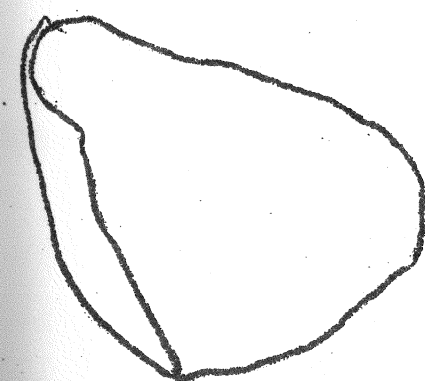
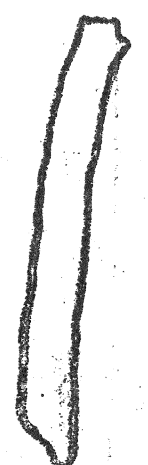
End Scraper



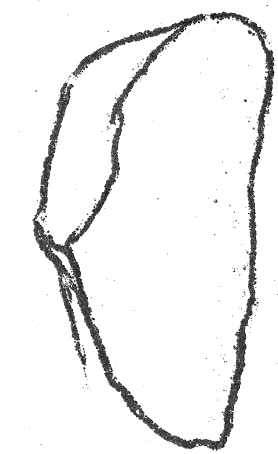
All Sides All Faces



Single Side Single Face



Hand Axe (Scraper)

