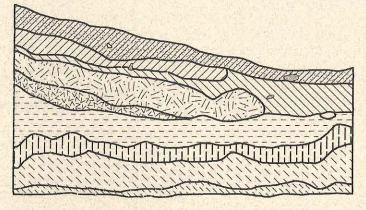
Archaeological Excavation at the Moore Site (12-Hu-935): A Multi-component Site Near the Forks of the Wabash, Huntington County, Indiana

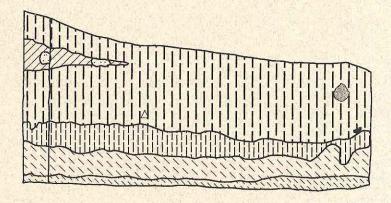
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April 1996



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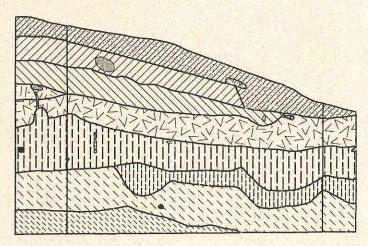


Report of Investigations: 95IN0072-P3r01

LANDMARK

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Technical assistance was provided by the following persons. Dr. Annette Ericksen, of Archaeological Data Services, conducted the botanical analysis. Terrance Martin, identified the faunal material. Leslie Bush attempted to identify the bark from Feature 10. Robert G. McCullough examined the ceramic assemblage. Curtis Tomak examined the entire assemblage of diagnostic lithics.

The field crew for this project consisted of Ramie Gougeon, Jen and Chan Funk, Chris Jerrells, Michelle Lorenzini, Jerry Mount, Arthur Sonnier, Jason Strahl, Leonard Van Zeeland, and David Wolf. David Sherman was the project director. Lab work was conducted by Stacy Bennett, Marnie Hilton-Plunkett, and Leonard Van Zeeland.

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Abstract

12-Hu-935 is a large multi-component site in Huntington County, Indiana. The site was mitigated in response to the proposed improvement to U.S. 24. 12-Hu-935 components range from Paleoindian to historic. The site was recorded in 1989 (Zoll 1989) by the Ball State University, Archaeological Resource Management Service (ARMS) as a very large lithic artifact scatter. Findings included 3,026 prehistoric artifacts, 6 historic artifacts, and over 600 fire cracked rocks. The diagnostic lithic assemblage consisted of 1 Paleoindian miniature, 1 Matanzas, 1 Madison, and 1 Riverton. These data raised expectations for finding significant intact subsurface cultural remains. For this reason ARMS began Phase II subsurface investigations in 1991. During testing a total of 938 prehistoric artifacts were recovered, including 1 Brewerton Corner Notch point and one Brewerton point fragment. Further findings were a number of intact features, including an "earth oven" (with an associated radio carbon date of A.D. 460+/-60) and "soil discolorations with associated artifacts." (Zoll 1992) The recovered remains warranted mitigation of negative impact resulting from U.S. 24 improvement.

Landmark Archaeological and Environmental Services, Inc. was contracted to mitigate negative impact to the site resulting from planned improvement to U.S. 24. During mitigation 66 projectile points from nearly all periods of Indiana's prehistory were recovered. Also recovered were 36,537 pieces of lithic debitage. It seems likely then that 12-Hu-935 was an often visited locale throughout this time. Three pit features with associated Late Woodland pottery were encountered during mitigation. This indicates the possibility that during this period some habitation related activities may have occurred at 12-Hu-935. Miami remains, including structural materials, a large sheet midden containing a dense assemblage of faunal materials, clay pipes and silver items of adornment were also recovered during mitigation. These remains are undoubtedly of Miami origin, deposited prior to the rapid and unplanned abandonment of a large settlement at the forks of the Wabash and Little Rivers, just days before the arrival of William Henry Harrison and his troops during the War of 1812.

Three distinct contexts of preservation were encountered at 12-Hu-935: 1) beneath the plowed field on the north side of U.S. 24, 2) within the tree line adjacent to the plowed field, and 3) beneath gravel fill on the south side of U.S. 24. Each of these were impacted by unique ranges of formation processes which determined the observed expression of the archaeological record. Most notably among these processes are: 1) the construction, use, and abandonment of the Wabash-Erie canal, 2) the construction, use, and destruction of the Inter-Urban rail line, 3) the commencement of agriculture in the current plowed field, and 4) the occupation and abandonment of a large Miami settlement that stretched west from the forks at Huntington for 3 or 4 miles along the Wabash. Prehistoric cultural formation processes also likely contributed to the character of the observed archaeological record. The periodic occupation and reoccupation of the site along with the use, re-use, and recycling of its resources throughout much of Indiana's prehistory, almost certainly resulted in some mixing. Each of these transformations are explored below.

The pedogenesis of the soils encountered at 12-Hu-935 also strongly influenced the character of the observed archaeological record. The site's setting, on the first terrace of the Wabash River near its headwaters, indicates that throughout the site's occupational history it was well protected from alluvial deposition. During mitigation few other sources of geological deposition were recognized. This indicates that the parent material of the soil encountered there was deposited during the close of the last glaciation. The foregoing suggest further that during all occupational episodes the original cultural depositional surface was in the relatively stable A horizon. This interpretation was confirmed during mitigation. The vast majority of temporally diagnostic archaeological materials, from both historic and prehistoric periods, was encountered within the A soil horizon.

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1. Introduction

12-Hu-935 is a large multi-component site, first recorded (Zoll 1989) and tested (Zoll 1992) by the Ball State University, Archaeological Resource Management Service (ARMS), as part of the environmental impact assessment for the proposed improvement to U.S. 24. 12-Hu-935 components range from Paleoindian through historic occupations. The density of cultural materials recovered by ARMS during testing indicated the necessity of mitigating the site. Based on "soil characteristics" and ARMS' recovery of charcoal from an "earth oven" with a radio carbon date of AD 460 +/- 60, numerous sub-plowzone "features," as well as Middle to Late Archaic, and Late Woodland projectile points, suggested the possibility of exploring regional chronometric, subsistence, and site structural issues. Landmark Archaeological and Environmental Services, Inc. (LANDMARK) was contracted by the Indiana Department of Transportation (INDOT) to mitigate negative impact upon the site resulting from this expansion of U.S. 24.

ARMS identified 12-Hu-935 as an extensive lithic scatter in an agricultural field located on a natural levee on the first terrace of the Wabash River, in a valley known as both the Wabash-Erie Channel (Dryer 1908) and the Wabash Sluiceway (Cummings and Schrock 1928). The lithic scatter extends roughly over one third of the current agricultural field. The scatter is located in the SW 1/4 of the NW 1/4 of the NE 1/4 of the SE ¼ of Section 24, Township 28 North, Range 9 East as shown on the U.S.G.S. 7.5 Bippus, Indiana Quadrangle (Figures 1.1 and 1.2). U.S. 24, the southern border of the lithic scatter defined during Phase I (Zoll 1989), lies roughly forty meters north of the Wabash River, on top of the natural levee. This levee was created as the waters of the Wabash became entrenched into the Liston Creek Limestone formation (Figure 1.3). The scatter is bordered REDACTED on the north roughly by the extent of the first terrace, and on the East by an intermittent drainage and tree line. A series of steep bluffs, running roughly east and west, crest 100 feet above and 650 feet north of 12-Hu-935. The intermittent drainage enters the current agricultural field at the bluff base, traverses the site, and eventually conflues with the Wabash. The soil is a well drained Fox silt loam¹, whose pedogenesis occurred in alluvium deposited via waters of the melting glacier and later Glacial Lake Maumee, beginning around 14,500 years ago (Farrand 1988). Surface Artifacts - including numerous flakes, FCR, and a large biface - recovered just below the northern rim of the Wabash and Erie Canal in the root mast of a large fallen tree - suggest that the canal, rather than U.S. 24, should be considered the southern boundary of 12-Hu-935.

During mitigation three distinct preservation contexts were identified within the glacial outwash soils encountered at 12-Hu-935. These were 1) beneath the plowzone north of U.S. 24, 2) within the tree line on the north side of U.S. 24, and 3) beneath gravel fill on the south side of U.S. 24. The preservation of cultural materials and features recovered from 12-Hu-935 was dependent upon the preservation context in which they were encountered. A total of 39 two meter square units were excavated during mitigation (See Figure 1.4). A stratified sample of the entire site was taken during mitigation which covered the full range of archaeological variability within each preservation context. Eleven units were excavated in preservation context one, 13 were excavated in context two, and 15 were excavated in context three.

Historically, the Wabash Valley was part of an Indian trade route and has been of strategic and economic significance to the region prior to Indiana's nascence. As early as 1784 George Washington recognized the importance of establishing a water route from the Great Lakes to the Mississippi (Castaldi 1995:2). Washington's dream was realized in 1837 when the Wabash and Erie Canal opened and consequently catalyzed the transformation of the valley into a modern transportation corridor. Castaldi (1995:3) efficiently sums up the significance of the canal to the development of Indiana and historic settlement patterns in the Wabash Valley:

¹ The "Soil Survey of Huntington County, Sheet 18 (Lockridge and Jensen 1982)" shows the location of 12-Hu-935. Here, the soil type is designated as Genesee silt loam. However, during the course of mitigation a striking contrast between the soils found at 12-Hu-935 and typical descriptions of Genesee Silt Loam was noticed. The re-designation of the soils found at 12-Hu-935 to Fox silt loam will be discussed in detail below.



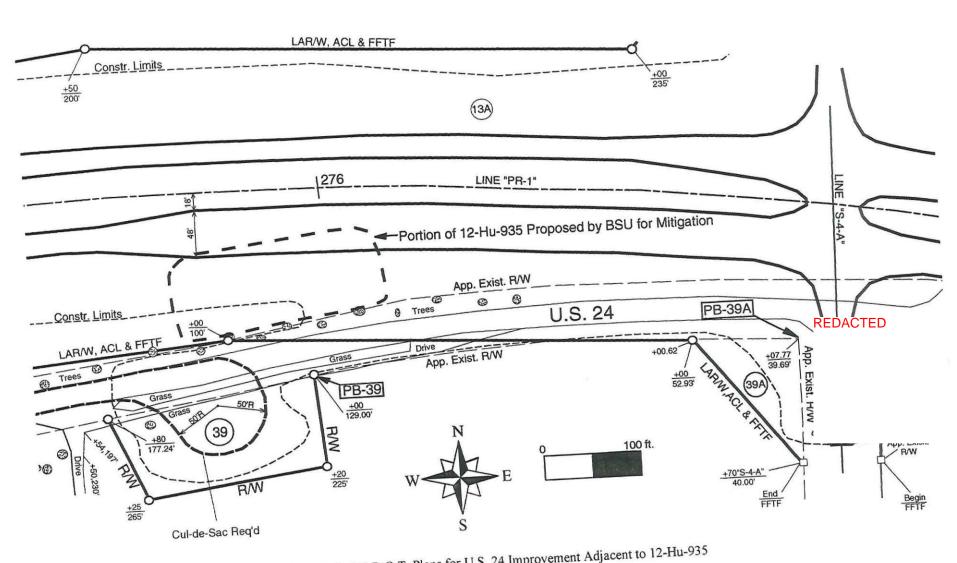
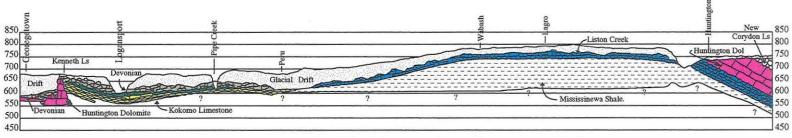
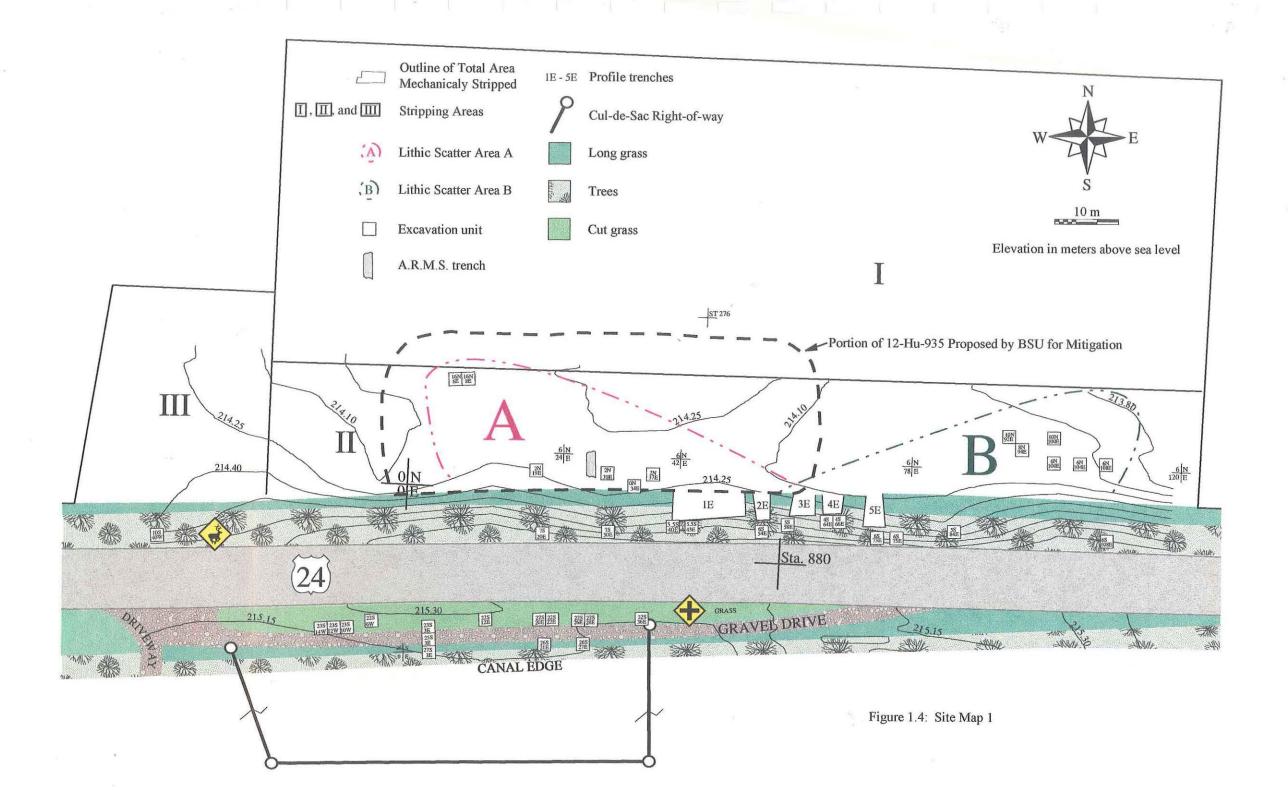


Figure 1.2: I.N.D.O.T. Plans for U.S. 24 Improvement Adjacent to 12-Hu-935



Generalized Section Along The Wabash Sluiceway From Georgetown to Huntington Lenght of Section -- 59 Miles

Figure 1.3: Cross Section of Silurian Formation (From Cummings & Shrock 1928)



For its time, the canal was an ideal transportation method, handling the enormous farm harvest produced in the Indiana heartland. Once trading centers could be established and people were attracted to live and work the land, counties and towns developed along the way. People settled where the locks were constructed and these communities influenced where roads and rails would eventually be located.

The canal links Fort Wayne to Huntington, by-passing two portages - linking first the Maumee and Little Rivers and second the Little and Wabash Rivers - on the older Indian trade route (Figure 1.5). With the canal, traffic on this water route -- the shortest from Buffalo to New Orleans -- changed from canoes to barges (Castaldi 1995). Despite the fact that the cost of constructing the Wabash-Erie canal put the state of Indiana into financial arrears from which it would not fully recover until the 20th century, the canal did open up a modern transportation corridor and thereby usher in a new era of economic development for many sectors of Indiana's population. The canal opened the broad valley floors of the Wabash River across the state to cash agricultural exploitation. Today, this transportation corridor remains vital to the state of Indiana and is kept opened by U.S. 24, which follows the old canal route from the Ohio state line to Logansport.

For a number of reasons it is probable that the modern transportation corridor described above partially overlaps an older, prehistoric, one. First, the diverse valley and riverine environment in which 12-Hu-935 was found would have made the region attractive to prehistoric human and animal populations. Second, previous work has indicated that the Upper Wabash and Maumee River drainages have withstood human traffic since Paleoindian times onward, and are dotted with prehistoric lithic scatters (Anuszyk and Cochran 1984, Mohow 1987). This suggests the possibility that the historically documented trade route might have been used prior to contact. Third, the assemblage of diagnostic lithics recovered from 12-Hu-935 indicates that it has been occupied and re-occupied by prehistoric populations during all major occupational periods identified in the Upper Wabash Drainage.

In order to adequately define the evolution of this transportation corridor and assess the role 12-Hu-935 played in it, it will be useful to begin with an assessment of the formation history of 12-Hu-935. This will provide the background necessary for testing cultural interpretations of the archaeological record there. This will include, 1) an examination of the site's natural setting, geology, and pedogenesis (Chapter 3), and an examination of historic (Chapter 4), and prehistoric (Chapter 7), cultural transformations (Schiffer 1991) to the site. These will include both those processes that were evident in the expression of the archaeological record and those that could be deduced from historical records.

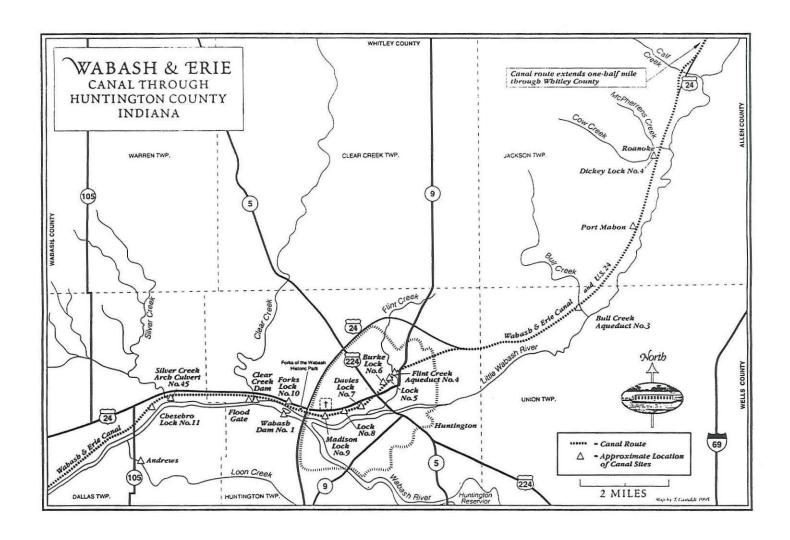


Figure 1.5: Map of Wabash & Erie Canal (From Castaldi 1995)

2. Methodology

2.1. Previous Investigations

"Previous archaeological investigations within the Upper Wabash drainage have been oriented toward surface surveys: only a small number of sites have been tested" (Wepler and Cochran 1983:19). Surveys include 1) Kellar's (1963, 1964a, 1964b) surveys of the area affected by the construction of the Mississinewa, Salamonie, and Huntington reservoirs: 2) Gerald's (1964) and Cochran's (1980) survey of the Fox Island Nature Preserve, 3) Wepler's (1982) survey of the Mississinewa Reservoir, (4) Wepler and Cochran's (1982) survey of Salamonie Reservoir, 5) Wepler and Cochran's (1983) survey of the Huntington Reservoir Shoreline, 6) Anuszyk and Cochran's (1984) survey of the Upper Wabash River Valley, and 7) Mohow and Cochran's (1987) survey of the Upper Maumee River Valley.

An archaeological surface reconnaissance, conducted by Ball State University, Archaeological Resource Management Service (ARMS) and in conjunction with expanded right-of-way for the proposed relocation of U.S. 24 documented 12-Hu-935 (Zoll 1989). This survey resulted in the recovery of 3,026 prehistoric artifacts, 6 historic artifacts, and over 600 fire cracked rocks from 12-Hu-935. Lithic raw material types ranged from Liston Creek, Attica, quartzite, glacial, Kenneth, Upper Mercer, Burlington, and Wyanadotte (in decreasing order of occurrence). The diagnostic assemblage included 1 Paleoindian miniature, 1 Matanzas, 1 Madison, and 1 Riverton. The above indicated the potential for encountering intact subsurface cultural remains. Based on these findings subsurface testing was recommended and carried out in 1991 (Zoll 1992). During testing a total of 938 prehistoric artifacts were recovered, including 1 Brewerton Corner Notch point and one Brewerton point fragment. Furthermore, 11 features, consisting of one "roasting oven" (with an associated radio carbon date of A.D. 460 +/-60), one "FCR concentration," five "soil discolorations with flakes and FCR", and "four artifact concentrations" were encountered at the base of the plowzone (Zoll 1992). In light of these data and the "soil situation" where they were recovered (Zoll 1992) the probability of encountering substantial cultural remains buried beneath the plowzone seemed to be high. Mitigation of negative impact to the site resulting from the expansion of U.S. 24 was therefore recommended. In December 1994 data recovery operations were initiated by LANDMARK.

2.2. Research Questions

To address the cultures present at 12-Hu-935 research questions defining the chronology, past lifeways and cultural ecology will be investigated. These include:

Chronology

- 1. What is the occupational chronology at the site?
- 2. What cultures occupied the site?

Technology

1. What lithic technologies are evident at the site? What changes in lithic technology and activities are evident in the archaeological record there?

Settlement

1. What is the spatial organization of the site? Does the patterned distribution of lithic materials suggest discrete activity areas? Are any of these areas diagnostic of a particular occupation? What do these patterns suggest about settlement patterns in the Upper Wabash drainage?

Subsistence

1. What subsistence activities are evident in the archaeological record at the site?

2.3. Report Preparation

The current study was prepared and written between September 1995 and April 1996 and details all of the findings of the field and laboratory investigations. Interpretations are made in light of current theoretical and methodological considerations as they apply to the specific research problems and questions evaluated herein.

2.4. Laboratory Analysis

Laboratory work, including washing, sorting and tabulating of all collected data were undertaken at LANDMARK's facilities in Sheridan, Indiana. Flotation samples were processed using a 30 gallon drum flotation device. The light fraction, primarily biotic remains, were collected in a nylon bag fitted to the flotation device. The heavy fraction was collected at the bottom of the flotation device onto a 1.5 mm mesh screen. Once dried light fraction samples were bagged and shipped for processing to Dr. Annette Ericksen at Archaeological Services Consultants. The heavy fractions were processed in house using a geological sieve. Cultural materials were hand picked from the .072" and .030" mesh screens. Non-cultural detritus from these screens were subsequently discarded.