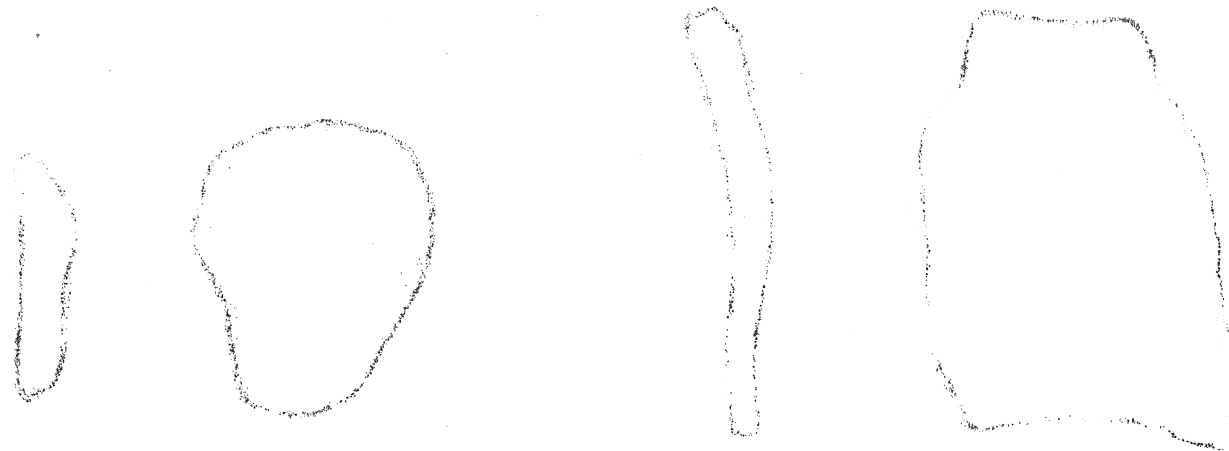


Single Side Two Faces



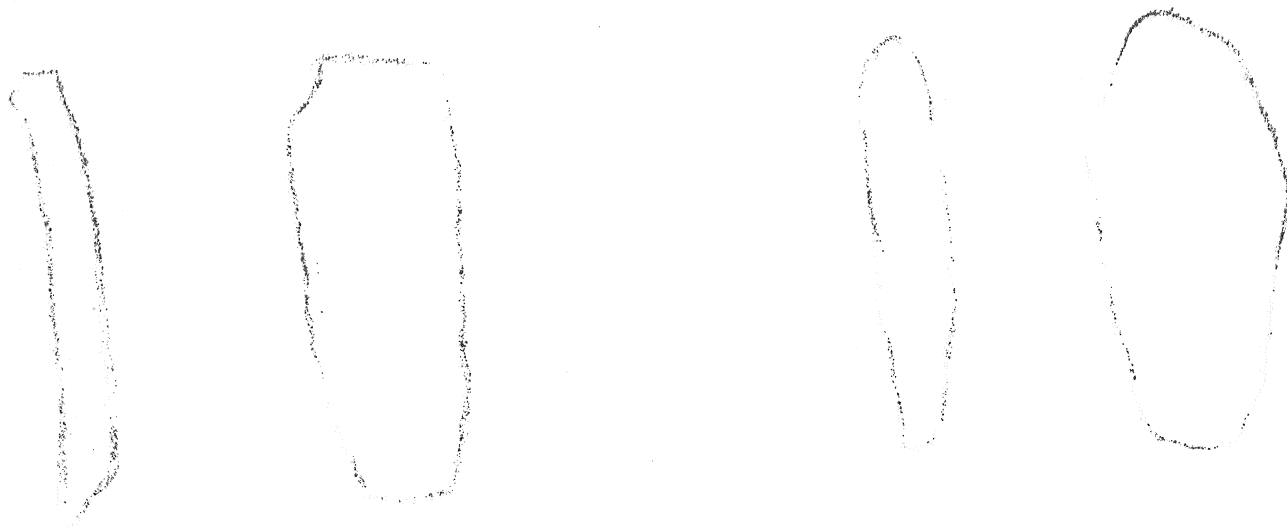
SCALPERS AND KNIVES

Fig. 42



End scraper

Two sided stone knife



Single sided stone knife

All sided stone knife

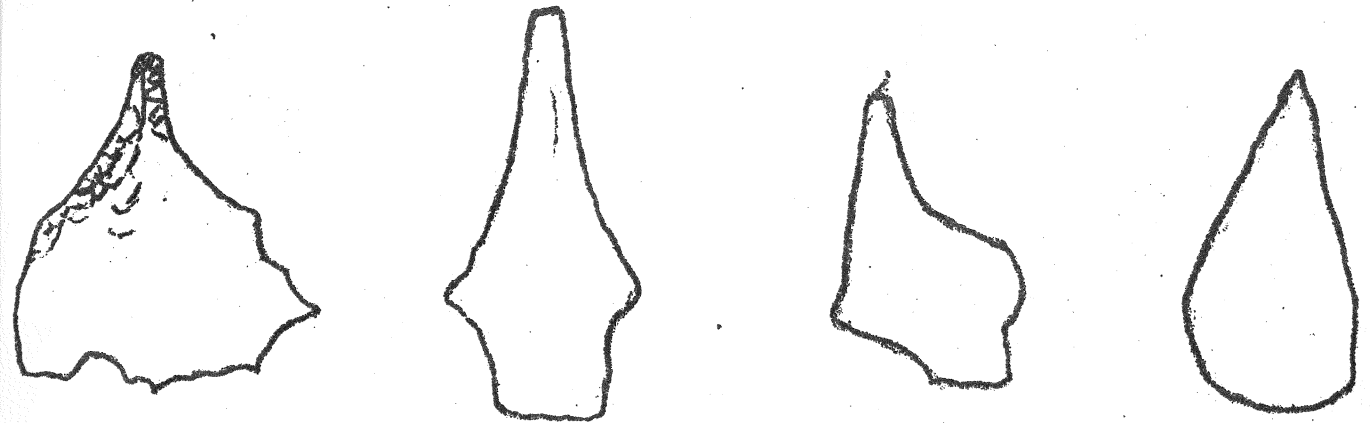


Single sided stone knife

Hand and scraper

Dia. #3

DRILL AND AWL OUTLINES



Drills

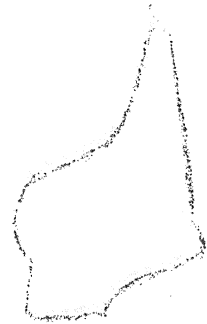
Awls