After being washed all artifacts, prehistoric and historic, were sorted into classes based on material types; lithic, clay, metal and glass.

2.5. Fieldwork

Field work was undertaken in four stages, 1) mechanical stripping of area I, 2) mechanical stripping of areas II and III and hand excavation of two meter square units in areas II and III, 3) machine excavation and hand scraping of profile trenches within the treeline, 4) hand excavation of two meter square units within the treeline on the north side of U.S. 24 and below gravel fill on the south side of U.S. 24 (Figure 1.4). Each stage will be discussed in detail below. A total of five profile trenches were cut. A total of 39 two meter square units were excavated through the B1. All profile trenches and excavation units were tied to a permanent site datum. The southwest corner of each unit was designated as the unit datum. All unit data were recorded in relation to the overall site datum using a standard transit and leveling rod. Profile trenching began at the western margin of scatter area B (Figure 1.4) and are numbered east. Screen artifacts were recovered from profile trenches and excavation units using 1/4" hardware cloth. Fifteen liter flotation samples were taken from all features and stains and brought back to LANDMARK's laboratory in Sheridan, Indiana for analysis.

Once exposed, all features were schematically and photographically recorded in plan view, and whenever, possible *in situ* artifacts were piece plotted on the plan view maps. Piece plotted artifacts were bagged separately and given separate catalog numbers. Where features (i.e. the Miami midden - Feature 10) extended over more than one unit each unit was treated as a separate entity and flotation samples were taken from each. All unit wall profiles were mapped and photographed.

An overall site plan map keyed to existing permanent landmarks was prepared (Figure 1.4). The site map records the relationship of the stripped areas I, II, and III, scatters A and B, profile trenches, excavation units and cultural features to existing natural and man-made landmarks such as the Wabash-Erie Canal, U.S. 24, the tree line adjacent to the plowed field, and the gravel driveway south of U.S. 24.

Stage 1: Striping Area I

The testing report for 12-Hu-935 filed by Zoll (1992) was used in an attempt to relocate his Features 1-11, Trenches 1 and 2, and Deep Trenches 1-4 within the current agricultural field. Specifically, Zoll's published maps- "Figure 45: Map showing the locations of Trenches 1 and 2 (Zoll 1992:72)" and "Figure 46: Map showing locations of Deep Trenches 1-4 and Features 1-11(Zoll 1992:73)," were followed to flag reported locations of features and trenches. According to Figure 45 the minimum distance between Trench 1 and U.S. 24 was 39 meters.

A fifty meter by one hundred forty five meter block (Area I, Figure 2.1), centered over the area where Zoll reportedly found "intact subsurface cultural features" and a "continuous scatter of flakes," was flagged for stripping. This block extended 14 meters south, 36 meters north, and 42.5 meters east and west beyond the portion of "Trench 1" where "subsurface features" and a "continuous scatter of flakes" were reported by Zoll, and documented in Figures 45 and 46 (1992:72,73). There were two reasons that justified using such a generous block to strip: 1) The first reason was a function of weather. In order to complete the project in a timely fashion it was necessary to work during winter. It was December 28, 1994 before it was possible to begin stripping. By the time stripping commenced there was a high probability that the ground could freeze and thus limit the bulldozer operator's ability to accurately control the amount of dirt removed with each pass. In this situation it was imperative that all the earth that needed to be removed with heavy machinery be removed quickly and efficiently. As it turned out snow began to fall and the plowzone began to freeze the day archaeological stripping was completed. 2) The second justification for extensive stripping was a function of sampling efficiency. By stripping a large area at once, rather than numerous smaller areas, it was possible to quickly assess the archaeological potential of the entire site below the plowzone. Due to the fact that a portion over sixty meters in length of Trench 1 (Zoll 1992:72) was literally dotted with "subsurface features" and a continuos lithic scatter, opening such a generous block in "Genessee soils" (Zoll 1989, 1992) seemed eminently appropriate.

After the block to be stripped was laid out, shovel probes were placed every 25 m along the southern margin of this block to determine variation in plow zone depth. Here, ARMS's findings (Zoll 1992) were confirmed. The depth of the plowzone over the southern margin averaged 21 cm.

The 50 m (N-S) by 145 m (E-W) area was mechanically stripped in two steps, each of which was monitored by three professional archaeologists. Stripping was conducted by Star Excavating. The bulldozer operators were very professional, understood the necessity of moving earth with care, and followed our directions with precision.

Step one: A small, 550 Caterpillar, bulldozer was used to remove the plowzone from 4 transects along the western margin of Area 1. This gave the archaeologists and the dozer operator the opportunity to recognize in plan the difference between the plowzone and sub soil. Next, a larger 850 Caterpillar bulldozer was used to remove 75-85% of the plowzone. Two backdirt piles, running east and west, were placed at the northern and southern margins of the defined block. The northern half of this area was stripped first. It took three passes of the bulldozer to remove 75-85% of the overburden from each transect. Each pass of the bulldozer was monitored by three professional archaeologists.

Step two: Once the majority (75-85%) of the overburden was removed, a road grader was brought in to remove the remainder of the overburden. Again each pass of the road grader was closely monitored. The road grader gave a nice clean and even cut, right at the interface of the plowzone and subsoil, and consequently, enabled us to accurately assess the archaeological potential of this large area with little expenditure of time or effort. The entire area was stripped and graded in 5 work days.

During this phase of research little significant data was recovered. The exception being that the lithic scatter visible on the surface of the plowed field was also visible at the base of the plowzone. The lithic scatter was most dense along the southern margin of the area stripped and became increasingly lighter moving north, ending near the beginning of the second terrace. During the course of stripping it became evident that the entire plowzone along the southern margin was replete with lithic artifacts. Occasional pieces of possibly fire altered rock were encountered in the scatter. However, no concentrations were evident. Furthermore, no subsurface cultural features were encountered.

Stage 2: Stripping Areas II and III

In light of the fact that nothing of archaeological significance (remains that would warrant inclusion in national or state registers) was found in the first area stripped, a second block located between the first and U.S. 24, was mechanically stripped (Block II in Figure 2.1). Through personal communication

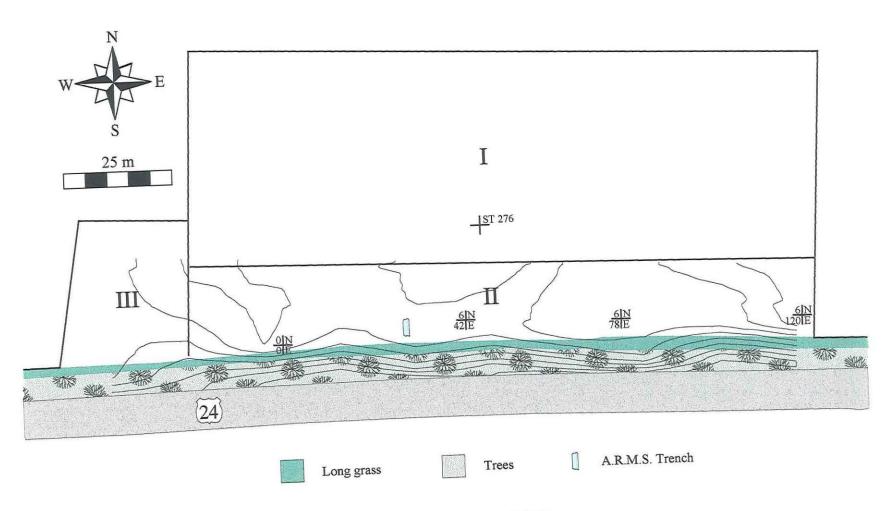


Figure 2.1: Stripped Areas I, II, III.

with Mitch Zoll, and an examination of the ARMS photographic record of 12-Hu-935 testing, it was learned that the actual location of Trench 1 was closer to ten meters from U.S. 24 rather than the thirty nine meters mapped on "Figure 45: Map showing the locations of Trenches 1 and 2 (Zoll 1992:72)."

The eastern ½ of area II was tackled first. Two bulldozers, an 850 and a 550 were used to first move the southern backdirt pile up into the previously stripped area, and second, remove the remainder of the overburden. The larger bulldozer (850) was used to remove the back dirt pile and 80% of the plowzone. The smaller bulldozer (550) was used to slowly and evenly remove the remaining plowzone. As before, each pass of the bulldozer was closely monitored by three professional archaeologists. Along the tree line cuts left by the smaller (550) dozer smeared, and thus exaggerated, dark soil discolorations in the lighter colored sub-plowzone B1. This allowed workers to quickly identify stains and, with a trowel, expose their limits.

The western ½ of Area II was stripped second. The over burden in this area was removed with a backhoe.

Area III, the last area stripped (Figure 2.1), was stripped entirely with a small bull dozer (550).

In all areas when soil discolorations were encountered stripping was halted while stain limits were defined with a trowel and flagged for avoidance.

After mechanical stripping artifacts were flagged in order to roughly determine density clines. Soil discolorations, resembling Zoll's "subsurface features" 3,7,9,10, and 11 (1992) were also flagged. It became readily apparent upon stripping that Zoll's feature 2, artifact scatter with FCR, corresponded accurately with nearly the entirety of lithic scatter "B." "Figure 48: Plan drawing of Feature 2 (Zoll 1992:79)" shows a 1 meter by 60 centimeter area with what appears to be 8 pieces of FCR. Lithic scatter B is literally strewn with lithic debitage and FCR (Figure 2.2).

A six meter grid, tied to a permanent site datum was laid out. For reasons made clear above the six meter grid was not tied to previous testing. Six meter square units containing soil discolorations, lithic concentrations, or were in proximity to mapped ARMS features were shovel scraped. During this phase of research what appeared to be the stain of one of ARMS's deep trenches was encountered (Figure 2.1).

Stripping of the second block revealed: 1) the lithic scatter was more or less continuous throughout the stripped area, and became increasingly dense with proximity to the tree line, 2) two primary density clines existed, Scatter A and Scatter B, one at each end of the stripped area. The scatter in the south eastern portion of the site, Scatter B, contained the higher density of artifacts. One Palmer Corner Notched point, numerous cores, flakes, and pieces of FCR were recovered from Scatter B, (3) six soil discolorations (See Feature Catalog below, Stains 1,2,5,6,7, and 9), resembling Zoll's "soil discolorations with artifacts," were identified.

Two meter square excavation units were laid in over soil discolorations in the newly stripped area. Excavation units were tied to the permanent site datum. These soil discolorations were indistinguishable from those found by Zoll (1992) and remained ambiguous with respect to origins after excavation and analysis of flotation samples.

It is clear that the features and stains encountered beneath the plowzone were impacted by both natural and cultural processes. It is unclear, however, to what extent their origins can be linked to natural processes, and to what extent they can be linked to cultural ones. The soil in the stains resembled that surrounding them, save color. At the interface the B1 varied from a 10YR 3/4, 10YR 4/3, to a 7.5YR 4/3, while the dark stains were generally 10YR 2/1 to 2/2. All soils were sandy silt loam, with some variation in sand content. The excavation of 2 meter square excavation units revealed that throughout the portion of the site found beneath the plowzone the vertical distribution of artifacts conformed to a singular pattern.

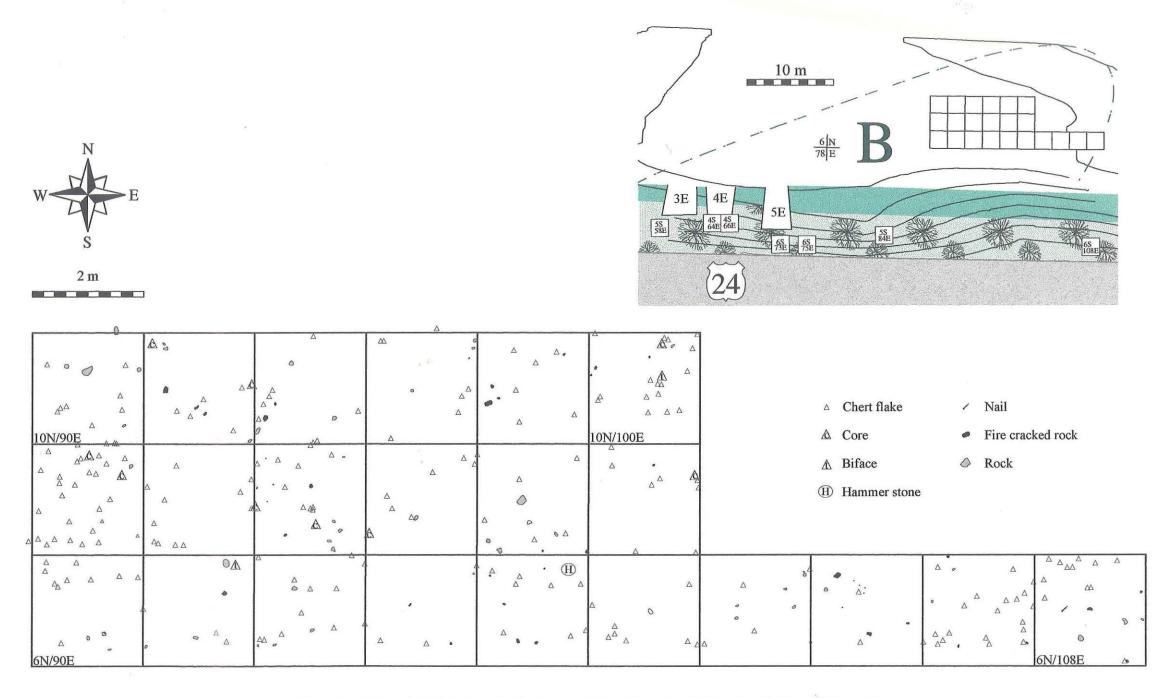


Figure 2.2: Mapped Artifacts Found at the Plowzone/Subsoil Interface Within a Sampled Area of Scatter B

Artifacts were concentrated at the base of the plowzone and decreased geometrically below this level. This patterned distribution of lithic materials suggests that the original depositional surface was probably above the current plowzone/subsoil interface. This pattern most likely resulted from a combination of cultural and natural transformations to the plowed field resulting in the deflation and turbation of this soil context. This will be explored in some detail in chapter 4 below. Figure 2.4 shows a typical transition between the B1 and B2 soils in the south eastern sandy portion of the site. Here, glacially deposited gravel in the B2 is clearly visible.

In areas II and III the only unambiguous cultural materials encountered were lithic artifacts and FCR. In these areas the density of such remains was greater than in the first area stripped. However, it became clear during this phase of research, given the turbated soils and mixed nature of the materials recovered, that the interpretive potential of the "features" and "stains" encountered beneath the plowzone was limited. No diagnostic lithic materials were recovered from any of the features or stains within this area. Fully 16 out of 17 diagnostic points recovered from this portion of the site came from either the surface of the plowzone or from archaeologically displaced plowzone in backdirt piles. No carbon samples of sufficient size to allow radio carbon dating were recovered. Furthermore, no animal remains that could indicate subsistence behavior were recovered. Due to these facts it was decided to concentrate efforts on the portion of the site falling within the proposed right of way that seemed unlikely to have been plowed. This included the area on the north side of U.S. 24 within the current treeline and the area south of U.S. 24 falling within the proposed culdesac (Figure 1.4).

Stage 3: Profile Trenches

To test the hypothesis that the area within the tree line was not plowed and contained intact soils and cultural materials, five Profile Trenches (Figure 2.3) were cut with a roughly 3 foot wide smooth bucket backhoe within the treeline from the edge of archaeological stripping through the remaining plowzone south toward the road. These profile trenches were then scraped clean. Wall trimmings were screened using ¼" hardware cloth.

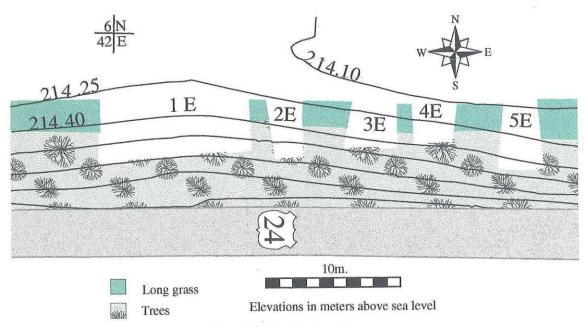
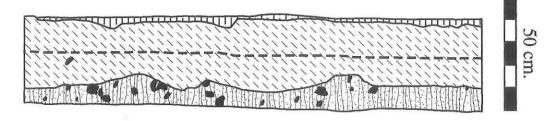


Figure 2.3: Profile Trenches

The five Profile Trenches gave the first substantial evidence indicating an intact A horizon and a relatively intact living surface. The living surface was recognized in the lower half of the A horizon, just above its undulating conformation with the top of the B1, as a band of greyish A soil (Figures 2.5 and 2.6).



- A; 10 YR 3/3 50% mottled with 7.5 YR 3/4, fine, silty sand
- B1; 7.5 YR 3/4, fine, silty sand
- B2; 10 YR 4/4, sandy silt and gravel
- Rock



Figure 2.4: B1/B2 transition below scatter B, in 6N/108E

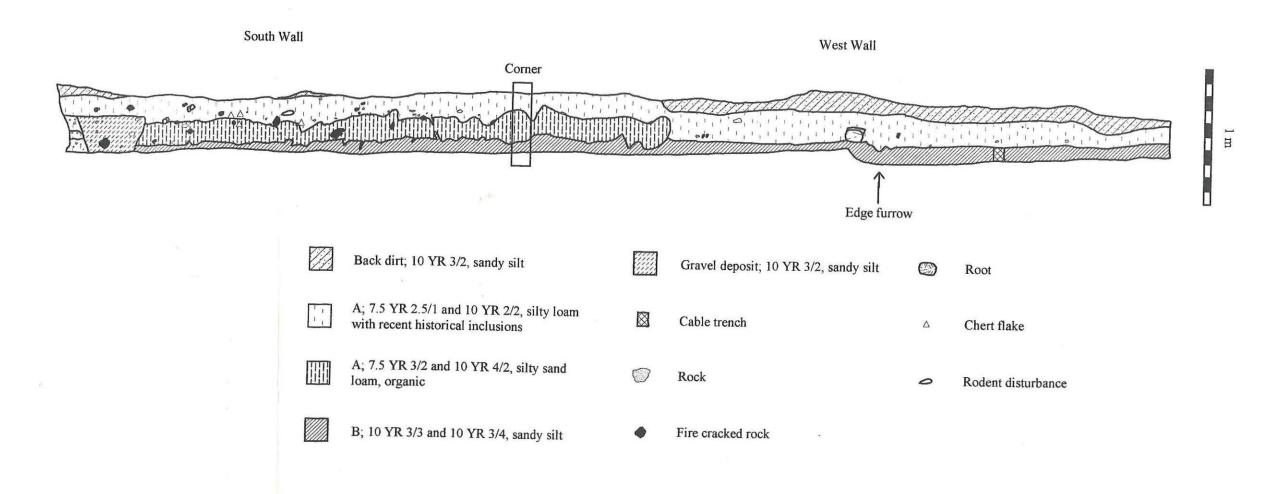


Figure 2.5: Profile Trench 3E, South and West Walls



West Wass

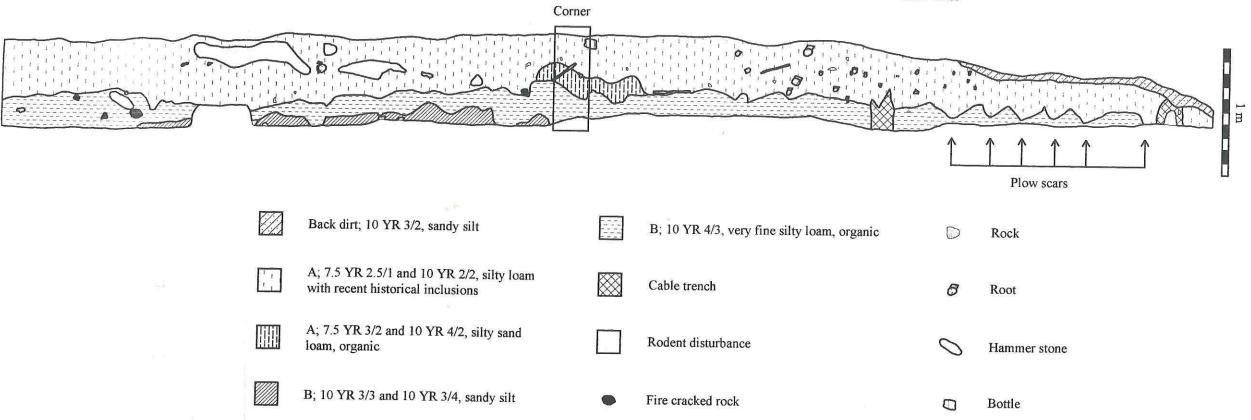


Figure 2.6: Profile Trench 5E, South and West Walls

FCR, occasionally in large deposits, was encountered in all profile trenches concentrated within this band. Both the gradual color gradation between the overlying A horizon and the living surface, as well as the mottled and wavy interface between the living surface and the B1 are suggestive of bioturbation. Primary among these processes is the leaching of organic material from the rich A horizon. This occurs when fine grained humus "coats the outer surfaces of larger grains, attaches itself to clay and silt particles as well as to other organic molecules, and accumulates along the pathways created by plant roots or organisms" (Stein 1992:196). The loose sandy A horizon and the sandy B1 below it would have provided an ideal environment for this process. It was home to a wide range of living creatures, including moles, mice, worms, and burrowing insects, all of which were observed altering the archaeological record during mitigation. Furthermore, the root structure from the treeline likely aided leaching as well. It is probable that these sources of turbation would have resulted in the movement of particles larger than carbon molecules. While the densest concentrations of FCR and lithics were always found in the lower half of the A horizon in unplowed soils, both classes of artifacts were recovered from above and below this level. It appears than that cultural deposits migrated both up and down. The term "living surface" is used here with caution, and describes an archaeological record whose current expression resulted from both natural and cultural processes. This "living surface" could be considered a rather fluid archaeological palimpsest where artifacts seemingly float, migrate, or cycle within the A horizon.