DRILL AND SAW OUTLINES

Fig. 1



Alva

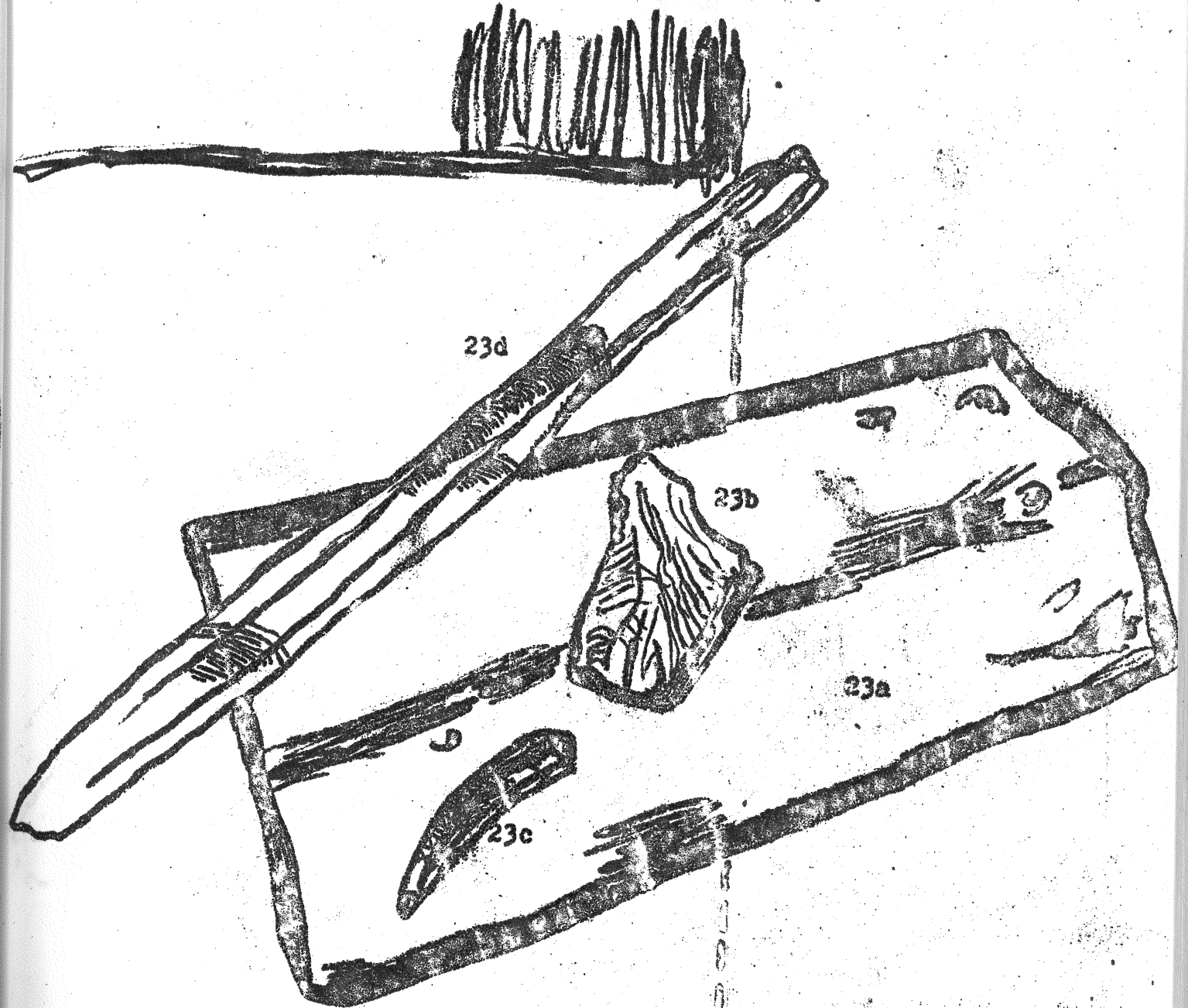


Alva



Dia. #4

TOOL KIT (actual size)



Reqs. 2-23a, b, c, d

C-D line of
section D-2
(see MAP 1.)

(exile [unclear]) TIX IOT
(exile [unclear])



22 7235 130
(22 7235 130)
1.5 7235 130

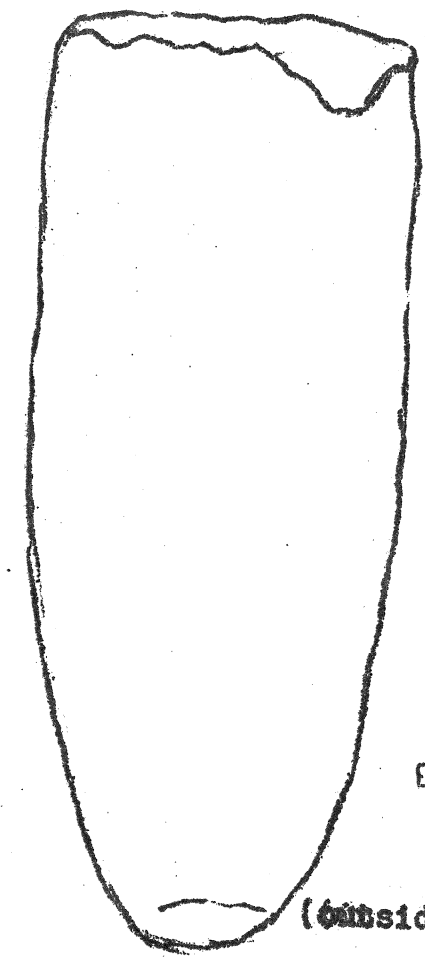
1.5 7235 130

Dia. #5

Dia 5

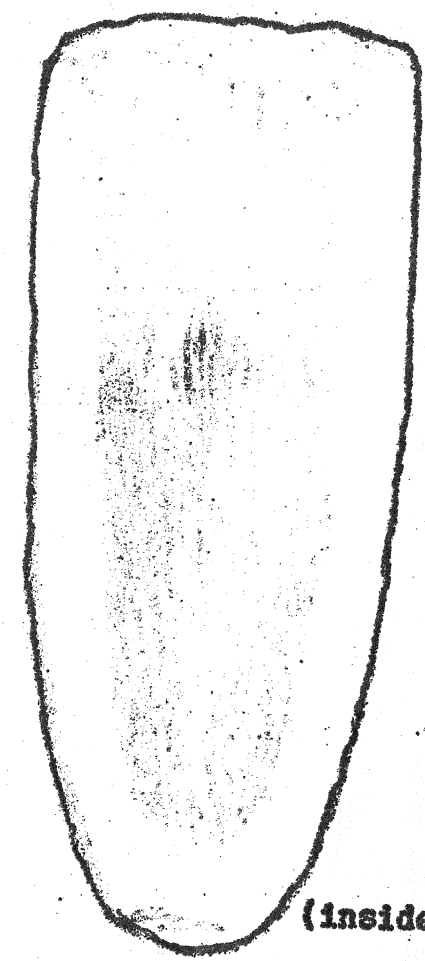
Wedges

WEDGES (actual size)

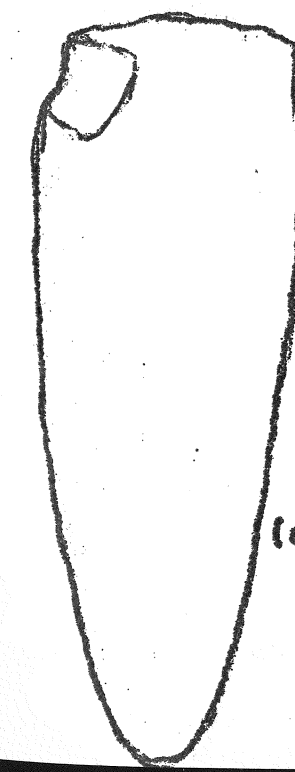


ExQx:2-20
ExQx:2-20

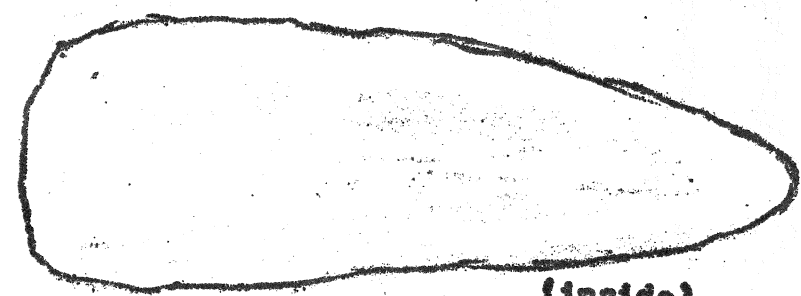
(outside)



(inside)



(outside)



(inside)

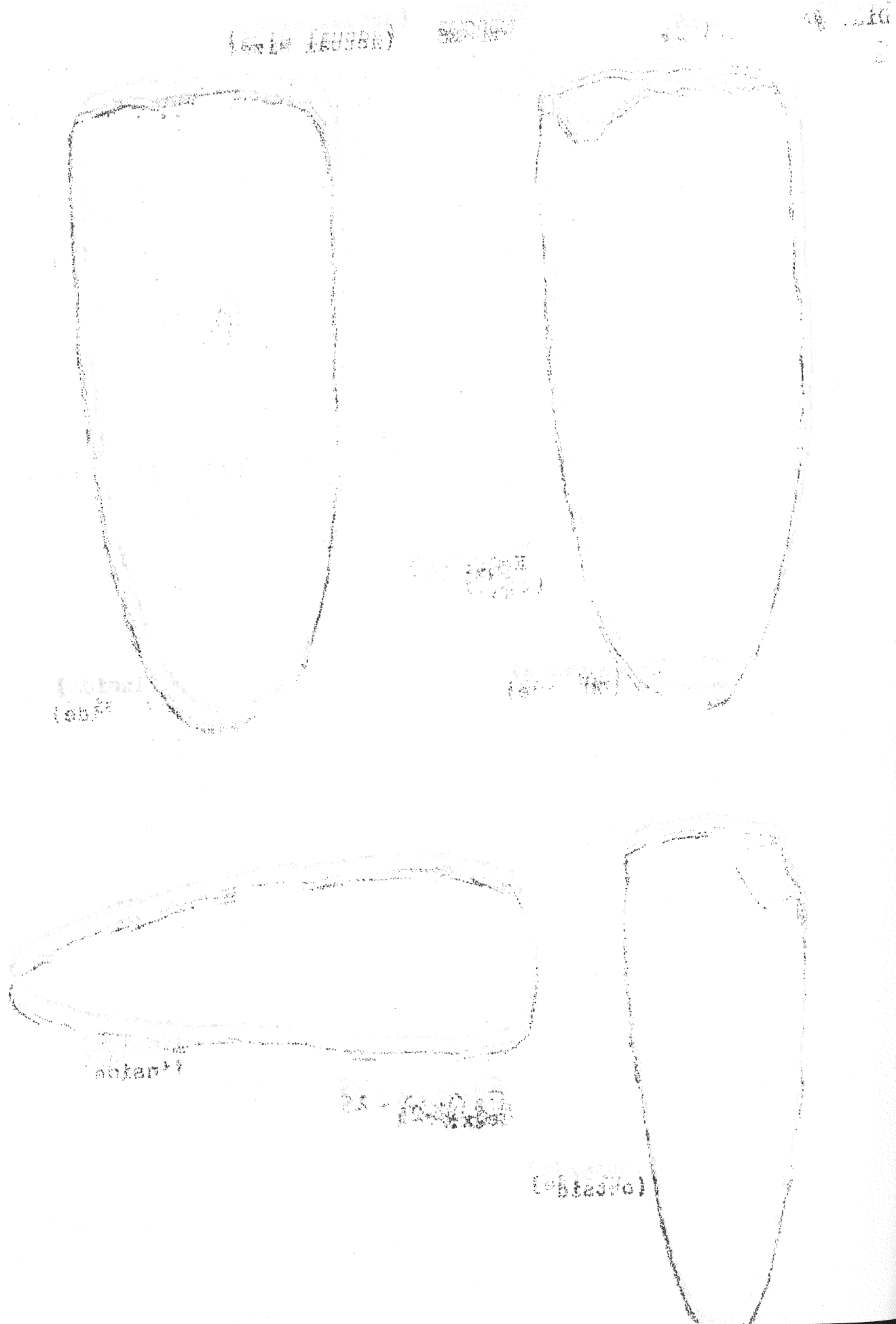
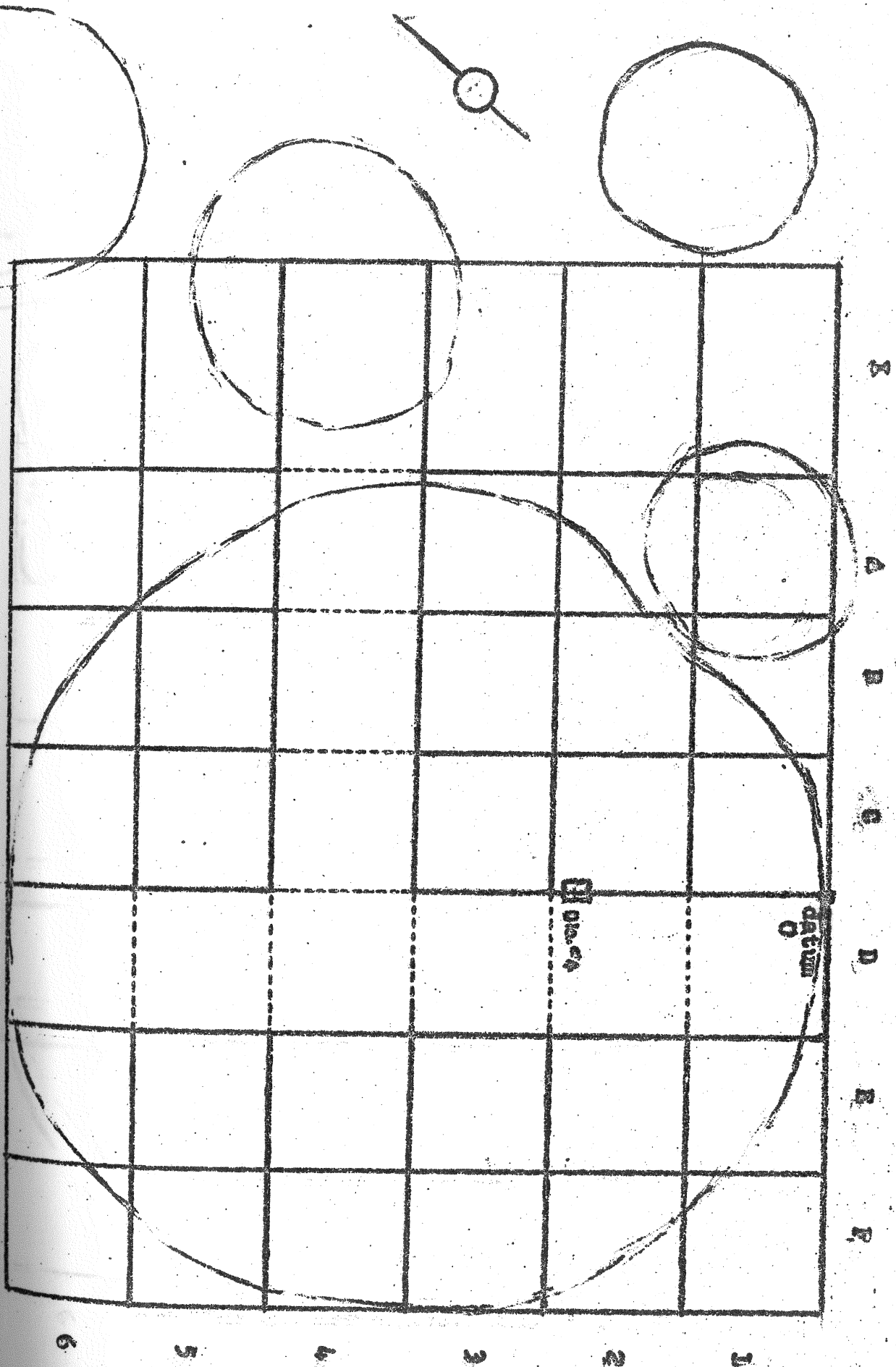
ExQx:2-25
ExQx:2-25