Figure 2.7: Core Concentration

Three deposits encountered during this phase of research gave the first indication of the high improbability that the land within the tree line between the highway and the plowed field was ever plowed. These deposits also further confirmed the suggestion that the current plowed field has deflated since the commencement of plowing. A large concentration of FCR, with over 100 pieces, was encountered in Profile Trench 4E, within the A horizon and just 10 centimeters above the B1. This deposit was found 18 cm above the base of plowing in the adjacent plowed field. Once the concentration was exposed two 2 m x 2 m excavation units (4S-64 - 66E) were placed over it, completely containing it. In plan, the FCR appeared to be scattered in a roughly 3 m x 2 m oval. Included within this deposit were a number of cores, blades, and thermally altered flakes, all of Liston Creek chert. This deposit may be refuse scattered from an earth oven, such as the one recorded by Zoll (1992), used to heat treat local chert. However, no evidence of burning

was encountered which indicated that burning probably did not occur there *in situ*. In profile trench 5E a core concentration (Figure 2.7), a pile of nine cores, was recovered near the A/B1 interface and a full 20 cm above the top of the plowzone in the adjacent agricultural field. One piece of burned bone, one shell fragment, and one prehistoric ceramic sherd were also recovered from this profile trench. It is not likely that the apparent integrity of these deposits could have survived modern plowing.

The level of integrity of the deposits encountered within this context along with the amount of diagnostic remains recovered suggested that data recovery efforts should continue to be concentrated in areas that have not suffered modern plowing.

Stage 4: Excavation of Units Adjacent to the Highway

1. Units within the tree line on the north side of U.S. 24.

The first indications of an intact living surface encountered in profile trenches were confirmed in excavation units placed between U.S. 24 on the south and the plowed field on the north. A total of 13 two meter square units were hand excavated within this preservation context (Figure 2.8). Historic artifacts, from recent glass to odd pieces of rusted iron were recovered throughout most of the A horizon in these units. Lithic artifacts were recovered from nearly all 10 cm arbitrary levels. The pattern of lithic distribution observed above in the profile trenches, where prehistoric cultural deposits were concentrated in the lower portion of the A horizon, was maintained in these units. The foregoing indicates the migration of cultural materials in the sandy A and B1 soil horizons. Although this context has experienced a significant amount of bioturbation intact cultural deposits, faunal material, and prehistoric ceramics were still recovered from units within this context. The recovery of these items further supports the interpretation that this area has never been plowed.

Three intact cultural deposits were encountered within this preservation context: Feature 1, the FCR concentration in 4S/64-66E, the core concentration in Profile Trench 5E, and the FCR concentration in 5S/84E.

2. South side of U.S. 24

15 units were placed between the canal on the south and U.S. 24 on the north (Figure 2.9). During this phase of research intact A horizon soil was encountered buried beneath stratified layers of gravel canal fill. Feature 10, an extensive Miami sheet midden was encountered in A soils in 10.5 of the 15 units excavated in this portion of the site.

In units 23S/10-14W, and 22S/26-28E possible Miami structural remains were encountered. In the first group of units a dense linear concentration of burned bark was encountered traversing the trench suspended within the sandy A horizon. Leslie Bush (personal communication) examined the bark but was unable to determine its species. The bark most likely originated from a burned Miami structure. The co-occurrence of the hearth deposit and the bark lined trench are suggestive of a domestic structure or possibly a corn cache. The second group of Units, 22S/26-28E, contained five post molds. The post molds could be distinguished from other discrete soil discolorations in that they ended abruptly with small deposits of rocks and formed an alignment.

Three pit features, Features 12, 13 and 14, were encountered below and grading into the overlying Miami midden. Although no clear stratigraphy was evident between the pit features and Feature 10 the former likely resulted earlier, probably during one or more Late Woodland occupations. This interpretation is supported by the recovery of what is arguably Late Woodland pottery from within Features 12 and associated with Features 13 and 14. Feature 12 contained a deposit of FCR and 17 Late Woodland sherds while the soil surrounding Features 13 and 14 contained 31 similar sherds. Furthermore, unlike the historic feature, the Woodland features contained no faunal remains. The absence of any faunal remains from these features is possibly due to the slightly acidic Fox silt loam A horizon (Lockridge and Jensen 1982). Feature

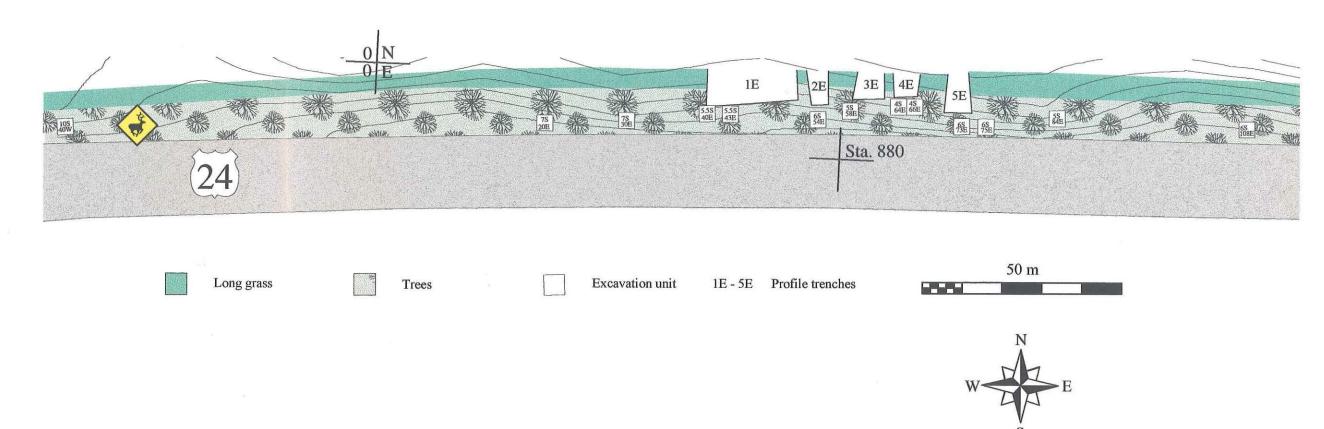


Figure 2.8: Units Within Tree-line, North of U.S. 24.

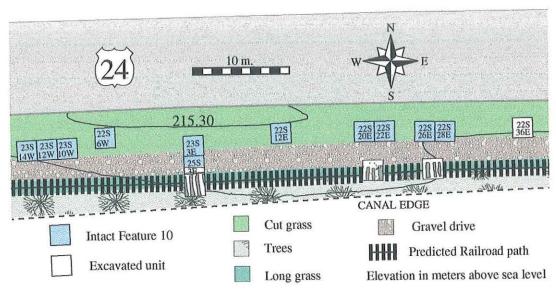


Figure 2.9: Units South of U.S. 24

8, rail tie depressions from the Inter-Urban rail line, was encountered in 3 units placed adjacent to the canal edge.

2.6. Fieldwork Summary

Throughout the sampled portion of 12-Hu-935, in both plowed and unplowed land, vertical movement of artifacts - the result of stochastic natural and cultural processes, was uniformly indicated. In non-plowed land prehistoric artifact density was greatest, on average, 5 cm above the interface between the A and B1 horizons. Above and below this point artifact density decreased rapidly. In plowed land, on the other hand, artifact density was greatest at the base of archaeological stripping - the interface of the plowzone and B1, and decreased precipitously below this level. The artifacts recovered from stains beneath the plowzone were, overwhelmingly, lithic debitage. The darkened soil within sub-plowzone stains and features could be the result of carbon leaching from cultural formations, such as pit features, through the sandy soil. The darkened soil could also be equally well accounted for by floralturbations, such as those resulting from trees growing and decaying, or faunalturbations resulting from ants, rodents, and other burrowing creatures (i.e. mice, moles, worms, or groundhogs)(Schiffer 1991, Stein 1992). On the other hand these stains may have originated from the burning and removal of tree stumps during the original clearing of the land for farming. The stains were concentrated in a ten meter strip north of the current tree line, and remain ambiguous with respect to their origins.

The variability of feature expression described above resulted from a variety of formation processes that occurred during all occupational periods. The most significant cultural transformations to the archaeological record at 12-Hu-935 began during the historic occupation, just after the Miami exodus. Construction of the Wabash and Erie Canal, Inter-Urban rail line, and U.S. 24 all resulted in significant deposition to the archaeological record. Historic and prehistoric transformations to the observed archaeological record in each context of preservation will be discussed in greater detail below.

3. Natural Setting

3.1. Upper Wabash Drainage

12-Hu-935 is located in Huntington County just west of the town of Huntington and the forks of the Wabash and Little Rivers in the Upper Wabash Drainage (Kingsbury 1970). The Upper Wabash Drainage includes portions of Whitley, Allen, Miami, Wabash, Huntington, Wells, Adams, Cass, Grant, Blackford, Jay, Madison, Delaware, and Randolf counties. Major drainage's include the Mississinewa, Wabash, and Eel Rivers. In the vicinity of 12-Hu-935 a number of smaller creeks and intermittent drainages conflue with the Wabash River. Among these are Clear Creek and Silver Creek. Bedrock geology in the drainage is primarily Silurian age (Gutschick 1976).

The majority of the drainage basin lies within the Tipton Till Plain. The Tipton Till Plain is described by Schneider (1976) as flat and featureless. The plain conforms to the Central Till Plain Natural Region defined by Homoya et al. (1985) which covers approximately 12,000 square miles of central and north central Indiana.

3.2. Flora

The presettlement vegetation of the region primarily consisted of beech-maple forest with some oak-hickory forest (Petty and Jackson 1976). In such forests Beech is usually the most abundant canopy with sugar maple begin codominant. Petty and Jackson (1976) state further:

Small tree understory in the woods of the beech-maple association is generally either redbud-dogwood-blue beech or dogwood-hop hornbeam. Shrub layers usually include one or a combination of the following: pawpaw, spicebush, greenbriar, elderberry, leatherwood, wahoo and maple-leaf viburnum.

3.3. Fauna

Modern fauna in Indiana include 177 species of fish, 66 species of mammals, 82 species of reptiles and amphibians, and 366 species of birds. (Gammon and Gerking 1976, Minton 1976, Webster 1976, Mumford 1976).

3.4. Climate

In Huntington County the average length of frost free seasons is between 150 and 170 days. The climate there, and in all of Indiana is described by Newman (1976) as humid continental. The average temperature in summer is 71.9 and in winter 28.3. The total annual precipitation is 37.3 (Lockridge and Jensen 1982).

3.5. Geology

Huntington County is underlain with Silurian age rocks including: dolomite, limestone, chert, siltstone and shale (Gutshick 1976). Liston Creek chert is widely available in the vicinity of 12-Hu-935 (Figure 3.1). In addition to Out Crop 1, directly adjacent to the site, Liston Creek chert is available in three other outcrops and three gravel bars within roughly a mile from the site. The gravel bars include glacial erratic cherts in addition to the Liston Creek. Liston Creek chert occurs in the Liston Creek limestone formation in bands from 1 to 4 inches thick. The limestone occurs in bands ranging from a few inches to a foot or more (Cummings and Shrock 1928: 77).

The Liston Creek formation outcrops over a broad area embracing Miami, Wabash, Huntington, Wells, Grant, Blackford, Madison, Hamilton, and Delaware Counties. The formation outcrops chiefly along the major stream valleys, where it frequently caps the rocky bluffs. (Cummings and Shrock 1928:84).



The lithological characteristics of Liston Creek chert are variable. Fine grained specimens are found in small quantities and are usually inconsistent, veined with imperfections, and prone to frost riving. Consistent, although grainy, varieties are more common, and account for the vast majority of all lithic materials recovered at 12-Hu-935. Liston Creek chert varies in color from light yellowish brown, pale red, brown, dark brown, to light grey. Lithic debitage recovered at 12-Hu-935, of the grainy variety of Liston Creek, shows the highest occurrence of thermal alteration. The preference for the consistent grainy variety conforms to the patterns observed by Cochran, Richey and Maust (1990) in the glaciated regions of northern Indiana.

3.6. Geohistory

The landscape surrounding 12-Hu-935 developed its current contours during the close of the last glaciation as the glacier melted and glacial lake Maumee discharged. The unconsolidated surface deposits in Huntington County are made up of the New Holland member of the Lagro Formation (Wayne 1976). Drift deposits of clay-rich till were left by the Ontario-Erie Lobe of the Wisconsin glaciers (Wayne 1976). Beginning around 15,000 years ago "[Glacial Lake Maumee] emptied its surplus waters through the Ft. Wayne outlet and Erie-Wabash channel into the present Wabash at Huntington, forming a river a mile wide and deep enough to rival the present Niagara" (Dryer 1908:49). Dryer estimates that this sluiceway was under as much as 70 feet of water (1908). Cummings and Shrock succinctly and dramatically sum up this history:

The present Wabash River, with its relatively low gradient and small volume, is but the vestige of a mighty river of the past which carried the flood waters from the retreating glacier, and later those from glacial Lake Maumee to the Mississippi. It was this great stream, and not its dwarfed descendent, that excavated the Wabash sluiceway as we know it today (1928:27-29).

And further, about the entire study area:

The carving out of the valleys, the local stripping off of the drift mantle, revealing preglacial bed-rock surfaces, and finally the alluviation of the broad valley floors were carried on by the waters which were discharged from the melting glacier (Cummings and Shrock 1928:36).

Cummings and Shrock contend that "the major valleys of the Wabash, Salamonie and Mississinewa Rivers were carved out chiefly in glacial times and have suffered but little alteration since" (Cummings and Shrock 1928:31). The first terrace and natural levee where 12-Hu-935 resides likewise has changed little since this time. Why this is so at 12-Hu-935 becomes clear when the Bippus Quadrangle U.S.G.S. topographic map and "Sheet 18" from the *Soil Survey of Huntington County* are examined (Lockridge and Jensen 1982). 12-Hu-935 sits on top of the first terrace of the Wabash River, and is consequently well protected from Wabash alluvium (Figure 3.2). In the immediate vicinity of 12-Hu-935 the Wabash Valley narrows and shows little development of a true floodplain. Furthermore, adjacent to 12-Hu-935, the sharp southern curve of the Wabash indicates that the cut bank is on the north, which suggests further that currently alluvium is picked up by the Wabash adjacent to 12-Hu-935 and deposited on developed floodplains downstream. All of these facts indicate that it is extremely unlikely that floodplain soils developed at 12-Hu-935.

3.7. Pedogenesis

A detailed comparison between terrace and floodplain pedogenic environments around 12-Hu-935 supports the above conclusion. The *Soil Survey of Huntington County* describes the soil at 12-Hu-935 as a Genesee silt loam (Lockridge and Jensen 1982). However, the typical Genessee pedon described by Lockridge and Jensen is found on floodplains rather than glacial outwash terraces (1982:60). The core sample for this typical pedon was taken in "the Reserve of 10 Sections, 1,860 feet north and 2,505 feet west of the southeast corner of sec. 18, T. 28 N., R. 9 E" (Lockridge and Jensen 1982:60). Although this core sample was taken a mere stones throw away from 12-Hu-935, less than ¾ of a mile, it lies on a floodplain at



a much lower elevation than the first terrace and natural levee where 12-Hu-935 sits. Furthermore, the difference in elevation between the core sample and the river is significantly less than the elevation difference between 12-Hu-935 and the river. Station marker 880, from the original U.S. 24 improvement, was mapped on highway department plans (Figure 3.2). The marker was adjacent to 12-Hu-935, and sat atop the same natural levee with an elevation of 706 feet. The elevation of the river is somewhat lower than 690 feet at this point. In contrast, the elevation of the agricultural field where the core sample was taken lies at an elevation between 690 and 700 feet, while the river lies at an elevation somewhat lower than 690 feet. Adjacent to the site the Wabash River is entrenched into bedrock - the Liston Creek limestone formation - and flows at an elevation at least sixteen feet below that of the site. In this situation only the most severe floods could ever leave a trace upon the site. In fact, during the great flood of 1913, adjacent to the site the waters of the Wabash rose to an elevation of 705.13 feet, barely enough to moisten 12-Hu-935 (Figure 3.2: "High-water Mark")

Based on the above geological history it is apparent that the soil, in which 12-Hu-935 was a culturally deposited clastic sediment, developed in alluvium deposited via runoff from the melting glacier and glacial lake Maumee. This soil then can not accurately be described as Genesee silt loam, which develops in active floodplains and not glacial ones. Lockridge and Jensen (1982) describe Genesee soils as deep, well drained, moderately permeable, and formed on floodplains in alluvium. According to Franzmeier (Franzmeier et al. 1987:34) Genesee loam is "formed by alternate deposition of dark-colored oil material high in organic matter and light colored material low in organic matter. Both types of material were carried in by water (Figure 3.3). Franzmeier states further that "the bands of different color are more pronounced in this particular soil than in most floodplain soils" (1987:34). Such stratification contrasts markedly with soils encountered at 12-Hu-935, where no such alternating light and dark bands were encountered. At 12-Hu-935 the A soil horizon varied from 10YR 3/2 to 10YR 3/3 with no visible stratification of light and dark materials. The west wall photograph from 6S/108E (Figure 3.4) shows intact unplowed A horizon soil and its undulating conformation with the underlying B1. Mixing, the likely result of root activity, is also clearly visible in the profile. Gravel from the B2, originally deposited via the Wabash Sluiceway, is visible in the south west corner of the unit. The B1 was generally 10YR 3/4, and also showed no light and dark banding. The difference in color between the A soil horizon and its underlying parent material, the B2, is most likely due to a higher organic content in the former. The darker color of the A horizon could have come from humus or charcoal (Butzer 1964). However, it is unlikely that it was borne via flood water. The B2 was distinguished from the B1 by its slightly more orange color and higher gravel and clay content. In intact soils the conformity between the A and B1 horizons were gradual and often diffused by organic leaching from the upper horizon to the lower (Butzer 1964, Schiffer 1991, Stein 1992). In plowed soils at 12-Hu-935 this boundary was abrupt and smooth. Figure 3.5 shows both sorts of transitions in the east and north profile maps from Profile Trench 2E.

Soils encountered at 12-Hu-935 were more similar to Fox, Martinsdale, and Ockley soils, all of which are formed in outwash sediment (Lockridge and Jensen 1982, Franzmeier et al. 1987) than they are to Genesee soils. Examples of each of these three soils are found in the environs of 12-Hu-934, also on the first terrace. The soils at 12-Hu-935 most closely resemble Fox series soils. ARMS' "Figure 58: Profile of Deep Trench 2, East Wall" (Zoll 1992) is strikingly similar to the typical Fox pedon described by Lockridge and Jensen (1982). Here, it appears that the soil is underlain with calcareous sand and gravel, beginning in the "C2," at 134 cm below surface (Figure 3.6a). This means the soils at 12-Hu-935 can not be Martinsville which are not underlain by calcareous sand and gravel. The depth of the calcareous sand deposit at 12-Hu-935 further suggests that the soils are not Ockley, in which the calcareous layer is usually deeper. Furthermore, the soils at 12-Hu-935 are virtually identical to those found at 12-Hu-1022 (Figure 3.6b). There, the Soil Survey diagnosis was of Fox silt loam. The calcareous sand and gravel layer there occurred at 140 cm below surface.

² According to J. E. Yahner (personal communication) the typical Ockley pedon pictured in *Understanding* and *Judging Indiana Soils* (Plate 6) is indistinguishanble from a typical Fox pedon. The only difference between the two soils is their respective solum depths.

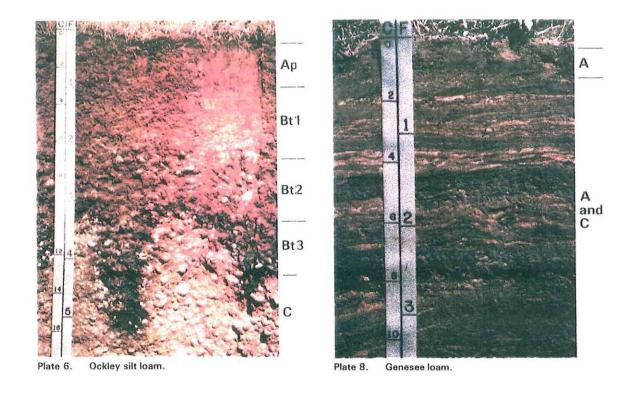


Figure 3.3: Typical Outwash and Floodplain Soils - Ockley & Genesee (Franzmier et al. 1987)



Figure 3.4: Intact Unplowed A Horizon, 6S/108E West Wall

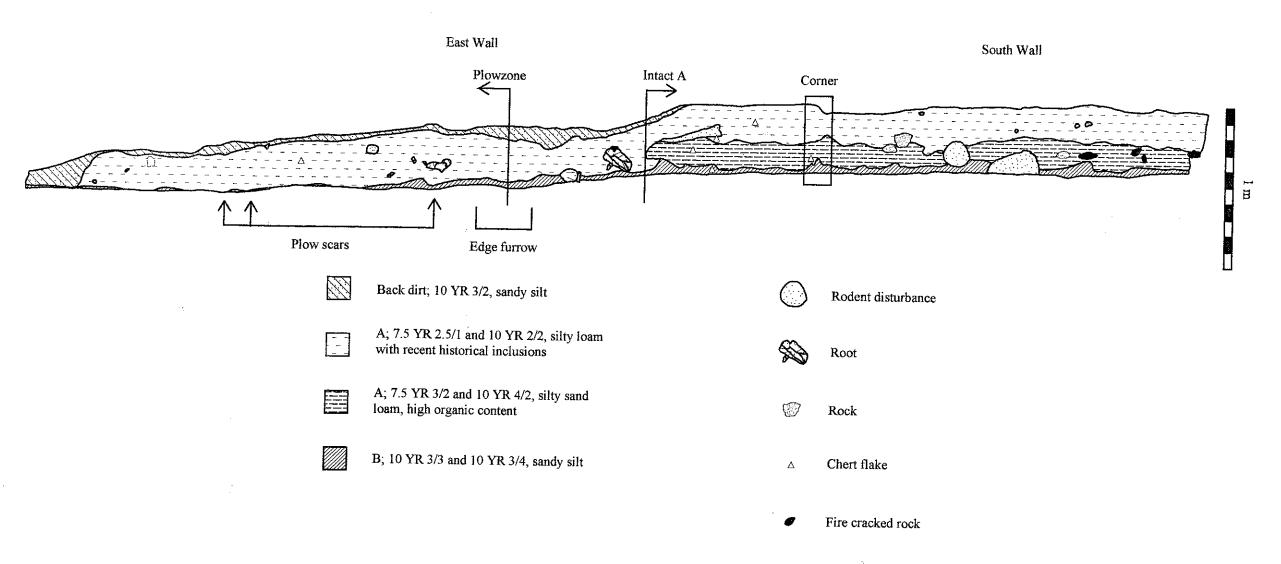


Figure 3.5: Profile Trench 2E, East and South Walls

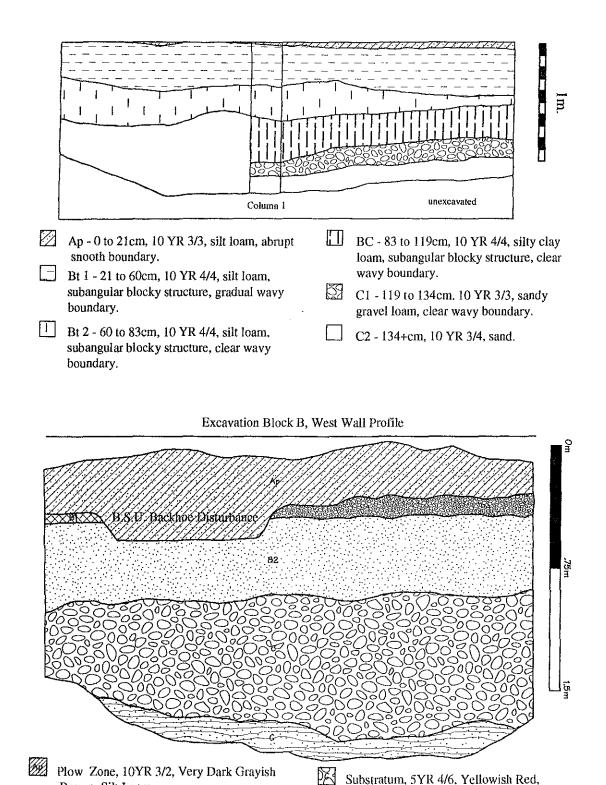


Figure 3.6: Deep Trench Profiles; (top) From Zoll 1992, "Fig. 58", (bottom) From Mann 1996, "Fig. 55"

Pleistocene Gravel and Sand

Sand and Gravel

Substratum, 10YR 8/2, Very Pale Brown,

Subsoil, 10YR 4/3, Brown, Clayey Loam

Brown, Silt Loam

Compact Clay

Clayey Loam

Tow Path, 5YR 4/6, Yellowish Red,

10YR 3/2, Very Dark Grayish Brown,

It is easy to understand how the soil survey may have misdiagnosed the soils at 12-Hu-935. The area around 12-Hu-935 has been severely impacted by a number of major cultural transformations, most significantly, the construction of the Wabash-Erie canal. This construction event undoubtedly disturbed the soils around the site, and likely inhibited the Soil Survey from identifying the extent of the first terrace and making an accurate soil assessment.

3.8. Site Setting Summary

The implications of the above discussion concerning the depositional environment at 12-Hu-935 follow logically. There are four possible sources of post glacial geologic deposition - alluvial deposition from the Wabash River, colluvial deposition from the bluffs above the site, aeolian deposition, and alluvial deposition from the intermittent drainage originating from the bluffs above. Predictably the first three depositional sources should have little to no impact upon the site. For reasons stated above, alluvial deposition from the river should occur only during the most extreme floods. The amount of colluvial deposition originating from the bluffs above is a function of both distance and slope between the base of the bluffs and the site. In the 101 meters from the densest portion of the lithic scatter at 12-Hu-935 on top of the first terrace and natural levee to the beginning of the second terrace the slope is .6%. The distance between this point and the bluff base is another 93.1 meters with a slope of 3.3%. In the next 30 meters towards the bluff crest the slope increases to 10.4%. At this point the bluff crest is 156 meters away with an average slope of 12%. This means that colluvium from the bluffs must travel 194.1 m with an average 1.89% gradient to reach the site from the bluff base. In this situation colluvial deposition should be minimal. Aeolian deposition should be limited to open areas on higher ground. The plowed field was generally flat, with a low rise running north and south through the middle (marked by Station Marker 880, Figure 3.2). The matrix of this rise differed from the rest of the soil across the site only in that it contained somewhat less sand and somewhat more silt. It is therefore not likely that this rise originated from aeolian activity. No other deposits indicating a possible aeolian origin were identified. The last source of deposition, alluvial deposition from the intermittent drainage, should be limited to the vicinity of this drainage. One such location, in the southeast corner of the plowed field, showed signs that this drainage may have had an impact upon the site. This will be discussed in greater detail below.

The purpose of the foregoing discussion was to clarify the pedogenic history of the soils encountered at 12-Hu-935. The impact of possible depositional sources at 12-Hu-935 was assessed. It was recognized that the parent material from which the soils at 12-Hu-935 developed originated not from Wabash alluvium but rather from Wabash Sluiceway alluvium. Furthermore, the foregoing has demonstrated that since glacial times no significant sources of geological deposition have impacted the archaeological record at 12-Hu-935. These facts have serious implications for cultural interpretations of the archaeological record there. In a geological context with few to no depositional sources a mixed archaeological record with little culturally significant geological stratification would be expected. Such a record is in fact what was encountered at 12-Hu-935 during mitigation.

4. Evolution of a transportation corridor - Historic transformations

Major transformations to the archaeological record at 12-Hu-935 resulted from historic cultural processes set into motion during the settlement of Indiana and the subsequent development of the Wabash Valley into a modern transportation corridor. These are: 1) the construction, use, and abandonment of the Wabash-Erie canal, 2) the occupation and subsequent rapid and unplanned abandonment of a Miami village just prior to this construction event, 3) the construction, use, and abandonment of the Inter-Urban rail line, 4) the improvement, use, and ongoing refurbishment of U.S. 24, and finally, 5) the commencement of cash agriculture in the current agricultural field. Two of these processes, the improvement of U.S. 24 and the commencement of agriculture, instituted on-going cultural formation processes at 12-Hu-935.

4.1. Canal

The construction of the Wabash-Erie canal resulted in what was the earliest major historic impact to the archaeological record at 12-Hu-935 south of U.S. 24. The canal marks the southern boundary of 12-Hu-935 defined during mitigation. Here, the canal was cut into the same natural levee where the densest concentrations of lithic debitage, lithic tools, Miami faunal materials, and Miami artifacts were encountered.

Fifteen excavation units were placed between the canal on the south and U.S. 24 on the north. A large and well preserved Miami midden was encountered below stratified deposits of canal fill in 10.5 of these units (Figure 4.1). Both the Miami midden and the overlying fill are clearly visible in profile photographs from units in this part of the site (Figures 4.2, 4.3, and 4.4). It is likely that canal construction may have disturbed portions of the Miami midden. To assess the impact of canal construction on the archaeological record at the site it will be useful to begin with an examination of the canal's construction history.

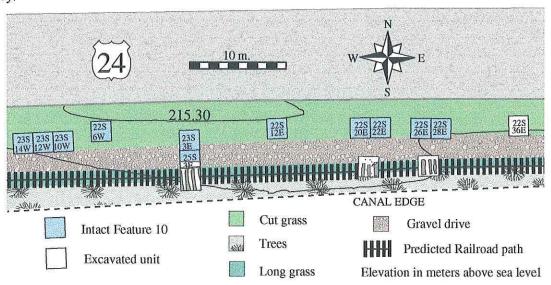
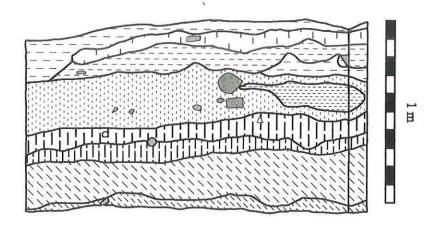


Figure 4.1: Units South of U.S. 24

Canal construction began in 1832; it was in use by 1837. According to the engineer's plans, from the water surface the canal was to be 40 feet wide and 4 feet deep (Castaldi 1995:3). At this time Indiana canals were typically constructed with a tow path on one side and a flood control berm on the other (Figure 4.5). It is likely that each of these would have been constructed with canal fill. The construction of the canal required the removal and re-deposition of a significant amount of earth. To explain how this construction event influenced the archaeological record at 12-Hu-935 it will be instructive to refer to Mann's (1996) mitigation report of 12-Hu-1022 - a Miami village preserved beneath the canal tow path roughly one mile west of 12-Hu-935. Here, the canal tow path was encountered on the south side of the canal. The tow path was composed of a compact mixture of clay and gravel canal fill, that served to seal and preserve two Miami structures and a large sheet midden. Except for a lower rock content and a slight



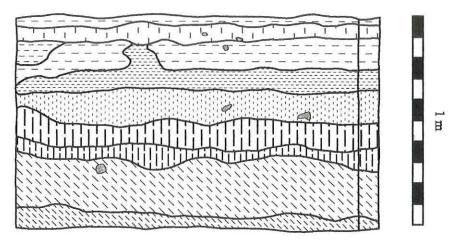
- Fill type C-3; 10 YR 3/2, silty sand

 Fill type C-1; 10 YR 3/3 mottled with 10 YR 4/4 and gravel, sandy silt
- Fill type C-3; 10 YR 3/4 mottled with 10 YR 3/3, sand
- Fill type C-3; 10 YR 3/4, sand
- Fill type C-3; 10 YR 4/4, sand
- Fill type C-1; 10 yr 3/3 mottled with 10 YR 3/4, gravel

- Feature 10; 10 YR 3/3 mottled with 10 YR 3/4, sandy silt
- B1; 10 YR 3/4, sand
- B2; 10 YR 3/4, sand mottled with gravel
 - Bone
- △ Chert flake
- Rock



Figure 4.2: Canal Fill/Miami Midden, 22S/12E, East Profile



- Fill type C-3; 10 YR 3/2, silty sand
- Fill type C-1; 10 YR 3/3 mottled with 10 YR 4/4 and gravel, sandy silt
- Fill type C-3; 10 YR 3/4 mottled with 10 YR 3/3, sand
- Fill type C-3; 10 YR 3/4, sand
- Fill type C-3; 10 YR 4/4, sand

- Fill type C-1; 10 yr 3/3 mottled with 10 YR 3/4, gravel
- Feature 10; 10 YR 3/3 mottled with 10 YR 3/4, sandy silt
- B1; 10 YR 3/4, sand
- B2; 10 YR 3/4, sand mottled with gravel
- Rock

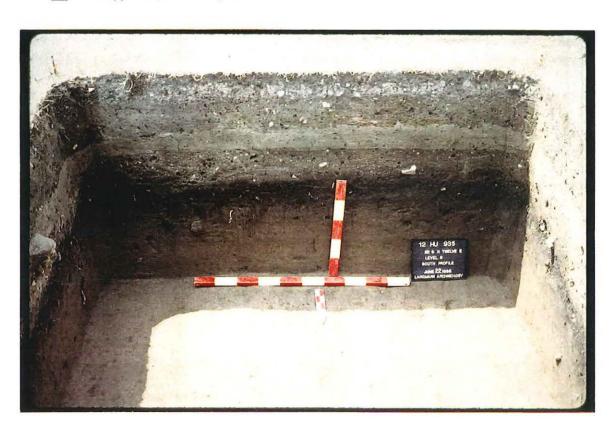
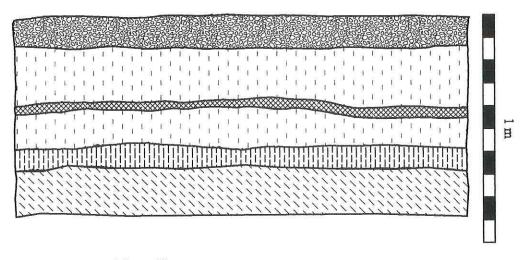


Figure 4.3: Canal Fill/Miami Midden, 22S/12E, South Profile



- Sandy pea gravel from driveway with less than 10% soil matrix
- Fill type C-1 with A; sandy gravel with 60-70% soil matrix
- Feature 11; 10 YR 3/2 mixed with 7.5 YR 5/6 50% mottled with carbon flecking and burnt sandstone 20%
- Feature 10; 10 YR 3/1, sandy silt loam
- B1; 10 YR 5/6, silty sand loam

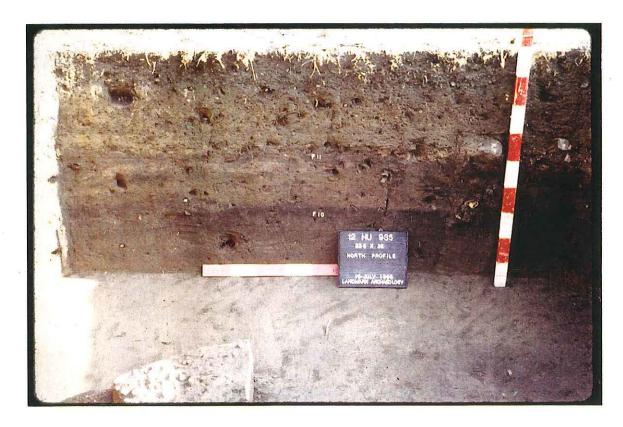


Figure 4.4: Canal Fill/Miami Midden, 23S/3E, North Profile

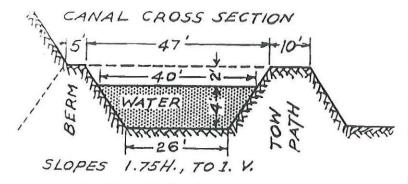


Figure 4.5: Canal Cross Section (Garman 1944)

color variation, the towpath matrix was virtually identical to soil in the lower portion of the B2 horizon at 12-Hu-1022, and was probably selected from there during canal excavation. The tow path accounts for the majority of fill deposited on the south side of the canal adjacent to 12-Hu-1022. Along side of the tow path at 12-Hu-1022 beneath the plowzone a number of large rock concentrations with apparent

cultural origins were encountered. These rocks were likely separated from canal fill during construction of the tow path and scattered along side of it. The remainder of the canal fill was likely deposited on the north side of the canal, and used to construct the flood control berm. This interpretation is supported by the appearance today of a low and fading berm running parallel to the canal on its north side. This berm is occasionally visible in front of current residences where it is overgrown with grass. However, in wooded areas alongside the canal the matrix of this berm is occasionally visible. It consists primarily of gravel (70%), sand (20%), and cinders (10%). The existence of this berm strongly suggests that most of the canal fill was deposited during construction on the north side of the canal during construction of the flood control berm.

Evidence obtained through excavation at 12-Hu-935 indicates both that a large amount of canal fill was indeed deposited on the north side of the canal, and some of it was subsequently redeposited during construction of the Inter-Urban. This secondary deposit, or redeposition, of canal fill during construction of the railway may account for the fact that the low berm visible today is 2.5 m north of the canal edge, rather than on top of it. Similar to 12-Hu-1022, the deposition of canal fill served to seal and protect a large Miami midden that extended roughly fifty meters along the south side of U.S. 24 between it and the current gravel driveway. Canal related fill stratigraphy was complex and indicated multiple depositional episodes. Fill episodes were selected from the A, B1, and B2 soil horizons, and vary with respect to proportions of each. Episodes of canal fill were classified with respect to proportions of gravel, silt, and sand. Three types of canal related fill were identified, C-1, C-2, and C-3. Canal Fill Type C-1 was primarily composed of gravel, however individual C-1 episodes varied with respect to proportions of other constituents. Likewise, C-2 and C-3 were primarily composed of silt and sand, respectively.

4.2. Miami Occupation.

The Forks of the Wabash, located on the "long portage" connecting the Great Lakes with the Mississippi Drainage has long been an important location of activity for prehistoric and historic populations (Glenn 1991). The Algonquian speaking Miami (or Atchatchakangouen) first entered the headwaters of the Maumee River in the late 1600's (Strass 1991). The Miami peoples were related to but distinct from the Wea and Piankashaw, who like the Miami came from Wisconsin. The first written record of a Miami village at the Forks of the Wabash was made by Harrison in 1809 (ee Mann 1996 and Esarey 1922). However it is not clear when the village was first inhabited. Glenn (1991) efficiently sums up the history of the Miami peoples in the forks area for the period 1783-1840 - the "American period":

Failed diplomacy, conflict, land alienation by treaty, settlement, conflict, statehood and removal. The first event in that sequence that had a direct relationship to the Forks of the Wabash was the Treaty of Greenville in 1795. The Treaty of Greenville ended the resistance of the Miami Confederacy to the American invasions of their eastern territory by the military forces of General Harman, St. Clair and Wayne. It also ceded the strategic position of present day Fort Wayne to the Americans. Since Kekionga (Fort Wayne) had been the long-term location of a principal Miami village, some of the Miami dispersed into

other parts of their territory along the Wabash. With that dispersal, we get the first evidence of villages permanently sited at the Forks (Glenn 1991:64).

During the war of 1812, after the siege of Fort Wayne, William Henry Harrison left this description of the Miami village at the Forks.

The second detachment under the immediate command of Brig. Genl. Payne was composed of Lewis's and Allen's Regmts. of Kentucky militia and Garrard's troops of Dragoons. I accompanied that detachment and we reached the Towns at the forks of the Wabash on the 15th they had been abandoned by the inhabitants several days about 1500 bushels of corn were cut up and destroyed as completely as the state it was in would permit (Esarey 1922:144-45).

The large faunal assemblage recovered from an extensive sheet midden at 12-Hu-935 unquestionably was deposited during the historic occupation of the Miami settlement scattered along the Wabash River for 3 or 4 miles west from the forks (for a more detailed account see Mann 1996). This contention is based on 1) the midden's stratigraphic context beneath canal fill, 2) its contextual association to a large assemblage of Miami artifacts (Figure 4.6), and 3) its similarity to the midden encountered at 12-Hu-1022.

Terrance Martin (1996), of the Illinois State Museum, examined the faunal assemblage:

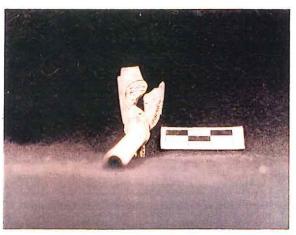
The vast majority of animal remains from 12-Hu-935 were associated with Feature 10. In decreasing order, the animals that were observed include white-tailed deer, swine, raccoon, black bear, freshwater mussel shell, beaver, eastern cottontail, turtle, wild turkey, horse, and snake. This... collection seems similar to 12-Hu-1022 in the prevalence of deer bones and teeth along with the presence of raccoon, black bear, and mussel shells. No cattle remains were noted, but a horse molar was identified (catalog number 582). Fish and waterfowl appear to be absent from 12-Hu-935 altogether. Although the faunal assemblage from 12-Hu-935 is generally comparable to 12-Hu-1022 in its mixture of deer and swine bones, fish and turtles were apparently not exploited to any great extent.

The occupation and abandonment of this settlement has been treated elsewhere (Mann 1996); for this reason the current analysis will focus only on Miami occupation related transformations to 12-Hu-935. The Miami occupation of the site commenced at least by 1809 and lasted until the rapid and unplanned abandonment in 1813, at the encouragement of William Henry Harrison's troops (Mann 1996).

The most visible result of the Miami occupation of the site was the deposition of the faunal remains within Feature 10. Figure 4.7 shows the distribution of bone recovered from this portion of the site in Feature 10. Although well preserved faunal materials were recovered from nearly all units in this part of the site their distribution was not uniform. Two concentrations of bone are evident, one in 23S/10-14W and one in 22S/20E. It is plausible that this pattern of bone distribution reflects to some degree systemic Miami activities resulting in the deposition of bone. These two deposits are similar in some respects to Mann's (1996) Feature 10, and therefore are likely to have analogous formation histories.

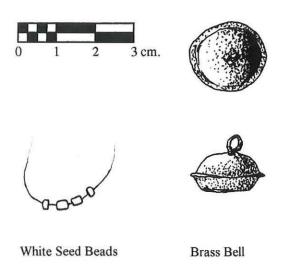
The majority of fish and turtle remains from 12-Hu-1022 were recovered from Feature 10, a large and deep Miami refuse pit (Mann 1996). The comparable lack of these remains from 12-Hu-935 is perhaps due to the lack of a similarly extensive pit feature. Mann's Feature 10 was encountered in association with Miami structural remains, and contained both burned and un-burned faunal materials, ashy soil, as well as a large assemblage of historic Miami artifacts. Two analogous deposits were encountered at 12-Hu-935 in excavation units 23S/10-14W and 22S/20-22E. These were not nearly as artifactually rich nor as deep as Mann's Feature 10. However, these deposits did contain the densest concentrations of faunal remains recovered at 12-Hu-935.







Early-Mid 19th Century Clay Pipe





Square Nail Silver Brooch Ramrod Fragment
Silver Earring Lead Disk/Net Weight Metal Lock Part

Figure 4.6: Miami (War of 1812 Era) Artifacts

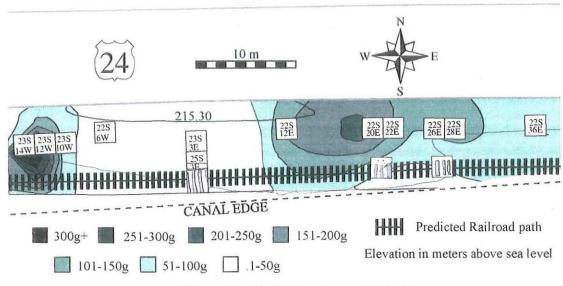


Figure 4.7: Distribution of Faunal Material

Also like Mann's Feature 10, these deposits were encountered in association with possible Miami structural remains. In the first group of units a dense linear concentration of bark was encountered traversing the trench suspended within the sandy A horizon (Figures 4.8 and 4.9). Leslie Bush (personal communication) examined the bark but was unable to determine its species. The bark most likely originated from a Miami structure. In 22S/12W the midden above and south of the bark deposit was slightly more grey -10YR 2/1- than that encountered below the bark and in most other excavation units as well.