MAP 1.

GRID PLAN OF HOUSEPT AND STORAGE PITS

Scale - 1"=4'

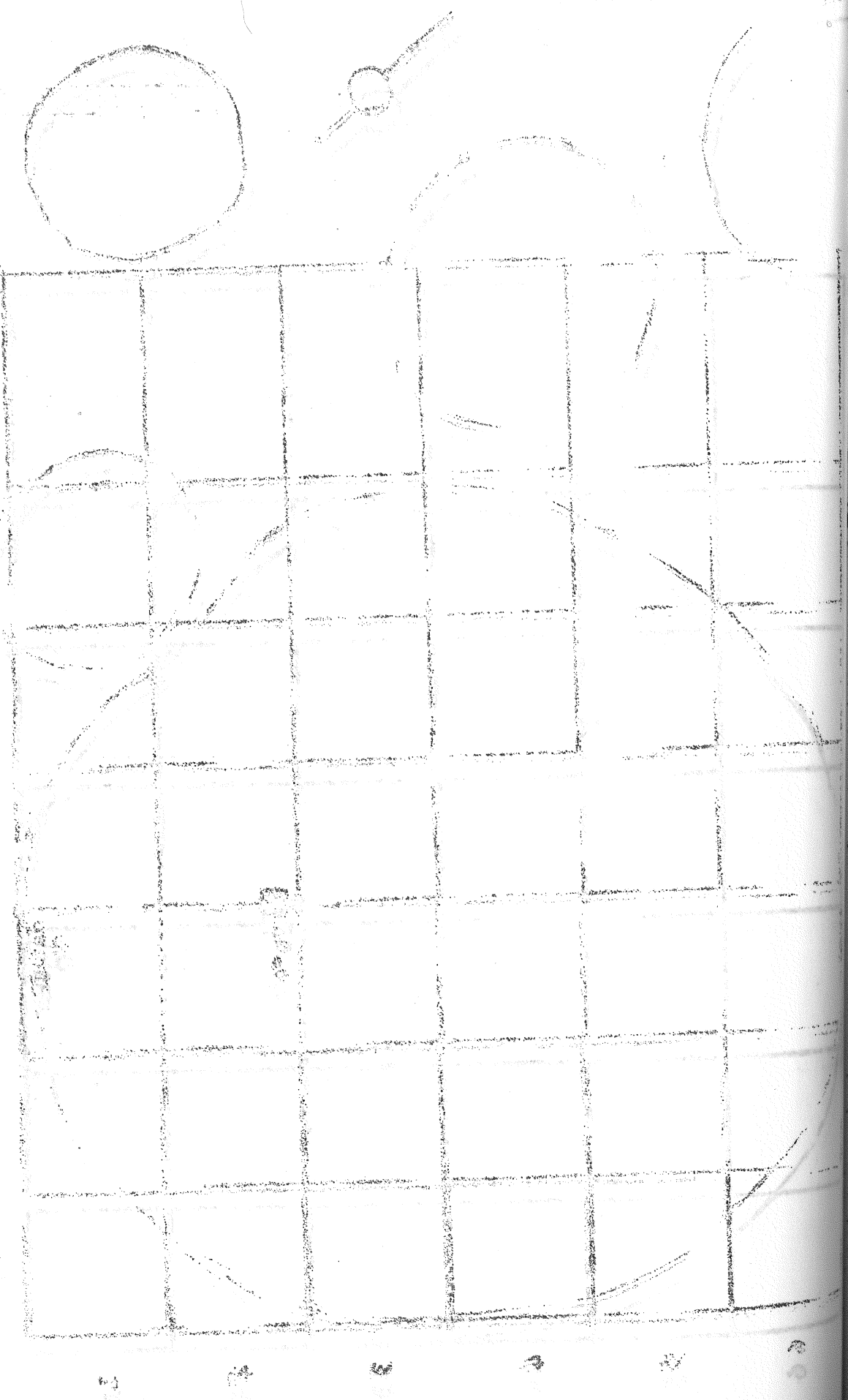
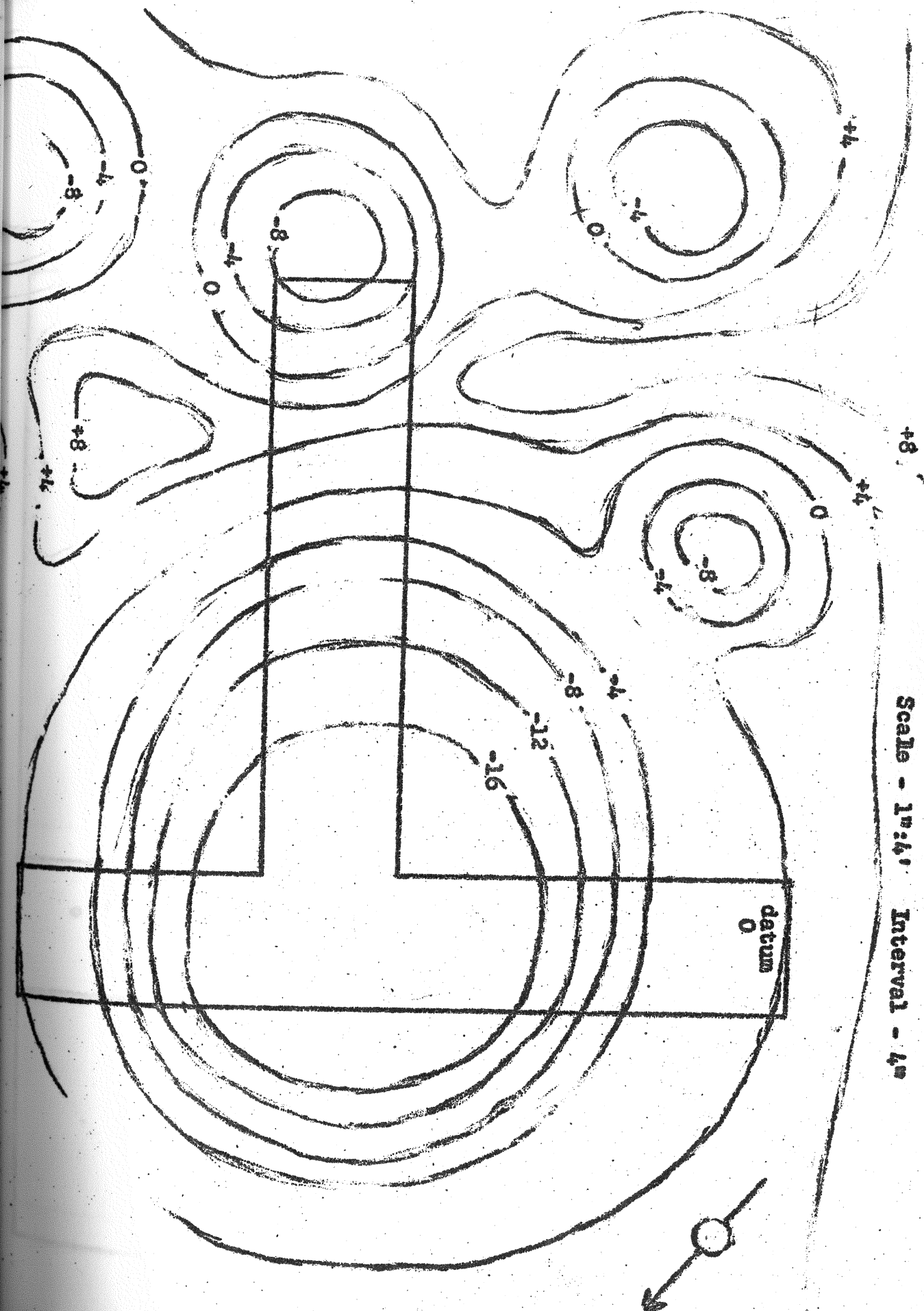
Dark outline shows excavated area.



MAP 2.

CONTOUR MAP OF PTIS

Scale - 1"=4' Interval - 4'