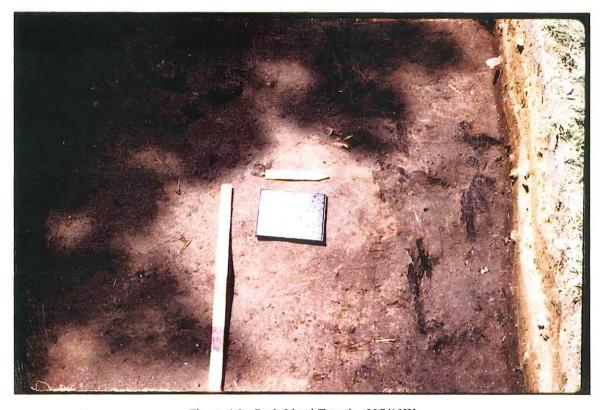


Figure 4.8: Bark Lined Trench, 23S/10W

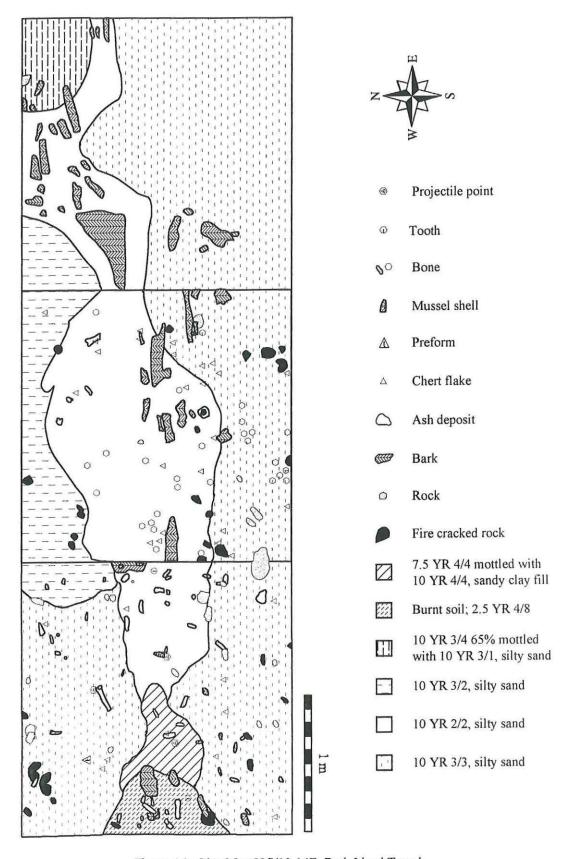


Figure 4.9: Plan Map 23S/10-14E, Bark Lined Trench

This deposit was also unique in that it contained the highest concentration of burned faunal remains within Feature 10, most of which where in fragmentary form. The ash contained within this deposit likely originated from a nearby Miami hearth. The midden below and to the north of the bark was more typical of what was encountered in other units placed within similar contexts of preservation. The bark lined a shallow trench, and overlain a few large, (5-11 cm long), unburned faunal remains. This indicates that the bark was deposited in the refuse pit, probably by the Miami occupants. The proximal deposition of the hearth deposit and the bark lined trench are suggestive of a domestic structure or possibly a corn cache. The second group of Units, 22S/26-28E, contained five post molds in an alignment (Figure 4.10). There are two likely interpretations for this alignment. It could have resulted from either a Miami domestic structure or a drying rack.

In addition to the deposition of faunal materials during this time, the Miami occupation also likely influenced the expression of the archaeological record in other ways. It is likely, for example, that the Miami occupation resulted in some turbation to the archaeological record from trampling. Trampling related turbation, in addition to other sources, is suggested by the co-occurrence of Miami faunal material, historic Miami (War of 1812 Era) artifacts, and non-diagnostic prehistoric lithics within the same soil context (Table 4.1).

Table 4.1: Ve	rtical Distributio	n of Non-diagno:	stic Lithic Artif	facts from Unit	s South of U.S.	24
	Del	oitage	Cores		Bifaces	
C	NT I	D	NT	n .	NT 1	D

Context	Debitage		Co	res	Bifaces		
	Number	Percentage	Number	Percent	Number	Percent	
A/Feature 10	11,219	61.09	41	50.62	40	68.97	
B1	5,339	29.32	38	46.91	16	27.50	
B1/B2	1,648	9.05	2	2.47	2	3.45	
Total	18,207	100.00	81	100.00	58	100.00	

4.3. Inter-Urban

The Inter-Urban rail line was constructed in 1903 marking the next stage in the evolution of the Wabash valley transportation corridor. It ran until 1938 and provided an efficient and cost effective medium for transporting goods and labor. In the vicinity of 12-Hu-935, the rail line ran along the northern edge of the Wabash-Erie canal (Figure 4.1). Evidence obtained from units excavated along the northern edge of the canal illustrates the construction history of the Inter-Urban. In these units depressions from railroad ties, Feature 8, were found in the A soil horizon at the interface with an overlying layer of secondarily deposited gravel canal fill (Figure 4.11). These depressions were identified upon exposure as a series of evenly spaced and uniformly sized rectangular gravel concentrations in the A soil horizon (Figure 4.12). After excavation the regularity of the depressions became apparent (Figure 4.13). Deteriorating turbated remnants of the Miami midden, including small fragments of bone and shell, were recovered from the remaining A horizon surrounding rail tie depressions. The prehistoric lithic scatter first observed on the north side of U.S. 24 was also present on the south side beneath the rail tie depressions. The identification of rail tie depressions on the surface of the A horizon, indicating that the rail line was constructed on top of an unconsolidated top soil, seems contrary to then common rail construction practices (see Watkins 1891), where rail lines were normally supported by a gravel and cinder bed. However, such expediency was not an unheard of practice (Gillespie 1853) during the "experimental era of the American railroad" (Watkins 1891:666).

An examination of profile maps and photographs makes it possible to further delineate the construction history of the Inter-Urban. West profile maps from 23S/3E to 27S/3E, depicted in Figure 4.14, outline relationships between the various episodes of fill encountered on the south side of the road and illustrates as well the removal of fill that made way for the railroad. The fill overlying the rail tie depressions can be distinguished from the fill that sealed the intact portions of the Miami midden. In Figure 4.14 the truncation of the latter by the former is clearly defined. This relationship is also well defined in Figure 4.15, the East Wall Profile Photograph from 25S/3E. Again, this relationship is depicted in the interface between fill and sub-soil plan maps (Figure 4.11) for this trench.

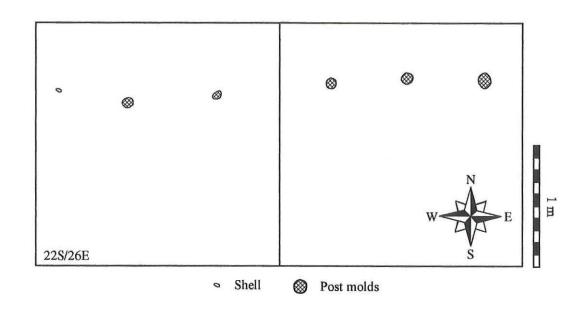




Figure 4.10: Post Molds; (top) 22S/26E and 22S/28E, (bottom) 22S/28E

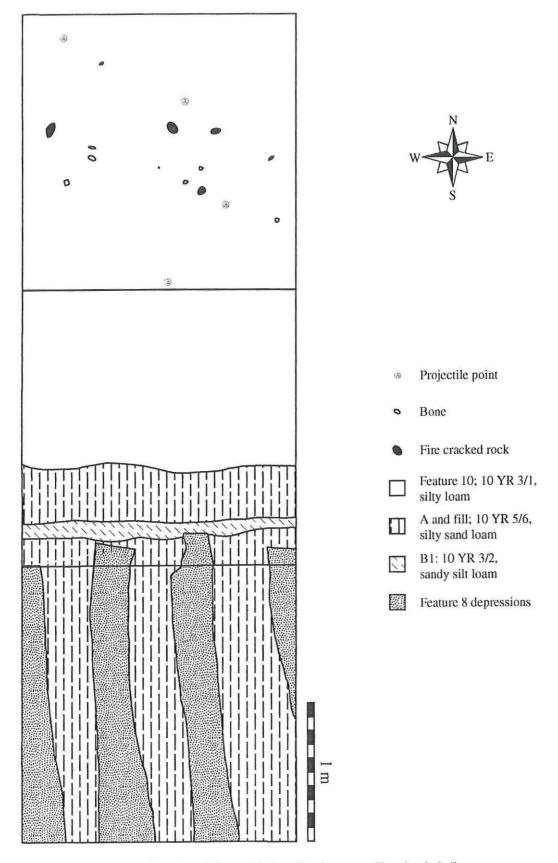


Figure 4.11: Plan Map of Feature 8, Interface between Fill and Sub-Soil

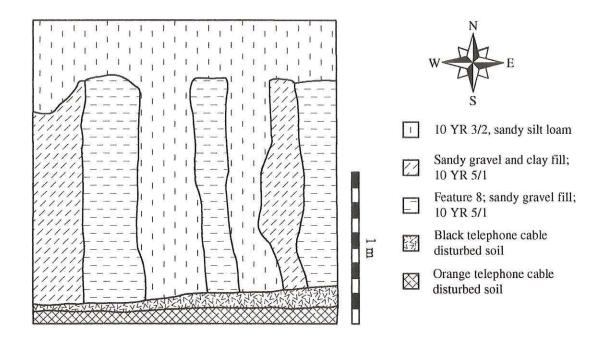




Figure 4.12: Feature 8, at Exposure, 26S/27E

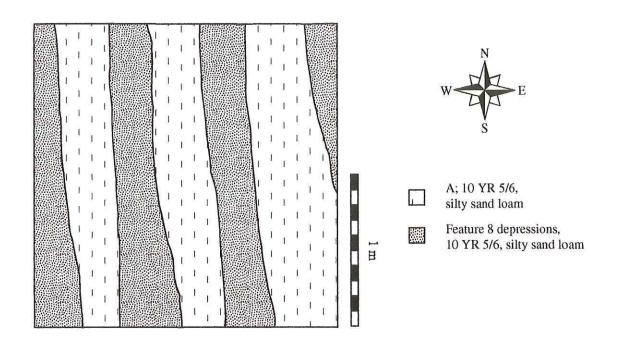
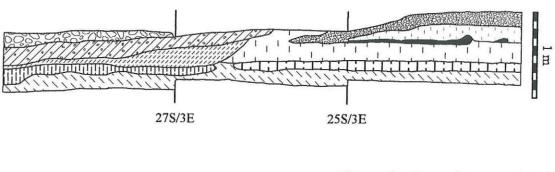
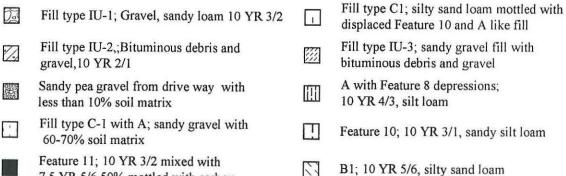




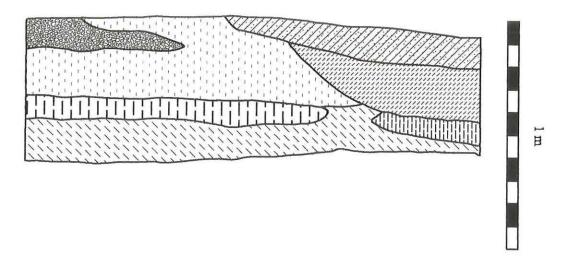
Figure 4.13: Feature 8, after Excavation, 27S/3E





7.5 YR 5/6 50% mottled with carbon flecking and burnt sandstone 20%

Figure 4.14: West Profile, 23-27S/3E



- Fill type IU-2,;Bituminous debris and gravel, 10 YR 2/1
- Sandy pea gravel from driveway with less than 10% soil matrix
- Fill type C1; silty sand loam mottled with displaced Feature 10 and A like fill
- Fill type IU-3; sandy gravel fill with bituminous debris and gravel
- A with Feature 8 depressions; 10 YR 4/3, silt loam
- Feature 10; 10 YR 3/1, sandy silt loam
- B1; 10 YR 5/6, silty sand loam



Figure 4.15: East Wall Profile, 25S/3E

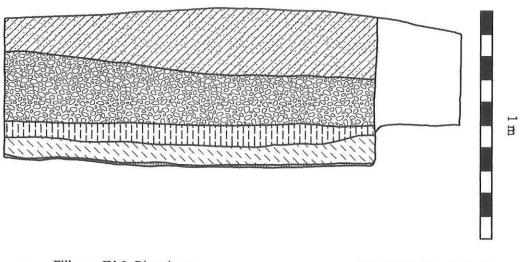
Three distinct types of fill were clearly related to the construction and later removal of the Inter-Urban. These have been designated as IU-1 through IU-3. Fill Type IU-1 was a mixture of gravel and sandy loam. This fill type could have resulted from the removal of the Inter-Urban when rail ties were covered with displaced canal berm. However, its presence may be more plausibly explained by the gravel driveway that runs through this portion of the site. Fill Type IU-2 (Figure 4.16) is a mixture composed of bituminous debris (70%) and gravel (30%). The source of the gravel was likely secondary displacement of the canal berm. The deposition of the bituminous debris may have resulted from the operation of the Inter-Urban itself. However, it may also have been deposited during construction of U.S. 24. The second scenario may account better for the depositional history of the bituminous debris, due to the fact that Fill Type IU-3 intervenes between the bituminous debris and Feature 8. Fill Type IU-3 (Figure 4.16) is composed of sandy gravel (95%) and bituminous debris (5%). The majority of this fill type resulted from the secondary displacement of the canal berm. This fill type was encountered directly overlying Feature 8 and was therefore deposited soon after the rail line was removed, probably in 1938. The source of the bituminous debris is analogous to the above fill types.

The above discussion outlines an order of events. First, canal fill, likely the canal berm, was displaced to make room for the Inter-Urban. The displaced canal berm was probably pushed to the location of the currently visible low and fading berm mentioned above. Second, the Inter-Urban was constructed on top of the newly exposed A horizon and what was left of the Miami midden. Third, the railroad was dismantled and rail tie depressions were covered with redeposited gravel canal fill from the already displaced berm. Fill deposited as a result of Canal construction, as well as Inter-Urban construction and dismantlement created a unique preservation environment in glacial outwash soils. Predictably glacial outwash soils on the first terrace should not maintain the integrity of archaeological remains. It is significant that not only were the Miami midden and rail tie depressions preserved by these events, but also were three Woodland pit features, Features 12, 13, and 14. These facts have implications that transcend the mitigation of 12-Hu-935. Both 12-Hu-935 and 12-Hu-1022 reside on the same first terrace of the Wabash River in similar soils. It seems likely then that the area between these two sites, on the same terrace where impaction from canal construction is evident, will likely exhibit equally exceptional preservation environments. Furthermore, true floodplain soils impacted by this event predictably should maintain even better preservation of archaeological remains.

4.4. U.S. 24

The improved U.S. 24 that is visible today is a testament to on-going transformations to the archaeological record at 12-Hu-935, resulting from its location along a modern transportation corridor, and imply as well transformations that predate its modern improvement. Plans for the first modern improvement of U.S. 24 were drawn up in 1928 (Figure 4.17). The plans for this improvement show, in addition to the proposed right of way, an older gravel road in the approximate location of the proposed U.S. 24 centerline. Adjacent to 12-Hu-935, this gravel road probably dates at least to the canal era, when it could have been used to transport canal fill, equipment, labor, and perhaps too a weary Irish canal worker on his way from Huntington to Madame LaFerrier's for a bit of evening entertainment. By 1837, the year the canal became operational and used to transport barges loaded with grain, the gravel road was likely used by farmers bringing produce to loading docks. Such a canal landing was built in Huntington on Washington Street (Castaldi 1995). By 1866 the gravel road appears on a plat map.

It is certain that this transformation -- the rapid industrial metamorphosis of a gravel wagon road into a modern highway -- altered the expression of the archaeological record observed at 12-Hu-935. During each phase of this transformation -- from the original surface preparation for the road bed, the deposition and mechanical grading of the road bed itself, the application and grading of the surface, to its utilization as a pathway for motor driven vehicles -- resulted in cultural deposition to the archaeological record at 12-Hu-935. Continuous and increasingly heavy traffic over the roadway also results in significant cultural deposition along its margins. These modern deposits eventually become incorporated into the A horizon.



- Fill type IU-2; Bituminous debris and gravel, 10 YR 2/1
- Fill type IU-3; sandy pea gravel from driveway with less than 10% soil matrix
- A and Fill; 10 YR 3/2, silty loam, very uniform

B1; 10 YR 4/4, chalky silt, 10% - 20% mottled

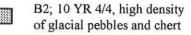




Figure 4.16: East Wall Profile, 26S/27E

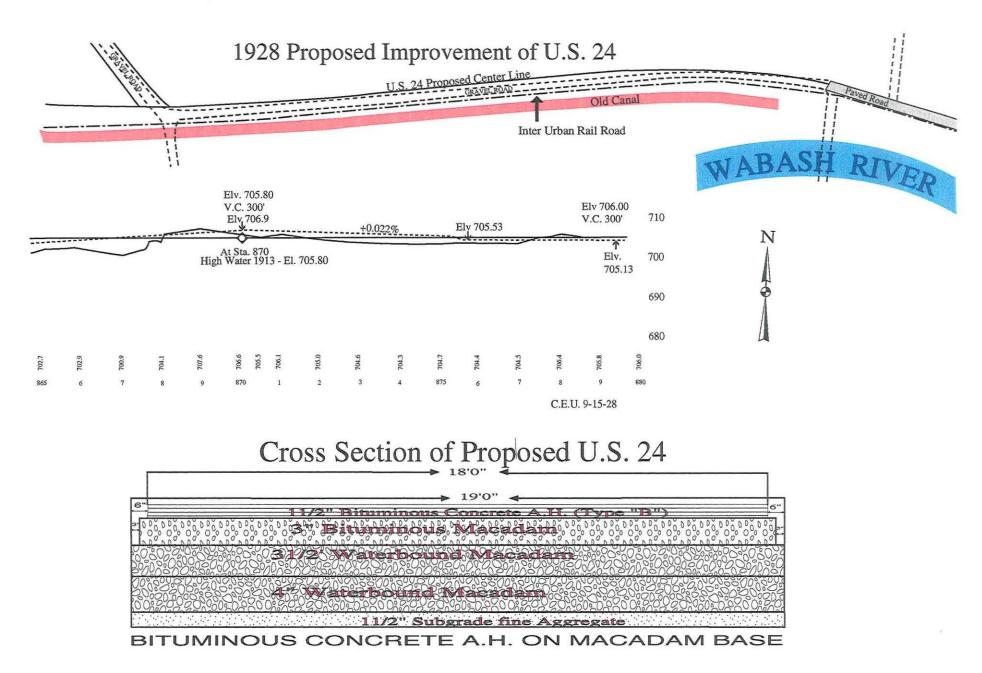


Figure 4.17: Highway Department Map from Original Improvement to U.S. 24

Highway department plans from 1928 for the U.S. 24 improvement called for a 1½" bituminous concrete surface underlain with a multi-component road bed (Figure 4.17). Going down, this bed included one 3" layer of Bituminous Macadam, two layers of Waterbound Macadam (3½ and 4" respectively), and lastly, one 1½" layer of subgrade fine aggregate. In sum, this road required the deposition of a 19' (5.9 m) wide by 13½" (34.37 cm) deep roadway.³

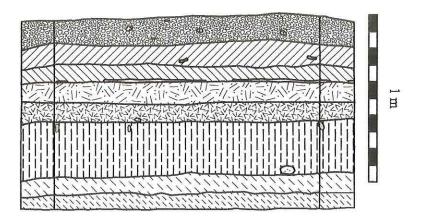
The resultant transformation to the archaeological record from the construction and use of U.S. 24 is illustrated in north and west profiles from excavation units placed closest to the road. Four separate components of road construction with a total combined thickness of 40 cm, (Figures 4.18 and 4.19), were identified in the four units closest to U.S. 24 (7S/20E, 7S/30E, 6S/73E, 6S/75E). These four episodes of road construction likely correspond to the bottom four road bed layers described above. The bottom-most episode of road construction, Road Fill Type 4, was usually encountered overlying the A soil horizon. In one case, however, 5S/58E, Road Fill Type 4 was encountered overlying the B1 (Figure 4.20). The A horizon beneath episodes of road construction was similar to the A horizon in unplowed areas across the site. The conformation with the B1 was gradual, wavy, and often blurred by root activity and organic leaching.

The upper arbitrary 10 cm levels through A horizon soils in units closest to U.S. 24 contained part of the road bed, bituminous debris that migrated away from the road bed itself, recent historic debitage, as well as prehistoric lithic debitage. A number of natural and cultural processes can account for both the discrepancy between the thickness of the observed road bed and that planned by the highway department as well as the co-occurrence of prehistoric lithic artifacts and historic bituminous debris within the same soil context. First, the successive deposition and mechanical flattening of road bed components during construction undoubtedly would have resulted in some compaction to the A horizon as well as some migration of road bed debris into it. This trend was probably furthered by years of heavy traffic over the road. Second, freeze thaw cycles, faunalturbation, and root activity may also account for some of the post-depositional migration of artifactual remains (Schiffer 1991).

The continual traffic upon U.S. 24 for the last 150 years likely resulted in traces to the archaeological record. The means by which recent historic debitage and road debris can become incorporated into the archaeological record at 12-Hu-935 are discernible today. Gravel, pebbles, glass, and other such roadway detritus can become entrapped within vehicle tire treads and on vehicle surfaces. While these vehicles travel highways such particles are loosened and become deposited along roadways. This process is especially visible during winter when snow piles conforming to roadway margins collect debris deposited via vehicles. After the snow melts piles of debris become plainly visible. Eventually air currents caused by traffic over the roadway pushes such debris further away from the margin, and eventually off the roadway entirely. At 12-Hu-935 in units placed closest to the highway a layer composed of gravel, road debris, and A like soil was encountered at the surface (Figure 4.18). The modern tree line of the current agricultural field today serves as a catchment for recent historic debris, which eventually become incorporated into the A horizon through root activity and other sources of bioturbation. During the course of 12-Hu-935 mitigation remnants of contemporary disposable material culture were deposited daily via the heedless hands of motorists. It is not unreasonable to assume that roadway debitage accumulated along U.S. 24 even before it was paved and supported modern motor driven vehicles.

A comparison of the vertical distribution of cultural materials recovered from excavation units across the site can be used to document vertical artifact cycling. A high concentration of historic cultural materials, road bed debris, and prehistoric lithics were recovered from the A horizon in units adjacent to the highway (Table 4.2). Across the site, 97% of the glass, 98% of the metal, and 100% of the plastic were recovered from the A horizon. The remaining fraction was recovered from below the A horizon. In units within the tree line the majority (85%) of the glass recovered came from the top three arbitrary 10 cm levels. However, glass was recovered throughout the A horizon and into the B (Table 4.2). The vertical

³ Bitumen is a hydrocarbon material such as coal cinders and slag. In road building it usually refers to materials that are cementitious in character such as asphalts and tars (Woods 1960).



- U.S. 24 margin gravel; 10 YR 5/2
- Fill type R-1; 10 YR 5/4, silty clay containing recent historical inclusions
- Fill type R-2; 10 YR 3/2, silty sand with gravel and clay inclusions
- Fill type R-3; 10 YR 3/2, silty sand with gravel and clay inclusions
- Fill type R-4; 10 YR 4/3 mottled with 7.5 YR 4/4, silty sand with asphalt
- A; 10 YR 3/3, silty sand with recent historical inclusions

- B1; 10 YR 4/4, silty sand
- B2; 7.5 YR 4/4, sandy clay
- Root
- Rock
- Rodent disturbance
- Asphalt

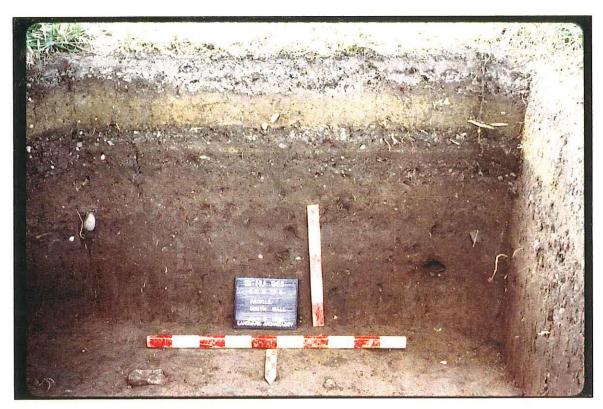
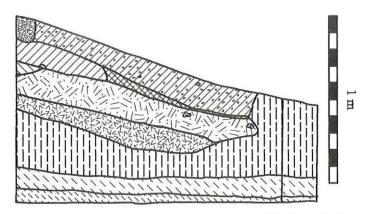


Figure 4.18: South Wall Profile Map, 6S/73E



- U.S. 24 margin gravel; 10 YR 5/2
- 10 YR 4/2, silty sand with gravel and recent historical inclusions
- Fill type R-1; 10 YR 5/4, silty clay containing recent historical inclusions
- Fill type R-2; 10 YR 3/2, silty sand with gravel and clay inclusions
- Fill type R-3; 10 YR 3/2, silty sand with gravel and clay inclusions
- B1; 10 YR 4/4, silty sand

- 10 YR 5/4 50% silty clay and 10 YR 4/3 50% silty sand
- Fill type R-4; 10 YR 4/3 mottled with 7.5 YR 4/4, silty sand with asphalt
- A; 10 YR 3/3, silty sand with recent historical inclusions
- B2; 7.5 YR 4/4, sandy clay
- Plastic
- Asphalt

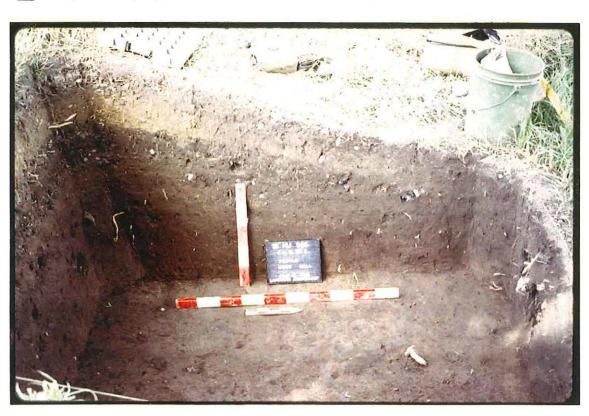


Figure 4.19: West Wall Profile, 6S/73E

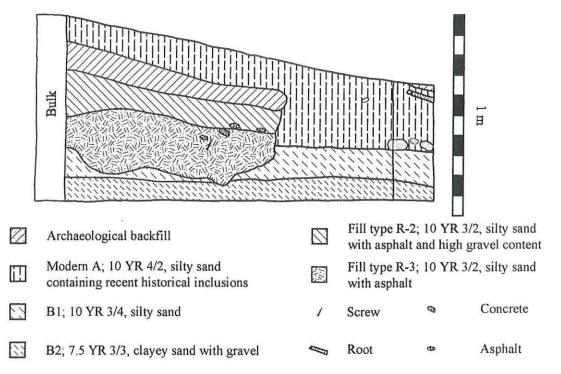


Figure 4.20: West Wall Profile, 6S/54E

distribution of lithic artifacts was similar. 84.0% of the debitage recovered from units within the tree line was recovered from the A horizon; 10.8% came from the B1; 3.1% came from transitional B1/B2 soil; 2.1% came from the B2. However, there is some

Fill type R-1; 10 YR 5/3, silty clay

 \square

Table 4.2: Vertical Distribution of Non-diagnostic Historic Artifacts

Rock

Plastic

Context	Glass	Metal	Plastic	
A	97%	98%	100%	
B/B2	3%	2%	0	
Total	100%	100%	100%	

significant difference between the vertical distributions of prehistoric lithic artifacts and historic artifacts (Table 4.3). The density of lithic artifacts was greatest in the A horizon just above where it conforms to the B1, while the density of historic artifacts was greatest in the upper portion of the A horizon near the surface. The densest level of lithic artifacts was most likely close to the original cultural depositional surface. Both above and below this level the number of lithic artifacts decreases significantly. Historic artifacts and road debris, on the other hand, were concentrated near the top of the A horizon and decreased rapidly below this point. The original depositional surface of recent historic artifacts was most likely close to the current ground surface.

The above patterns of the vertical distribution of artifacts recovered from excavation units at 12-Hu-935 are suggestive of post depositional processes resulting in artifact migration. During the course of excavation at 12-Hu-935 numerous sources of turbation were identified, such as floralturbation from roots and faunalturbation from burrowing

Table 4.3: Average Rate (pieces per soil type) of Lithic Debitage Recovery From Each Preservation Context.

Context	Sub-Plowzone	Tree Line	South of 24	
A	NA	676.9	748	
B1	228	87.5	355.9	
B1/B2	36.25	25.2	110	
B2	3.6	17.3	NA	

animals. A host of other sources of turbation are implicated by Indiana's temperate climate. Cryoturbation, including both frost heave and thrust, are likely (for a complete discussion of natural and cultural sources of

turbation see Schiffer 1991). Historic glass was recovered throughout the A horizon, and even from the B1/B2 transition. It is highly unlikely that the glass recovered from the B1/B2 transition was deposited directly within this context through cultural agency. It is far more likely that the glass migrated there from above. It also seems rather unlikely that lithic artifacts recovered from near the surface of units within the tree line were deposited there by prehistoric populations. Again, it is more reasonable to conclude that such artifacts migrated up from their original depositional locus. Furthermore, it also seems more likely that the few pieces of debitage recovered from the B1/B2 transition and below migrated to this level from their original depositional surface. Although artifact migration may be most visible in units close to U.S. 24, as this is where the majority of recent historic debitage and roadway debris was recovered, as will be seen below, this processes is indicated across the site.

4.5. Farming: Deflation

After the canal was constructed the value of arable land in the broad Wabash Valley increased dramatically as the waterway opened up new markets for grain. Based on transfer records it appears that by 1861, that portion of the Reserve of Ten sections - deeded to the madame Margaret LaFerrier from her uncle Chief Richardville, and where 12-Hu-935 was first identified, had moved out of the hands of both Indians and land speculators and into the hands of farmers. The first long-term white tenant held the land from 1861 to 1869. It is probable that this tenant was the one who began the process of improving the land for cultivation.

The most drastic alterations to the landscape on the north side of U.S. 24 occurred as a result of its transformation into an agricultural field and its subsequent use as such. Before the current agricultural field could have been used for agriculture it may have been necessary for the first white settlers to clear the trees and remove their roots. It is not clear precisely when this process of deforestation began or whether it was commenced under Miami or Euro-American agency. The Miami who deposited the midden at 12-Hu-935 may have started the deforestation process in their search for fuel (See Mann 1996). During the 1800's in Indiana typical techniques used by settlers to clear agricultural lands included four basic steps 1) the felling of trees under 18-20 inches in diameter, 2) the girdling of larger trees, 3) the burning of brush and stumps, and 4) the painstaking removal of roots with "brush hooks, briar scythes, mattocks, and other grubbing tools" (Buley 1950:164). What is significant about this account is the importance accorded to the removal of the root structure and the painstaking effort expended to accomplish this. Even if the Miami villagers began the process of deforestation at 12-Hu-935, the first farmers still may have had to remove the root structure if it had not broken down sufficiently through natural decay. The completion of deforestation and the commencement of plowing in glacial outwash soils should have predictable results to the archaeological record.

It has been made clear above that 12-Hu-935 does not lie within a flood plain and its depositional situation is therefore decidedly undynamic. Few geological sources of deposition were identified, and no significant ones were. This fact has important implications concerning the formation of the archaeological record observed at 12-Hu-935. First, it would be nearly impossible for a paleosol or a geologically buried A horizon to develop. This leads to the conclusion that the prehistoric cultural depositional surface, in intact soils, should be found within the A horizon -- as its pedogenesis occurred within the last 14,500 years. Second, once the root structure was removed from the A horizon and plowing was commenced, the A horizon deflated and became the integrated plowzone observable today. This resulted in an extremely mixed archaeological record. Third, few intact sub-plowzone features survived deflation and subsequent plowing. Furthermore, those features that survived these processes remained ambiguous with respect to their origins after excavation.

Lithic artifact recovery rates retrieved from intact A, plowzone, and B1 contexts, conform to the above predictions (Table 4.3). In a geologic situation with minimal deposition the majority of cultural clastics should be recovered from the A horizon with only minimal stratification. This, compounded with the processes of deflation and plowing, predictably would result in a mixed archaeological record, with very few intact subsurface cultural features. The corollary of this is that unplowed land should predictably include the majority of intact subsurface cultural features and fragile cultural materials. Both conclusions were

confirmed through excavation. Throughout the unplowed portion of the site the A horizon contained the majority of all cultural materials recovered, including materials from intact subsurface cultural features. This trend contrasts markedly with that obtained beneath the plowzone. After the plowzone was removed the lithic scatter was still visible at the interface with the B1, however, nearly all of the diagnostic artifacts recovered from the agricultural field were recovered from archaeologically displaced (during archaeological mechanical stripping) plowzone in back dirt piles. Furthermore, all of the cultural material recovered from beneath the plowzone were lithic artifacts and FCR, while all the bone, shell, and prehistoric pottery recovered on the north side of the highway were recovered from units and profile trenches placed within the tree line, in land protected from the plow. The recovery rate of cultural materials from sub-plowzone B1 compared favorably with that from below intact A. The average rate of artifact recovery from the B1 soil in units beneath the plowzone was 228 pieces of debitage per unit, while the rate from units on the south side of U.S. 24 was 356, and that from within the tree line was 87.5 (Table 4.3). The rate of artifact recovery from these contexts were significantly less than that obtained in intact unplowed A horizon. In units placed along the road prehistoric lithic artifacts were recovered from the surface to the base of the B1, and occasionally in the B2. In intact soils across the site the most artifactually rich context occurred in the A horizon, close to the conformation with the B1.

Compelling evidence supporting the above deflation-turbation hypothesis is plainly illustrated in north-south profile maps from units and trenches cut between U.S. 24 on the north and the plowed field on the south. Here, a distinct contrast is clearly visible in the transitions between where the A soil horizon conforms to the B1 in earth that has suffered the plow and earth that has not. In the former the conformity is sharp, attesting to the mechanical cut created by modern plowing. In the latter it is generally wavy and at times blurred by root activity and faunalturbation. In addition, this transition occurs up to 20 cm higher in unplowed land than it does in adjacent plowed land. Figures 4.21 and 4.22 depict both sorts of transitions and the drop in elevation between them as well in the west wall of Profile Trench 3E. The point at which the most recent plowing episode ends and unplowed land begins is visible in these figures, marked by an edge furrow. These modern transformations to the soils at 12-Hu-935 resulting from modern farming techniques are also apparent in Figure 4.23; showing the east, south and west walls of Profile Trench 1E. Figure 4.24 shows cultural deposits in intact and unplowed soil six meters east of the south west corner in Profile Trench 1E. Here, historic Miami artifacts, prehistoric flakes, and FCR are all visible. It is significant that even in unplowed soil Miami artifacts were encountered below FCR and lithic artifacts.

4.6. Farming: Drainage

The second farming related alteration to 12-Hu-935 resulted from drainage control. The densest part of the lithic scatter found beneath the plowzone, area B, was found in the south east corner of the current agricultural field (Figure 4.25). The soil in this portion of the site was exceptional, and included a higher sand content than the remainder of the site, evidencing a unique depositional environment. The source of this sand, however, was not obvious. Scatter B was encountered in the lowest portion of the current agricultural field, and sits 20 cm below the low rise running through the middle of the site. This portion of the site contained the only apparently intact cultural deposit - Feature 6- recovered from beneath the plowzone during mitigation (Figure 4.26). Feature 6 -- a concentration of lithics, including 10 cores, 17 utilized flakes, and over 500 pieces of debitage, was encountered suspended in the sandy B1 with no visible stratification, just 3 cm below the interface with the plowzone, in excavation unit 10N/100E (pictured as a red block in Figure 4.25).

The vertical distribution of debitage within 10N/100E was unique (Table 4.4). Here, debitage recovery did not decrease with each arbitrary 10 cm level excavated. These observations suggest two conclusions concerning the preservation of cultural deposits. First, preservation of cultural deposits did not result from modern earth movement related to farming, which likely

Table 4.4: Vertical Distribution of Debitage in 10N/100E

Level	Context	Number	Percentage
1	BI	511	53.2%
2	B1	136	14.2%
3	BI	62	6.5%
4	B1/B2	250	26.1%
Total		959	100.0%

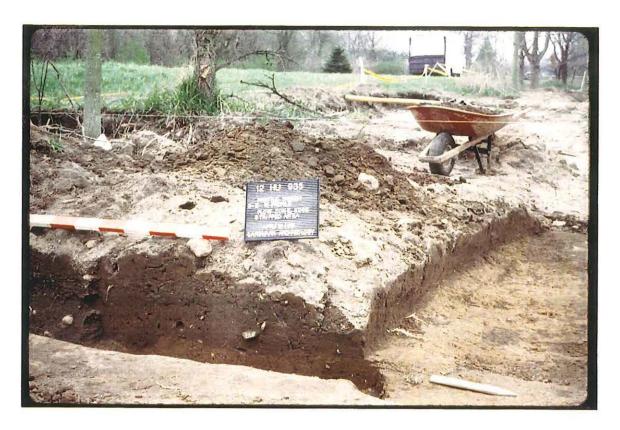


Figure 4.21: Profile Trench 3-E, Edge of Archaeological Stripping



Figure 4.22: Profile Trench 3-E, Plowed/Unplowed A horizon

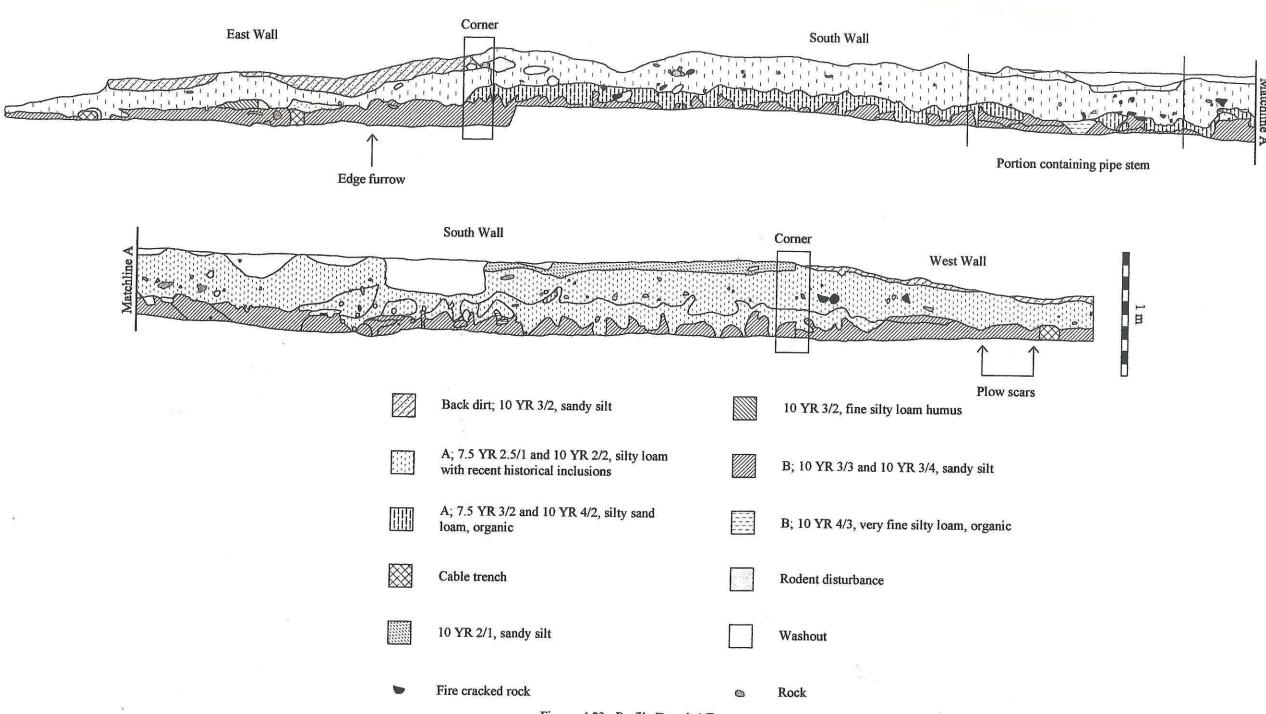


Figure 4.23: Profile Trench 1 E

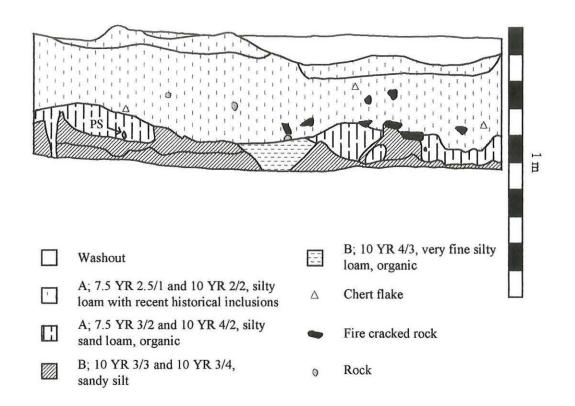




Figure 4.24: Profile Trench 1E (Portion With Pipe Stem).

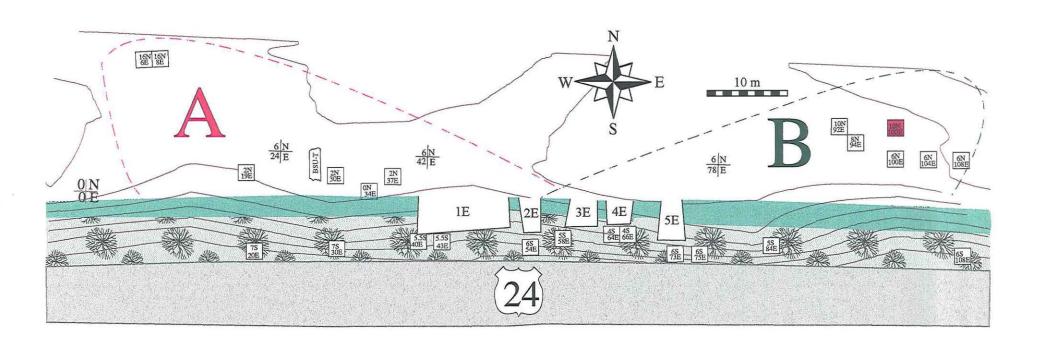
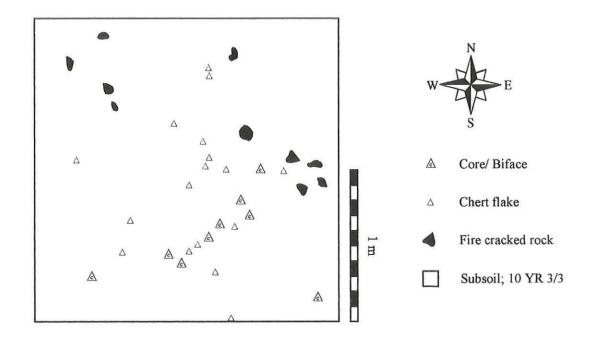


Figure 4.25: Scatter A & B



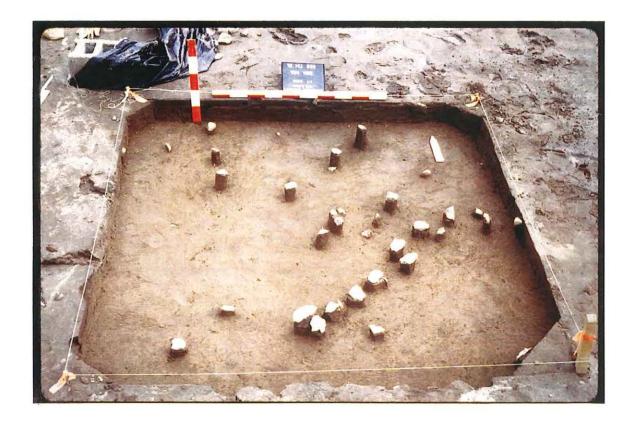


Figure 4.26: Feature 6, Core Concentration, 10N/100E

would have resulted in some stratification between plowed soil, mechanically deposited soil, and soil containing the intact cultural deposit. Second, episodes of geological sand deposition were interspersed with cultural lithic deposition. The most likely source of this deposition is alluvial from an intermittent drainage.

A gravel deposit, with ambiguous origins, was encountered in the north-west corner of unit 10N/100E below Feature 6, but still suspended in the same sandy B1 soil. This unit contained a deep pocket of B1 like sandy silt loam. Figure 4.27 shows the west wall profile map from 10N/100E. Lithic debitage was occasionally recovered from within the gravel deposit. Debitage was also recovered from below it. Three lines of evidence suggest that the origins of the gravel deposit were natural. First, a handful of small flakes were the only cultural materials recovered from within the deposit. Second, there is a lack of credible cultural analogs for discrete deposits of gravel. Third, the deposit was encountered within a soil context prone to turbation.

It appears, based on an examination of topo maps and soil survey maps, that such an intermittent drainage, running from the bluffs on the north to the river on the south, may have been re-routed, probably to facilitate drainage. This contention is based on the fact that the intermittent drainage that traverses the field today is straight, serves as a property boundary, and is apparently well maintained. Furthermore, the path of the drainage makes two almost 90 degree turns (Figure 3.2). The natural contour of the field from the point of entrance of the intermittent drainage across the site to the river passes over the low sandy area in the eastern portion of the site through Scatter B. It is very possible then that this intermittent drainage was the source for the sand encountered in Scatter B and resulted in the preservation of Feature 6.