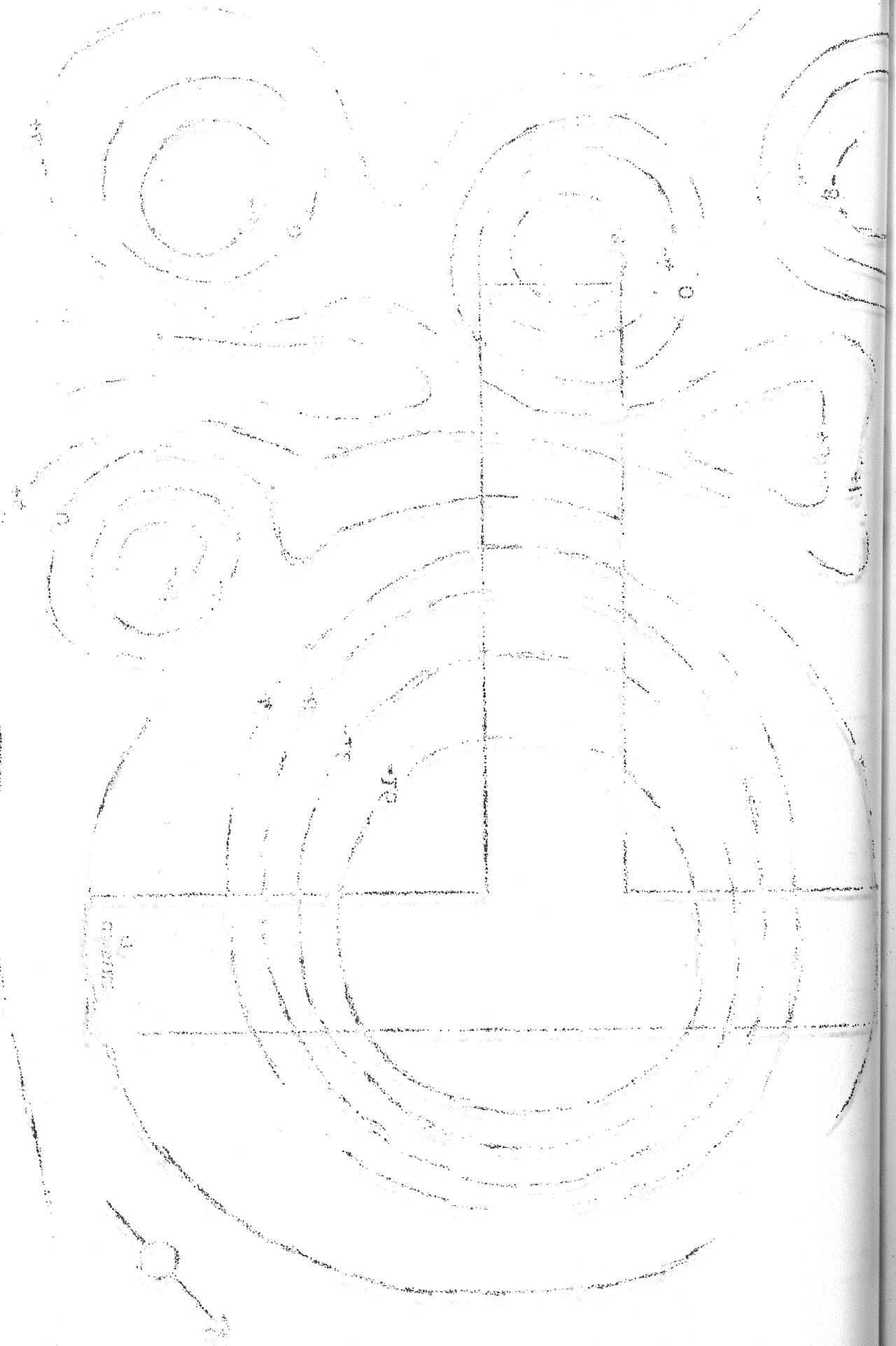
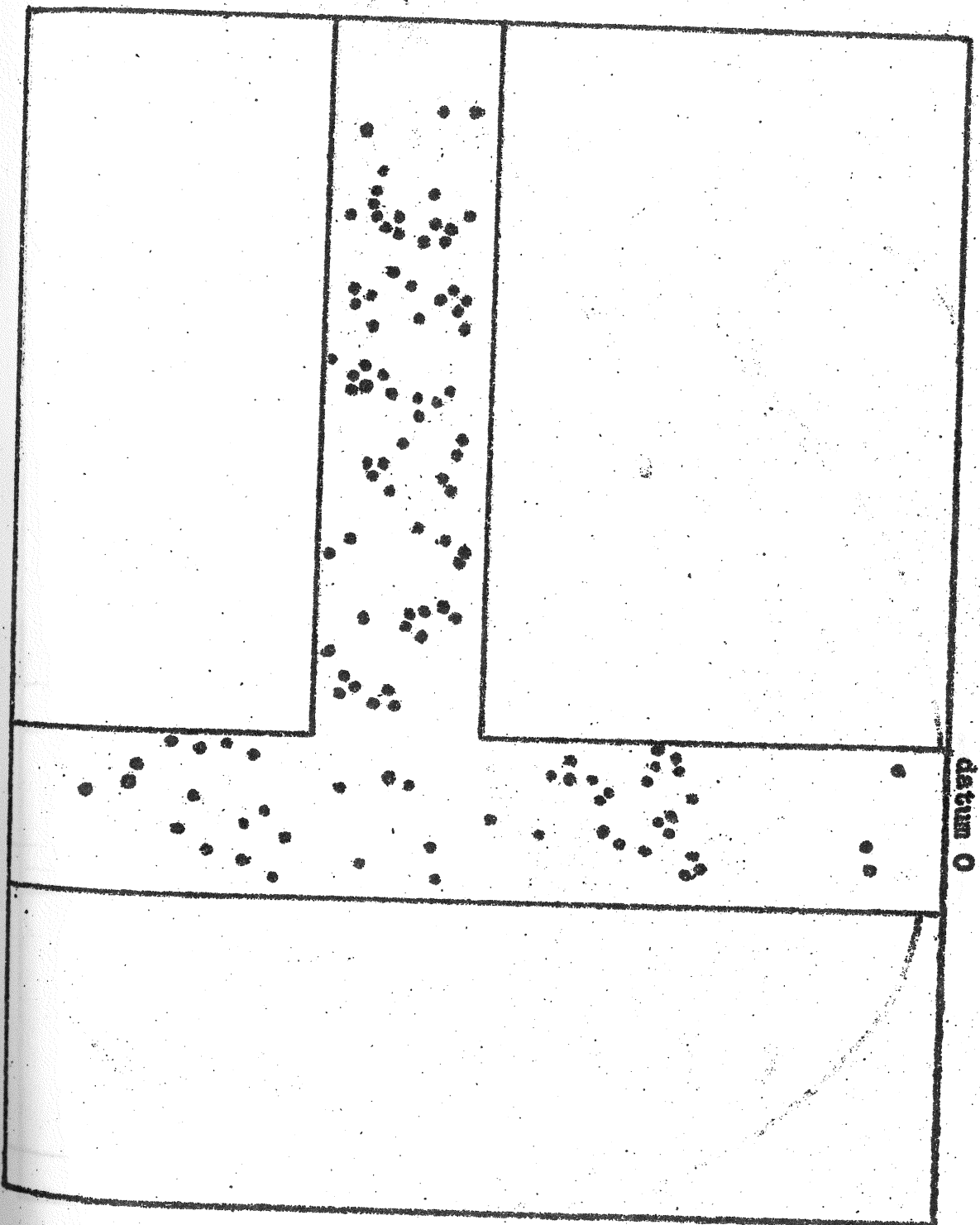


MAP 1

CONTOUR MAP OF PTIS
Scale - 1"=4' Interval - 4'

MAP 3.

ARTIFACT DISTRIBUTION
Scale - 1"=4'