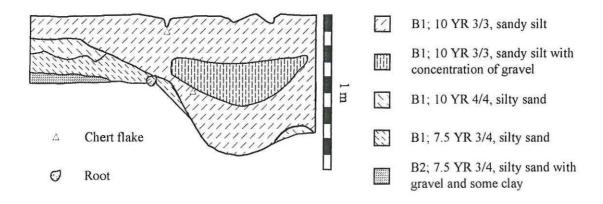


Figure 4.27: West Wall Profile, 10N/100E

4.7. Summary of Historic Transformations

The foregoing has demonstrated that historic cultural and natural formation processes have unevenly transformed the archaeological record at 12-Hu-935. Three distinct preservation contexts were identified, each with unique formation histories. The deposition of canal related fill preserved what could almost be considered a Pompeii assemblage (Sullivan 1986), part of a Miami village burned and abandoned just before the canal was constructed (See Mann 1996). This depositional event also halted further degradation of three Woodland pit features. Excavation units placed within the tree line on the north side of U.S. 24 produced evidence that enabled the documentation of first, the construction history of the highway, and second, on-going cultural and natural processes resulting in deposition and turbation. Although artifactual migration and leaching of organic materials were indicated to a degree across the site, these processes were most visible within the tree line. The portion of the site encountered beneath the plowzone was in the most turbated preservation context. However, as will be demonstrated in Chapter 7, sampling this area did provide data that can be used to address some site structural issues.

Archaeobotanical Summary of Site 12-Hu-935 Huntington County, Indiana by Annette Ericksen

5.1. Introduction

The following report summarizes the archaeobotanical contents of samples recovered from site 12-Hu-935 in Huntington County, Indiana. The site has been identified as a multi-component prehistoric/proto-historic habitation site sealed below a layer of gravel fill. Feature 10 was a large Miami period sheet midden overlying Woodland period pits (Features 12 and 13). Additional samples recovered below the sheet midden may be related to an Archaic period occupation. Lack of stratification of features and examination of soil profiles suggest that a "significant amount of turbation" had occurred at this location (Sherman personal communication).

Archaeobotanical remains were well preserved and were recovered in relatively dense to moderately dense quantities. Wood charcoal, nutshell and carbonized seeds were recovered in varying amounts from each sample analyzed. Identification of taxa suggest the presence of an open, well drained yet mesic habitat. Not enough data are available to interpret subsistence activities at the site or to differentiate subsistence activities between the cultural periods identified at the site.

5.2. Methods

Flotation

Samples were floated by Landmark Archaeological and Environmental Services, Inc. A standard measure of 15 liters was used for each sample (Sherman personal communication).

Analysis

Before sorting, samples are sifted through a series of nested geologic sieves to simplify identification by organizing the samples by size. Three size categories were created: 1) 2.00 mm, 2) 1.00 mm and 3) less than 1.00 mm. Sorting and identification of botanical materials are completed with the use of an Olympus VMZ stereo microscope with a magnification range of 10 to 40x.

Carbonized botanical materials are initially sorted into broad categories ie. nutshell, seeds, and wood charcoal. After initial sorting, these generalized categories are reexamined and identification into generic levels is made, whenever possible. Wood identification is limited to those samples which contain specimens large enough to maintain observable diagnostic features. Thus, identification is limited by preservation and overall condition of the specimens within the sample. Wood identification is conducted on samples which contain specimens of at least 4.00 mm in size. These samples are identified by again sifting the wood charcoal through a 4.00 mm geologic sieve. Identification is made through the combined use of several identification manuals and a comparative collection on file at the Archaeological Data Services Laboratory (Core, Cote and Day 1979; Martin and Barkley 1961; Panshin and de Zeeuw 1970).

All botanical materials removed from the 2.00 mm fraction are identified, counted and weighed. Materials from the two smaller fractions (1.00 mm and <1.00 mm) are designated present or absent only due to the small fragmentary nature of specimens in these categories. Seeds are identified and counted in all fractions.

Flotation heavy fractions were sorted and analyzed by Landmark Archaeological and Environmental Services, Inc. (Sherman personal communication).

5.3. Results of Analysis

A total of 10 soil samples recovered from a midden area, two pit features, and a lower portion of an identified A horizon were examined. The total volume of samples is 150 liters with each sample measuring 15 liters each. Three major categories of botanical materials were recovered and include 1) Wood Charcoal and 2) Nutshell and 3) Seeds. A total of 4125 specimens of botanical remains were recovered with a total weight of 38.3 g. The overall density of materials at this site is estimated at 27.5 specimens and 0.30 g of material per liter of sediment. Archaeobotanical materials were recovered from all samples (Table 5.1).

Table 5.1: Botanical Summary for Site 12-Hu-935

	Total		Density/liter			% of Total	
Botanical Classes	Number	Wt/g	Number	Wt/g	Ubiquity	Number	Wt/g
Wood Charcoal	4090	38.3	27.3	0.3	100	99.2	100.0
Nutshell	1	0.0	0.0	0.0	10	0.0	0.0
Seeds	34		3.4		90	0.8	
TOTAL	4125	38.3	27.5	0.3	100	100	100

Cells listed as 0.0 contain values < 0.09

No. of Samples: 10 Total Volume: 150 liters

Wood Charcoal

Wood Charcoal dominates the archaeobotanical assemblage. Ninety eight to 99 percent of the total assemblage consists of specimens of wood charcoal. A total of 4090 specimens of wood charcoal were recovered with a total weight of 38.3 g. The overall density of wood charcoal from the total collection of samples is estimated at 27.3 fragments and 0.3 g per liter of sediment. Wood charcoal was present in all samples analyzed (Table 5.1). Wood charcoal fragments were recovered in the greatest quantity from the Woodland pit features (Features 12 and 13 approximately 15% and 73% respectively). The Miami period midden contained moderate quantities of wood charcoal remains (approximately 9%) and the lower A horizon produced the least amount of remains (about 2%).

Of the wood charcoal specimens recovered a total of 160 specimens were suitable for further identification based on size. All but two of the specimens were recovered from the woodland period pits. Two specimens recovered from Feature 10, the Miami sheet midden were identified as elm (*Ulmus* sp.) and a ring porous tree. Tree taxa identified in order of relative abundance from Features 12 and 13 include: maple (*Acer* sp. n=13), and ash (*Fraximus* sp. n=2). Many specimens could be identified only as bark (n=24) ring porous woods (n=10) and diffuse porous woods (n=11). The remaining 96 specimens were unidentifiable. Many of the bark fragments showed evidence of partial carbonization.

Tree taxa identified (ie. maple and elm) suggest a well drained yet mesic environment. Not enough data are available from each cultural occupation to determine if the environment had been impacted thorough time by occupation and use. In addition, it can not be determined if collection strategies were localized or widespread as both of these species would have been available throughout the area.

Nutshell

A single specimen of hazelnut (Corylus americana) was recovered from the lower level of the A horizon (Table 5.2). Although this specimen may be present as a result of natural seed rain and not cultural manipulation, its presence does suggest that an open, disturbed habitat existed in the vicinity.

Table 5.2: Botanical Content of Samples

		Vol/I		T	otal	Density/Liter	
Number	Provenience		Content	#	Wt/g	#	Wt/g
1	Feature 10	15	Wood Charcoal	105	1.2	7.0	0.1
	23S 3E #685		Seeds: Raspberry	7		0.5	
2	Feature 10 Level 1	15	Wood Charcoal	23	0.2	1.5	0.0
	22S 20E #487		Seeds: Raspberry	1		0.1	
3	Feature 10 Level 2	15	Wood Charcoal	254	2.5	18.9	0.2
	23S 10W #873		Seeds: Raspberry	1		0.1	
4	Feature 12 Level 1	15	Wood Charcoal	445	8.8	29.7	0.4
	22S 20E #585		Seeds: Raspberry	2		0.1	
5	Feature 12 E 1/2	15	Wood Charcoal	184	2.8	12.3	0.2
	22S 22E. #880	-	Seeds: Raspberry	3		0.2	
			Fragments	1		0.1	
6	Feature 13 N 1/2 Lvl 2	15	Wood Charcoal	1493	14.1	99.5	0.9
	22S 6W #788		Seeds: Raspberry	8		0.5	
			Viburnum	1		0.1	
7	Feature 13 S 1/2 Lvl 2	15	Wood Charcoal	1488	9.8	99.2	0.7
	22S 8W #791		Seeds: Raspberry	7		0.5	
			Viburnum	1		0.1	
8	4S 64E Level 4 #88	15	Wood Charcoal	18	0.1	1.2	0.0
9	5.5S 40E Level 4	15	Wood Charcoal	53	0.5	3.5	0.0
	#279		Nutshell: Hazelnut	1	0.0	0.1	0.0
			Seeds: Raspberry	1		0.1	
10	5.5S 43E Level 4	15	Wood Charcoal	27	0.3	1.8	0.0
	#383		Seeds: Vetch?	1		0.1	
TOTAL		150		4125	38.32	27.5	0.3

Seeds

Only carbonized seeds were considered as representative of the period of occupation. A total of 34 seeds were recovered from the samples as a whole and these seeds comprise 0.8% of the total botanical assemblage. Carbonized seeds were recovered in all but one sample (Tables 5.1 and 5.2).

Of the seeds recovered, 88% (n=30) were identified as raspberry (Rubus sp.). Although raspberry seeds were present throughout the samples they were the most abundant in Feature 13 (a woodland pit). Two specimens of viburnum (Viburnum sp.) were also recovered from Feature 13. Both species are known to be edible; however, their status as food resources can not be clearly defined in this case. Viburnum seeds do not appear in quantities suggestive of intensive collection. In the case of raspberries; given that raspberry seeds are distributed throughout the midden, and that raspberries grow abundantly in open disturbed habitats, their incorporation into the archaeobotanical record could have arisen from several avenues. They may be the result of accidental carbonization from land clearing practices as well as the result of human predation. Most ethnographic sources suggest that raspberries are eaten fresh and it is doubtful although not entirely impossible that the seeds were somehow cooked and subsequently burned. An additional seed fragment and a seed which resembled specimens of the "vetch" family were also recovered.

5.4. Summary

The archaeobotanical assemblage from site 12-Hu-935 appears to have been relatively well preserved; however the data limit any interpretation to a cursory examination of past environmental conditions. Identified taxa suggest an open, well drained, mesic environment. However; little evidence has been recovered that can help interpret changing subsistence patterns or overall land use patterns. Generally,

all of the samples contained similar types of data albeit in varying quantities. Turbation noted at the site may have served to homogenize any distinctions which may have been present prior to disturbance.

5.5. Botanical Analysis References Cited

Core, H.A., W.A. Cote and A.C. Day

1979 Wood Structure and Identification. Syracuse University Press.

Martin, Alexander C. and William D. Barkley

1961 Seed Identification Manual University of California Press Los Angeles.

Panshin, A.J. and Carl de Zeeuw

1970 Textbook of Wood Technology. McGraw-Hill Book Company, New York.

6. Prehistoric Overview of the Wabash Valley

Above, the concept of the transportation corridor was introduced to highlight certain characteristics of the historic occupation of the Upper Wabash Valley, namely the interdependent historical development of transportation media, resource exploitation, and settlement patterns. During the historic period both economic development and settlement patterns in the valley were, to a large degree, determined by the introduction of the canal. The canal focused and intensified the capitalist catchment of the Wabash Valley; markets for cash crops opened throughout much of the midwest for the grain grown on newly acquired farms. In short, the canal changed the way the natural resource of arable land could be exploited. It is plausible that this connection, between resource exploitation and settlement patterns, was analogously manifest during prehistoric occupations of the Wabash-Valley. For prehistoric populations the Upper Wabash would have been a rich vein of natural resources, an "environmental magnet." This would have been uniquely true at 12-Hu-935. The large swamp less than a mile away at the forks of the Wabash and Little Rivers, the low possibly open sandy area traversed by an intermittent drainage in the south-eastern corner of the site (Figure 4.25, "Scatter B"), the Liston Creek chert outcrops below the natural levee, and the river itself, together would have housed a richly diverse exploitable biomass complete with the raw materials and space needed to process it. Resource zones within three kilometers from the site included: floodplain, upland forest, forested terrace, imperfectly drained upland forest, and the river itself (Mann 1996). Followed by foot or canoe, the Wabash River would have made the rich resources of the valley accessible to widely dispersed peoples.

The available resources within the environs of 12-Hu-935 suggest that it could have played a part in a variety of subsistence economies throughout the prehistoric occupation of the Wabash Valley. The diverse assemblage of diagnostic lithics recovered from 12-Hu-935 further supports this inference. Prior to examining the formation of 12-Hu-935 an historical overview of the Wabash Valley is given.

6.1. Paleoindian (ca. 9,200 - 8,000 B.C.)

Paleoindians began to exploit Indiana's natural resources probably sometime between 9,200 to 8,800 years ago (Tankersley 1992). These nomadic hunters likely followed herds of game, possibly including the European elk, which abruptly replaced the American species during the same period. This Euro-Asian animal invasion is evidenced in Pleistocene and Holocene faunal remains found at Big Bone Lick and Blue Lick Kentucky. Analysis of fossils demonstrates a marked extinction of species which were present through the Pleistocene, including mammoth, mastodon, bison, camel and horse. The role man played in these extinctions is weighed with the competition of the new species, the changes in climate, and resultant changes in flora. Other species moved north with the retreat of the ice sheet, including the musk ox, caribou, and stage-moose.

Nomadic hunters spread rapidly into the rich new continent, perhaps entering Indiana from the west, up the Ohio River and the Wabash, to harvest herds which likely once migrated each fall from the vast Illinois Prairie summer grazing lands to the salt and mineral licks in the protected forested river valley of Southern Illinois, Indiana, Kentucky, and Tennessee. Smith (1990) noted a correlation between Paleoindian sites and historic game trails such as the Buffalo Trace between the Falls of the Ohio and Vincennes on the Wabash. Although bison are a historic phenomenon dating from about A.D. 1450, there is no reason not to assume that the trail these large mammals followed was a traditional game trek followed by earlier large mammals for similar reasons. "The small feet of these animals (buffalo) along with their heavy bodies, necessitated their roads following the highlands - indeed the ridges, or watersheds... The buffalo avoided the hill and the swamp, and therefore took the ridge or the valley. He was a good civil engineer and path-finder... In the spring they came north from Kentucky into Indiana and covered the plains in great armies, then, as winter approached, retreated to the borders of the large rivers where they sheltered in the forest and fed upon the boundless fields of wild cane" (Wilson 1919).

Tankersley (1992:8-9) states that over half the known fluted points in Indiana "occur in the unglaciated portion of the state along the Ohio and Wabash Rivers and in bedrock sources of high quality lithic material [chert]... The greatest concentrations of fluted points occur on terrace and flood plain settings

(72%) and overlooks of those areas (22%), a phenomenon that can be related in part to the monitoring, procurement, and processing of game... Particular 'environmental magnets' for hunting and habitation sites would have been wetlands: marshy areas, the confluence of major streams, shallow river crossings, sinkhole ponds, kettle lakes, and springs (especially saline and sulfur springs)."

It is likely that throughout the Paleo period, one or more bands of nomadic hunters took advantage of the migration corridors which followed the Wabash and its tributaries. Although no fluted points were recorded in the immediate vicinity of 12-Hu-935, earlier Paleo bands did not neglect the resources that drew so many of the cultures that followed. There have been 140 fluted points reported in 19 counties of central and northern Indiana along the Wabash River (Cochran, Richey and Maust 1990).

6.2. Late Paleoindian (ca. 8,800 - 7,300 B.C.)

Divergence in Clovis points occurred about this time as the subsistence base gradually changed from big game to a more broad based pattern of hunting and collection. Hicks (1992) writes: "the period appears to be one of population growth... A general impression conveyed is of a more settled way of life, or at least the use of a smaller territory with only seasonal migrations, and a concentration of local or regional resources... such as smaller mammals and plant foods including seeds, berries, fruits, roots, and bulbs, bushes and trees". Fluted stemmed and unstemmed lancolate points include Cumberland and Folsom. Unfluted points include Plainview, Agate Basin, and Dalton. Folsom, Plainview, and Agate Basin points have been found on the prairies, in association with hide preparation tools at bison kill sites. Study of the kill sites suggest that between late summer and early winter groups gathered to communally hunt bison, either by driving small herds over cliffs, trapping them in box canyons, or driving them onto soft ground where they could be killed more easily (Knight 1989).

6.3. Early Archaic (ca. 8,600 - 6,500 B.C.)

The Early Archaic subsistence appears to be increasingly based on deer and small game hunting, fishing, shell, and plant collection. Mohow (1992) writes: "The Early Archaic was a period of increasing regional specialization, with settlement patterns structured around the seasonal availability of various resources in different environmental zones... Early Archaic populations... generally followed a central based wandering foraging scheme... with centralized base camps in strategic locations, which served as axis for numerous smaller hunting and gathering camps... The central base camps would probably have been established on better drained soils in environmental settings that would allow hunting and gathering parties to draw on a variety of seasonally available resources with a minimum of effort".

Lithic traditions of the Early Archaic include the Thebes, Kirk and Bifurcate. "A lithic tradition refers to two or more point types that are related by technological similarities and either coexisted or were related in an ancestral sequence" (Mohow 1992). Thebes points in Indiana, Mohow (1992) notes, may be "tied to the west" based upon raw material associations from data in east central Indiana. Data from southern Indiana supports this, with a large percentage of Thebes points made from Burlington chert from the St. Louis area of Missouri. Another point included in the "Thebes cluster" (Justice 1987) is the St. Charles (Dovetail), which is found in relatively high frequency in the middle south and southeast, extending into Florida, and West Virginia, but also extending into Missouri and eastern Iowa. Lost Lake and Big Sandy points likewise extend from the southeast over a similar area. The true Thebes point appears to have origins from the grasslands, perhaps for hunting herd animals such as bison or elk, where the animals would be driven over cliffs, into traps, or mired down in soft ground where they would be killed through jabbing and piercing a vital organ. The St. Charles, Lost Lake, and Big Sandy points appear to arise out of the moist southeastern interior deciduous woodlands, perhaps for hunting whitetail deer, and smaller mammals.

Kirk Tradition points including the corner notched Charleston, Palmer, and Kirk, followed by Kirk stemmed and serrated (oldest to most recent) all post date St. Charles and Lost Lake points and are all from the eastern deciduous woodlands. Broyles (1971) has suggested MaCorkle points were a transitional style from Kirk to the bifurcates such as St. Albans, LeCroy, Kanawha, and Lake Erie. Mohow (1992) writes: "The chronological range of the Thebes Tradition has not been as clearly defined, but... the tradition can clearly be place within the 2,000 year range of the Early Archaic... Thebes Tradition bands may have been

contemporaneous first with Kirk Tradition bands and later with Bifurcate Tradition bands... notched base Thebes Tradition points have been recovered... and may be an expression of bifurcate technology influencing Thebes bands. In the same way, the occurrence of alternate-edge blade resharpening in some Kirk and Bifurcate tradition points within the region may represent the diffusion of an element of Thebes technology".

6.4. Middle Archaic (ca. 6,500 - 4,700 B.C.)

The largest sites in the Upper Wabash drainage are from this period (Wepler and Cochran 1983). The archaeological record during the Middle Archaic is limited geographically compared to that of the Early Archaic. The drier climate drew native populations to the river valleys and ecotones between prairie and forests where food sources remained plentiful. Resource utilization of the uplands of southern Indiana and the glacial till plains of central and northern Indiana appears to almost cease during this period. An increasing dependence on aquatic resources is evident throughout the southeastern woodland interior by kitchen or shell middens, huge mounds of mussel shells found usually on terraces or high bluffs along shallow, rapid moving water. These shell middens extend from the Gulf Coast into Indiana along the Ohio, Wabash and the East and West Forks of the White River, but only as far north as about Greene County in Indiana. It is puzzling that only minor amounts of mussel shell are found on Middle and Late Archaic sites north of Greene County, although the mussels were available, but apparently not utilized to any comparable extent. Also found from sites of the Middle Archaic are pitted stones, mortars, pestles, and food preparation and storage pit features. Food processing technology involved the milling of seeds, roots, nuts, berries, fruit, and animal bones for the marrow, the products then stone boiled or cooked with heated stones in pit ovens (Frison 1975).

A breakdown in the trade of high quality cryptocrystaline cherts apparently occurred during the Middle Archaic, as more local, often poor quality cherts were utilized. The diversity of point styles during the Middle Archaic, most spatially limited, is thought to reflect territoriality and possibly even ethnic boundaries (Sieber et al. 1989). The climate, and the populations within the moist deciduous woodland interior core of Tennessee, Kentucky, and northern Georgia remain relatively stable, based upon point style distributions, but fragmentation seems to occur in outlying areas, including most of Indiana north of the Ohio Valley. Typical point styles of this period include Stanley Stemmed, Eva, Morrow Mountain, and White Springs from the southeast core area, and Matanzas and Karnak points occurring late in the Middle Archaic, extending into the Late Archaic, both with origins in the Illinois prairie.

6.5. Late Archaic/Early Woodland (ca. 1500 - 500 B.C.)

In the Upper Wabash Drainage, according to Wepler and Cochran, "Sites of this period tend to be small and located throughout all physiograhic zones (1983). Larger sites are normally multi-component where Middle to Late Archaic components apparently dominate." (1983:24) This pattern seems to suggest a broadening of the resource base with a continuation of mobility patterns developed in earlier periods. Such is the case at 12-Hu-935. This apparently contrasts with patterns in southern Indiana which indicate a more sedentary lifestyle, concentrated along the major drainages, lakes and marshes that began during the Middle Archaic and continued through the Late Archaic.

Pottery marks the transition from the Late Archaic to the Early Woodland Period. Pottery in the New World first appears in Equador about 3,000 B.C., "bearing an astonishing resemblance to potteries of the same date from the island of Kyusu, Japan" (Campbell 1988). It is found along the Caribbean coast at Porto Hormiga, Columbia, and the Tehuacan Valley of Mexico by 2,300 B.C. The skills of the potter apparently may have entered into North America by sea from coastal Columbia across the Antilles Islands, for it is found in shell heaps on the Georgia coast near Savannah, and near the St. Johns River in northeastern Florida by 1,900 B.C. Pottery has been radiocarbon dated from Mobile bay in Alabama at 1,090 B.C. plus or minus 200 years, and is reported from the Koster site in western Illinois by about 1,800 B.C. A thick pottery fabric impressed from baskets first appears late in the Red Ochre burial complex, known as Marion Thick.

In northern Indiana, Hicks (1992) writes: "There is, indeed, surprisingly little evidence for actual settlement from the Early and Middle Woodland in much of the area." He sites thirteen Early or Middle

Woodland sites (most previously occupied) with three fourths found in the river valley or valley edge in an extensive study of the Upper White River drainage.

6.6. Middle Woodland (ca. 200 B.C. - A.D. 600)

The Middle Woodland is poorly represented in the Upper Wabash drainage. This area lacks the major earthworks and other evidence of social stratification characteristic along major river valleys in southern Indiana. Here, sites are small and tend toward till plain and till plain edge. (Wepler and Cochran 1983).