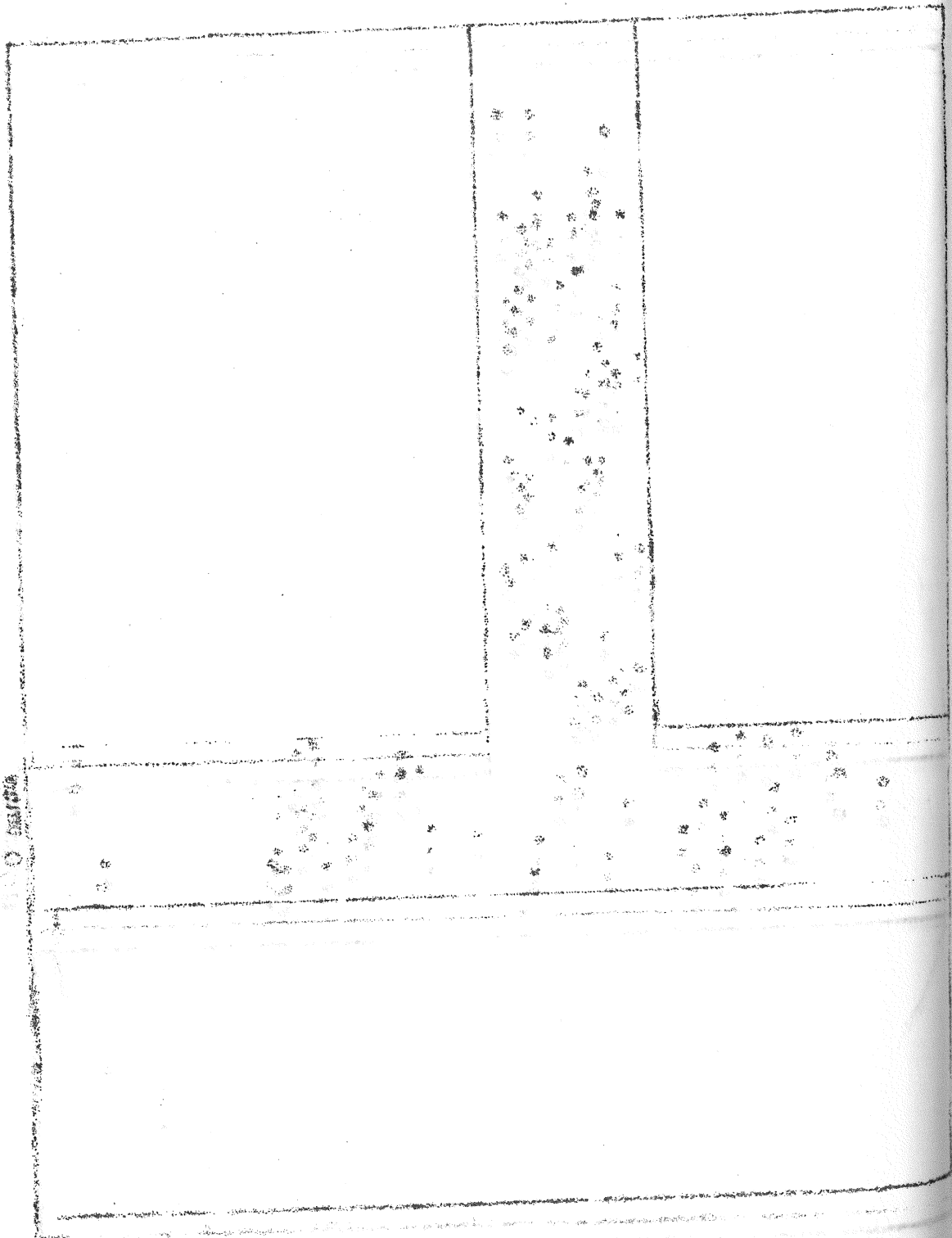
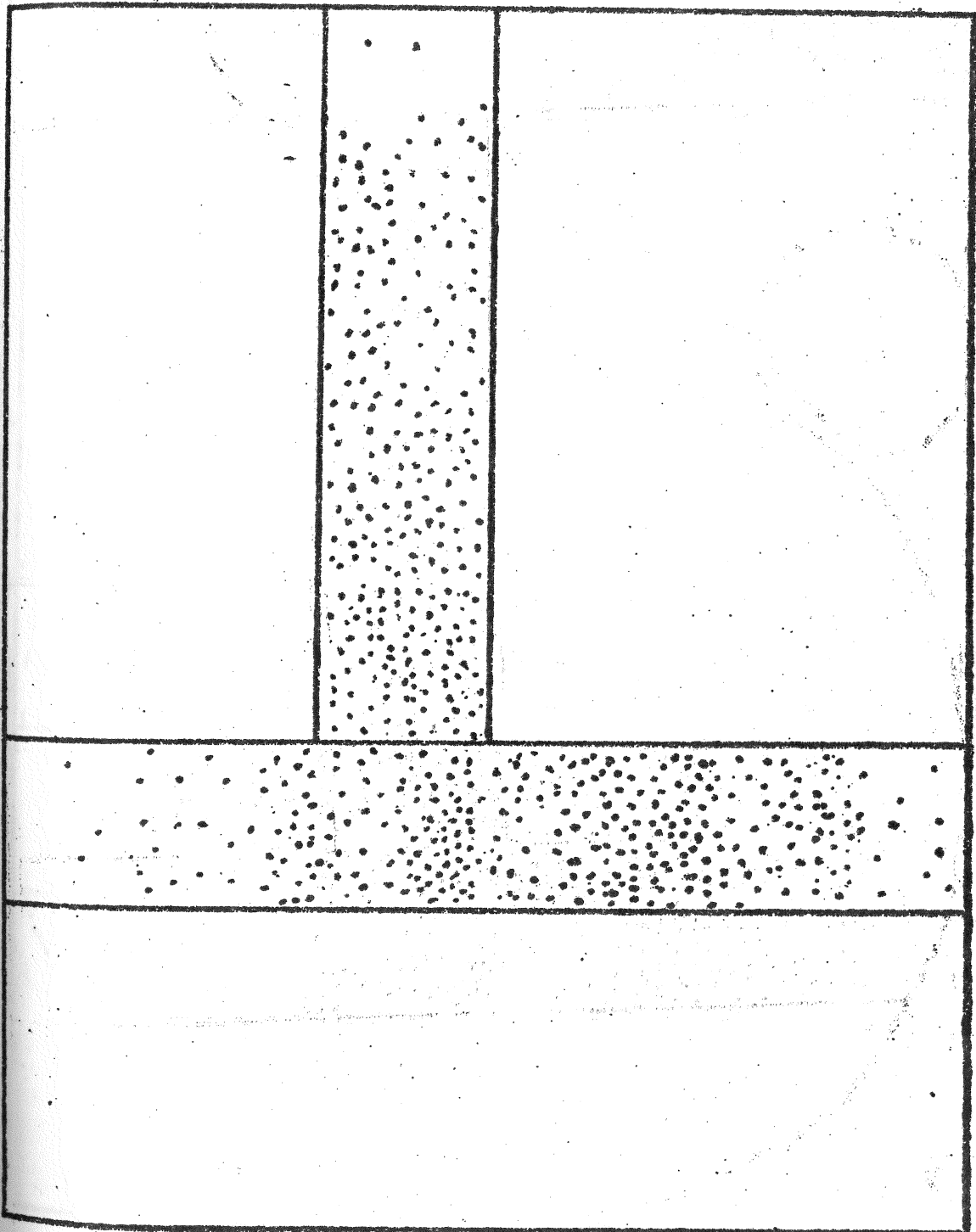


MAP 3.

Scale - 1"=4' Interval - 10
Contour Interval - 10

BONE AND ANTLER DISTRIBUTION

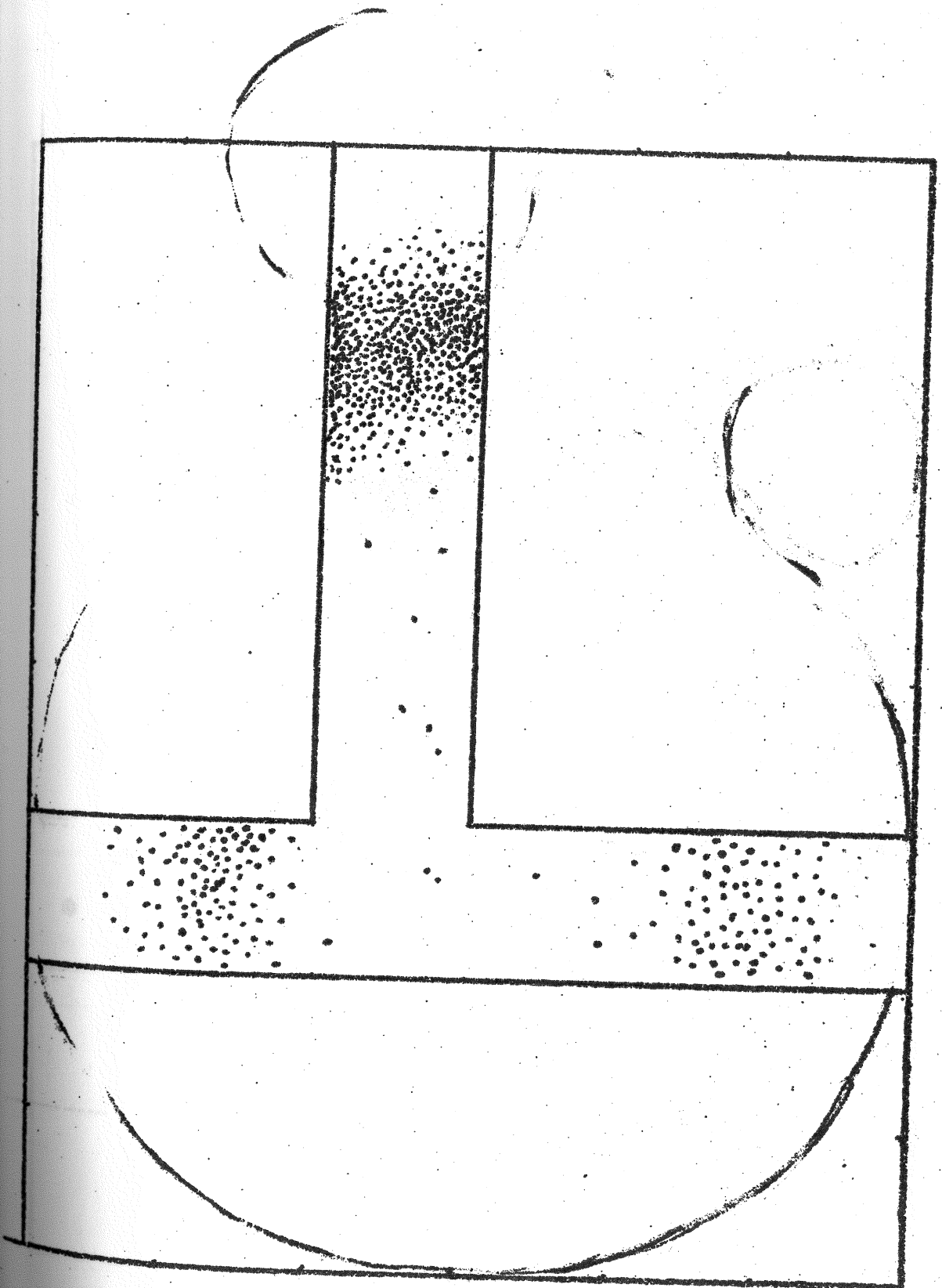
Scale - 1"=4'
One dot represents approx. 100.



SMELL DISTRIBUTION

Scale - 1"=4'

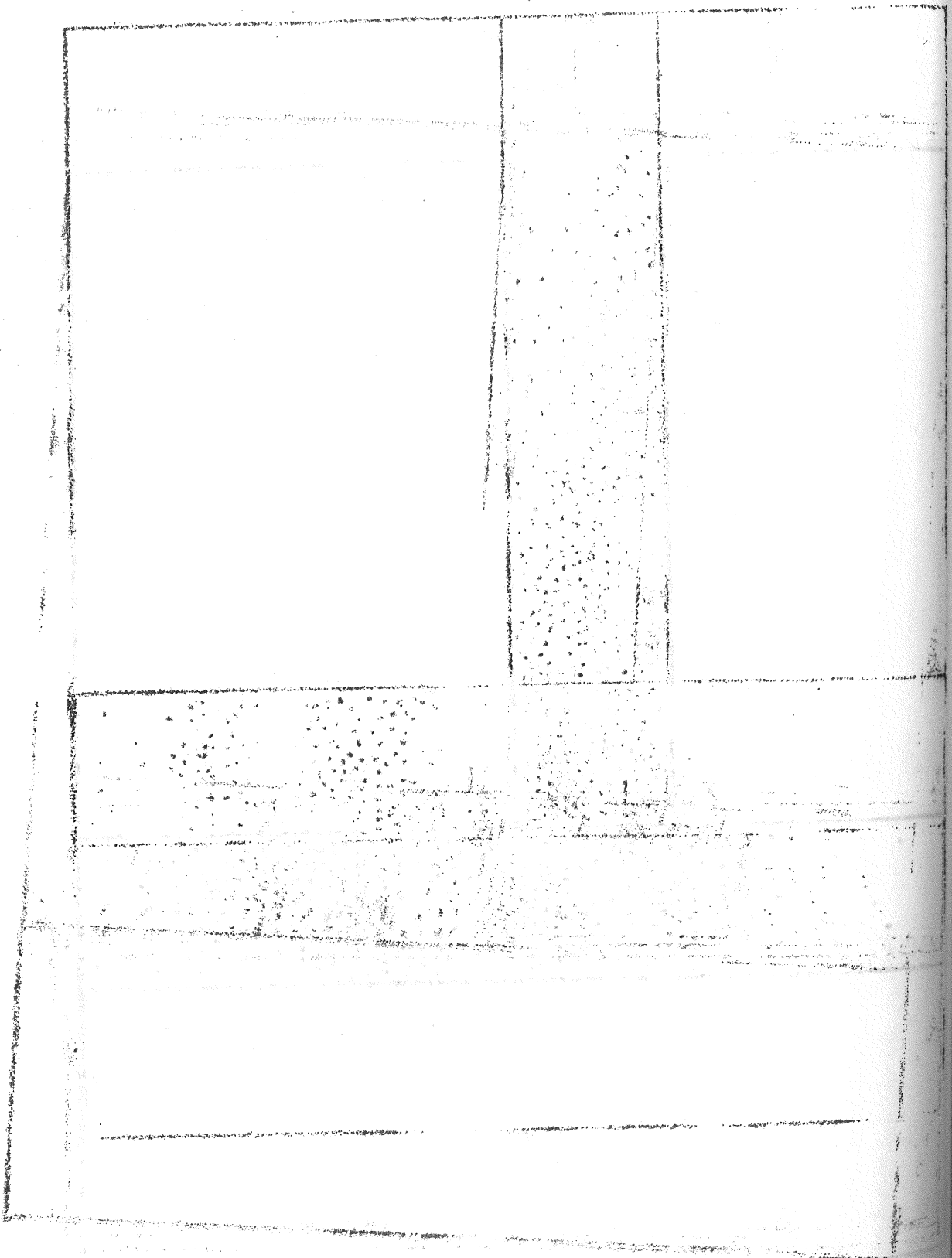
One dot represents approx. 4oz.
or 1 shell.



SECRET

DO NOT WRITE IN THESE SPACES

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ROYAL
ANTHROPOLOGICAL
INSTITUTE





DISTRIBUTION OF LARGE ROCKS (mostly fire-cracked)
Scale - 1:4'

10-1-4

Small circle represents one rock.
Dot represents charcoal.

Do not report on charcoal.