6.7. Late Woodland (ca. A.D. 500 - 1600)

Sites of this period are more numerous than of the Middle Woodland and Late Archaic. Thin grit tempered Late Woodland ceramics have been found in the Upper Wabash drainage as well as the Maumee River drainage. (Cochran 1985, Cochran and James 1987, Mohow and Cochran 1987) The nearby mounds, Big Bangs and Little Bangs are Late Woodland. (Gerald 1964) During this period sites are most often located on floodplains and low terraces. "No large village sites have been located. Instead, sites tend to be dispersed along the banks of rivers and across meanders, giving the appearance of individual homesteads or small hamlets" (Wepler and Cochran 1983:25).

7. Prehistoric Formation of 12-Hu-935

7.1. Settlement Patterns

A cursory examination of the above prehistoric overview reveals an interesting pattern. In northern Indiana prehistoric subsistence and settlement seemed to be predicated upon a high degree of mobility. Unlike the major drainageways of southern Indiana, substantial evidence suggesting sedentary occupation of large village sites, agricultural practices, status differentiation, and wide spread trade is relatively lacking. Even during the Late Woodland a high degree of mobility, with respect to southern populations, is indicated by settlements which have the appearence of "homesteads or small hamlets." In northern Indiana large sites tend to be multi-component, perhaps reflecting analogous usage during subsequent occupations by mobile populations. 12-Hu-935, with its large scatter and diverse diagnostic assemblage, is a good example of this northern Indiana site type. For this reason, an analysis of its structure may provide some diachronic insight into the unique subsistence patterns of the region.

The character of the archaeological record encountered at 12-Hu-935 imposed a number of interpretive constraints on the lithic assemblage. It has been recognized that small sites from nearly all phases of Indiana's prehistory are dotted along the Wabash Valley transportation corridor. In their survey of the Upper Wabash Drainage, Anuszyk and Cochran (1984) recorded 305 new sites. It is clear that the Upper Wabash drainage has withstood human traffic for roughly 10,000 years. The diagnostic lithic assemblage from 12-Hu-935 indicates it was periodically occupied throughout much of Indiana's prehistory. Furthermore, throughout this period the cultural deposition of lithic materials occurred virtually uninterrupted by geological deposition of sediments. Also, a host of natural and cultural processes resulted in significant turbation to the archaeological record in the form of artifact migration. This record then can be characterized as a rather fluid archaeological palimpsest.

In short, this record favored the use of horizontal over vertical data. The vertical integrity of this record is suspect, making the identification of individual depositional episodes and reduction strategies difficult. However, the patterned horizontal distribution of lithic materials seems to result in part from variation in the prehistoric use of space at 12-Hu-935. Lithic artifacts, from all stages of lithic reduction, were by far the most common artifact class recovered at 12-Hu-935. A lithic typology designed to contend with horizontal variability in the distribution of the lithic assemblage was used. This typology is mutually exclusive, easily replicable, and interpretation free.

7.2. Lithic Typology

Lithic materials recovered from 12-Hu-935 were classified as debitage, utilized flakes, cores, bifaces, and diagnostic projectile points.

Table 7.1: Summary of Lithic Materials

Artifact Type	Number	
Debitage	36,537	
Utilized Flakes	1,853	
Cores	405	
Bifaces	213	
Diagnostic Projectile Points	66	

Debitage: Lithic debitage includes all "flaked stone artifacts lacking scars longer than 3.0 mm. that originate on the objects perimeter (Sullivan 1987)." This category of materials thus includes all "non-utilized flakes", "blocky fragments" and "shatter".

Utilized flake: This category includes all unifacially worked lithic materials showing regular flake scars originating on the

objects perimeter. This category includes materials ranging from flakes with minimal regular patterned evidence of edge wear to heavily utilized "scrapers", "spoke shavers", and "burins".

Core: This category includes lithic materials showing only negative percussion scars. Materials in this category ranged from small "spent" cores, to chert slabs showing only a few negative percussion scars. Materials in this category showed a range of percussion traces, from regular patterns of perimeter originating flakes to notches that could have been used as "spoke shavers".

Biface: This category included all non-diagnostic bifacially worked lithic materials. Materials in this category ranged from "preforms," to well formed "knives," and large "axes". Materials in this category blend into the previous one. As cores are worked down they often come to resemble bifacially worked tools. Both categories of materials were likely to have served multiple uses.

Diagnostic Projectile Points: Materials in this category included bifacially worked lithic materials showing formal characteristics diagnostic of particular cultural historical periods (Justice 1987).

7.3. Site Structure

In order to adequately address the formation of the prehistoric components at 12-Hu-935 and attempt to define some parameters of occupational variability, it will be useful to provide a structural picture of the site. Lithic density clines will be assessed in order to identify sub-site areas. This examination will begin with, 1) a brief description of general depositional patterns across the site, 2) the methods used to determine density clines from excavation data and, 3) analysis.

The majority of the diagnostic points from all periods and lithic debitage were formed from the locally abundant Liston Creek chert. A large outcrop is directly south of 12-Hu-935 along the Wabash River. Liston Creek chert is also widely available in large gravel bars along the Wabash River near 12-Hu-935. Thirty-eight out of sixty-six diagnostic projectile points were formed from Liston Creek chert. Of these seventeen appeared to have been heat treated. Out of the remaining points eight others were heat treated; three were formed from Attica chert while five were formed from unidentified chert types. Heat treated Liston Creek points came from Middle to Late Archaic and Late-Early Woodland periods.

Before archaeological stripping the surface lithic scatter seemed fairly continuous across the current agricultural field. Both before and after archaeological stripping the variety of lithics encountered indicated that all stages of lithic reduction were present. After archaeological stripping the scatter remained fairly consistent and continuous across the site. However, two areas of the scatter, A and B (Figure 4.25), appeared to be more dense. Area B, in the south east sandy portion of the field, seemed somewhat more dense than Area A. Artifact recovery rates per level from units excavated across the site were used to more accurately define clinal variation. Lithic samples were taken from the three distinct preservation contexts encountered at 12-Hu-935 during the excavation of units. Thus, the full range of lithic depositional variation was sampled.

Surfer* for Windows was used to predict an artifact density plot for the entire site based on variation in lithic recovery rates from the densest arbitrary 10 cm level of each unit across the site. Three separate density plots were created, one for lithic debitage, one for diagnostic projectile points, and one for bifaces (Figures 7.1-7.3). Across the plowed portion of the site the densest arbitrary 10 cm level always began at the base of archaeological stripping. In unplowed portions of the site, both on the north and south sides of U.S. 24, the densest 10 cm arbitrary level always occurred in the A horizon, usually between 5 and 10 cm above the conformation with the B1. Nearly uniformly across the site artifact recovery rates dropped by 50% with each level excavated below the richest level. Across the site the average amount of debitage recovered per unit from the A was 587.9 pieces. On the other hand the average number recovered in each unit from the B1 was 251.66. In transitional B1/B2 soil the average was 86.7 while in the B2 it was merely 22.33. The foregoing suggest that the original occupational surface occurred within the A horizon. This further indicates that using recovery rates from the densest arbitrary 10 cm level should accurately reflect prehistoric cultural deposition of lithic artifacts across the site. Figures 7.1 - 7.3 show predicted densities of lithic debitage, bifaces, and diagnostic projectile points across the site.

Figure 7.1: Lithic Debitage Distribution, indicates five separate density peaks, marked 1-5. The most artifactually rich portion of the site occurred on the south side of U.S. 24, within the same soil context as the historic Miami midden. Diagnostic projectile points from all periods identified at 12-Hu-935 were recovered from this portion of the site. It is likely that the peaks occurring beneath the plowzone are somewhat distorted. These peaks are likely somewhat lower than would be expected if artifacts from the A

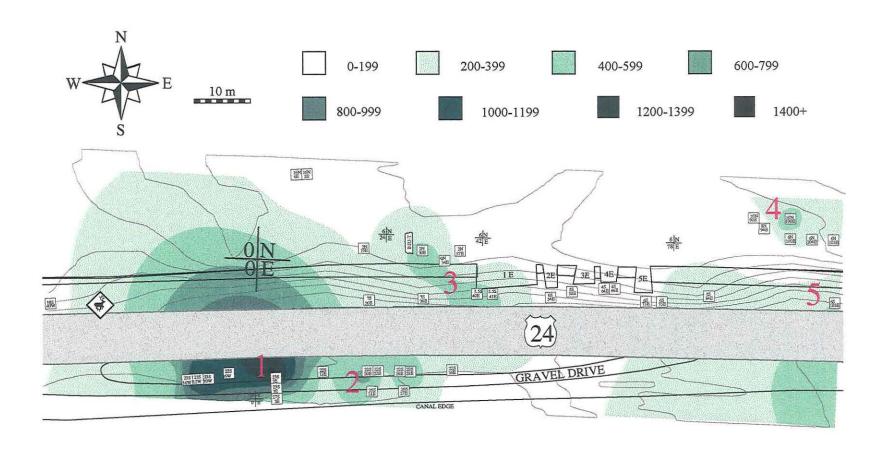


Figure 7.1: Lithic Debitage Distribution

horizon were included. It is significant that the peaks below the plowzone were maintained at all. Peaks occurring below the plowzone are small and relatively conscribed. The smaller of the sub-plowzone peaks, Peak 4, occurred entirely in one unit 10N/100E, in association with Feature 6. It therefore seems likely that this peak resulted from one episode of core reduction. No diagnostic projectile points were recovered from Peak 4.

Peaks 1-3 and 5 on Figure 7.1 are maintained in Figure 7.2: Biface Distribution, and Figure 7.3: Diagnostic Projectile Point Distribution. Furthermore, the area of low density (or density trough) between Peaks 3 and 5 is maintained by both the biface and point distributions. The clinal conformity among these three artifact classes likely results in part from prehistoric cultural behavior. The three largest peaks, 1-3, are close together and bisected by U.S. 24. Their proximity coupled with the historic transformations discussed earlier make distinguishing activity areas among them problematic. Peaks 1-3, like the remaining Peaks, were not associated with any one particular diagnostic point style.

Only one of the three projectile points recovered from 22S/28E was diagnostic; it was a Saratoga Parallel Stemmed. Unit 5.5S/40E contained two projectile points from the Middle to Late Archaic period and one from the Early Archaic period. The three unit trench 23S/10-14W included two transitional Saratoga styles and one Kirk stemmed. The remaining nine points recovered from this trench came from the Middle to Late Archaic period. The other three unit trench - 23-27S/3E- near Peak 1 included one Early Archaic type, eight Mid-Late Archaic types, two transitional Woodland Saratoga types, and two Late Woodland types. The unit defining Peak 5 included one Mid-Late Archaic Brewerton Corner Notched and one Late Woodland Madison.

The variety of non-diagnostic lithic tools can indicate, in a general way, some of the production activities conducted at 12-Hu-935 during some occupational episodes. The quantity and diversity of thermally altered Liston Creek chert tools recovered from 12-Hu-935 suggest that during some of the major occupational episodes a primary activity was the heat treating of the local chert resource. The majority of the heat treated diagnostic projectile points were Mid-Late Archaic types. This suggests further that the majority of the episodes of heat treating likely occurred during this period.

Two deposits within the density trough between Peaks 3 and 5 may have resulted from two separate episodes of core reduction and heat treating. These are Feature 1 and the intact deposit of FCR in 5S/84E. Both were encountered within the tree line north of U.S. 24. Feature 1, an FCR concentration with over 100 pieces, is likely the refuse from one episode of heat treating. Liston Creek chert (Figures 7.4, 7.5, and 7.6). Included among the FCR were 10 cores and over 500 pieces of debitage. It seems likely that the cores were reduced and subsequently heat treated nearby. A similar deposit was recovered in 5S/84E(Figure 7.7). Here, as in Feature 1, a concentration of FCR and lithic debitage was recovered from the lower and darker portion of the A horizon. This deposit also possibly arose as refuse from one episode of core reduction and chert heat treating.

Across the site the proportion of thermally altered lithic debitage to all debitage varied. A stratified sample of debitage from the most dense arbitrary 10 cm level from units in Peaks 1 though 5 and units 4S/64E, 7S/20E, and 5S/84E, was taken to assess horizontal variability of the recovery of thermally altered debitage. The average weight of both debitage types for each area was also recorded (Table 7.2). The percentage of thermally altered debitage from these locales varied from 21.2% to 47.1%. The behavioral implications of these patterns are ambiguous. Areas with both high and low proportions of thermally altered debitage also included both high and low concentrations of all debitage.

The average weight per thermally altered and non-thermally altered debitage, from each of these areas, was computed. In all samples, thermally altered debitage were smaller than non-thermally altered debitage. This pattern suggests the likelihood that the majority of thermally altered debitage resulted from tool production and maintenance, or secondary reduction. This interpretation is supported by the paucity of thermally altered cores at 12-Hu-935.



Figure 7.2: Biface Distribution

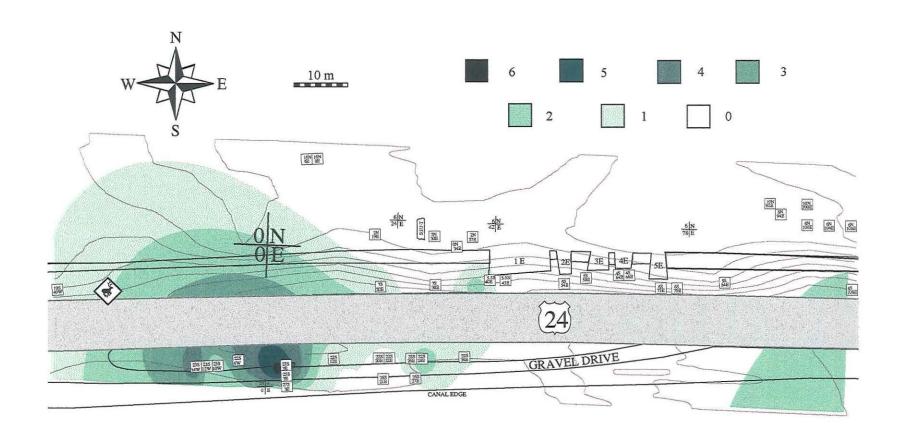


Figure 7.3: Diagnostic Projectile Point Distribution

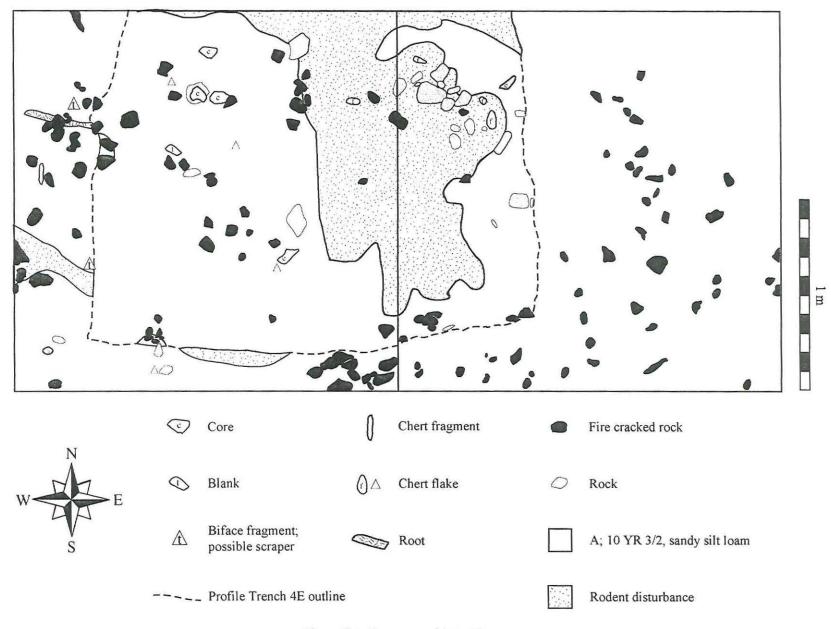


Figure 7.4: Feature 1, 4S/64-66E



Figure 7.5: Feature 1, 4S/64E after Profile Trench 4E Excavation



Figure 7.6: Feature 1, at Exposure in Profile Trench 4E

Table 7.2: Distribution of Thermally Altered Debitage

Peak #	Unit	# Thermally Altered	Total Debitage	% Thermally Altered	Ave Wt. Thermally Altered	Ave Wt. Non- Thermally Altered
1	23S/3E	376	1596	23.1	0.99	1.21
2	22S/28E	171	541	31.6	0.87	1.31
3	5.5S/40E	178	378	47.1	0.86	1.31
4	10N/100E	112	518	21.2	0.73	1.67
5	6S/108E	134	469	28.6	1.04	1.51
	4S/64E	48	135	35.6	1	1.93
	7S/20E	97	310	31.3	0.95	1.49
	5S/84E	129	334	38.6	0.86	207

The above supports the interpretation that the lithic assemblage from 12-Hu-935 was deposited as a result of various cultures through time using the site as a lithic workshop. However, this interpretation seems a bit restrictive in light of the diversity of lithic artifacts recovered. The volume of utilized debitage and bifaces suggest that the site's prehistoric occupants were processing more than just Liston Creek chert during some occupational episodes. The high proportion of recycled and resharpened projectile points deposited at 12-Hu-935 during the Middle to Late Archaic period further suggests that populations processed more than chert. Although the precise activities that resulted in the deposition of utilized debitage, bifaces, and scrapers can not be known with any certainty, it is likely that they were related to processing some of the available exploitable biomass in the vicinity of 12-Hu-935.

Table 7.3: Trace Variability in the Assemblage of Diagnostic Points

Point type	Number	% Resharpened	# Broken	% Heat-treated	# Recycled into a Hafted scraper
Paleoindian	2	100	2	0	0
Early Archaic	12	33	10	8	0
Middle to Late Archaic	34	47	23	44	4
Transitional	9	66	5	33	1
Middle Woodland	0	0	0	0	0
Late Woodland	6	0	5	0	0
Undetermined	4	0	4	0	0

7.4. Site Structure Summary

The above also indicates that the densest area of the site, around Peak 1, was likely the most intensively occupied portion of the site throughout the prehistoric period and during the Miami occupation. However, during some of the prehistoric occupations discrete activity areas, such as Features 1 and 6, and the FCR and lithic concentration in 5S/84E, were deposited. This deposit, pictured in Figure 7.7, was encountered within the tree line on the south side of U.S. 24. Road Fill Type 1 is clearly visible near the top of the unit profile, indicating that the construction of the highway served to preserve the integrity of this deposit. It is likely that other such discrete activities areas existed in what is now the agricultural field before plowing was commenced. The fact that the Miami midden was encountered in the same context as the centrum of prehistoric lithic deposition is significant. The Miami occupation is the only one that unequivocally resulted from activities normally associated with habitation. Although the level of habitation during prehistoric periods is unclear, the depositional patterns observed above suggest that if any of them included activities normally associated with habitation they likely would have occurred in the vicinity of Peak 1.

Throughout all occupational periods the densest area of activity occurred on the first terrace of the Wabash River in the area of Peak 1. This location is today, and probably has been for nearly 14,500 years, well protected from overbank episodes. It has been well documented that historic Indian tribes in Indiana

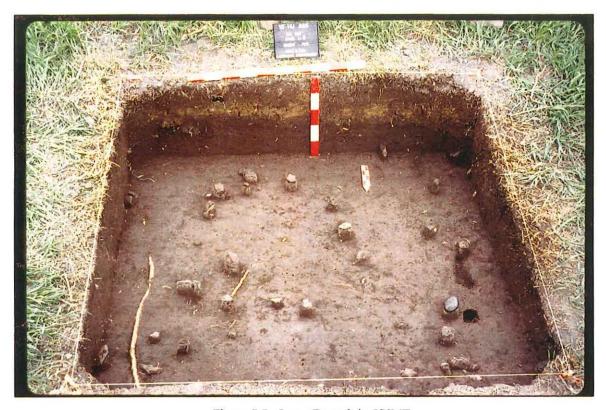


Figure 7.7: Intact Deposit in 5S/84E

selected such areas for village sites (See Mann 1996; Wepler 1992; Gipson 1938; Hulbert and Schwarze 1910). It is therefore reasonable to assume that such factors as flooding and drainage may have played a role in the decisions made by prehistoric peoples to locate certain site types on particular topographic features. The foregoing suggests the suitability for habitation of the area around Peak 1 for prehistoric populations.

8. Projectile Points

by Leonard Van Zeeland

One of the more interesting aspects of 12-Hu-935 is the size and diversity of the diagnostic lithic assemblage. There are a total of sixty-six points and point fragments from nearly every documented period of human occupation in the Upper Wabash Valley. The following analysis will show that this location has repeatedly withstood human occupation from the time that Paleoindian bands first began exploiting the region in the wake of the retreating glaciers until Europeans altered the cultural landscape in the midseventeenth century.

That transportation corridor still plays a major role to this day is well documented and has been covered above. The purpose of this portion of the report is to use projectile points as temporal indicators to track the prehistoric utilization of 12-Hu-935 in particular and compare this to the exploitation of the Wabash Valley in general. This will require three steps. First, the range of projectile point variation will be described and individual points placed into stylistic categories. Second, a category by category analysis will be undertaken to investigate occupational variability through identified cultural historical periods. Third, an occupational chronology will be proposed and compared with that derived for the Upper Wabash Valley.

8.1. Description

For the sake of simplicity, one reference (Justice 1987) is used in this descriptive listing of the projectile points recovered from 12-Hu-935. The following analysis section includes further references in an attempt to flesh out the most likely occupational chronology.

Paleoindian

Plano: Two points (Figure 8.1) recovered at 12-Hu-935 were Plano styles.

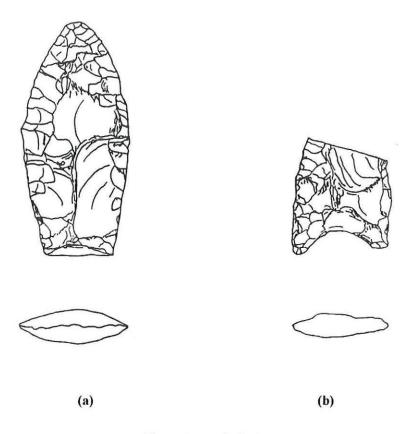


Figure 8.1: Paleoindian

Agate Basin (a) - The base is missing from this point, which makes it difficult to determine its type with absolute certainty, although it does exhibit many characteristics of an Agate Basin Lanceolate point that has been heavily resharpened. The point was formed from Attica chert. It is not apparent what caused the base to snap off, or even if the damage occurred before of after deposition. The hafting element has been heavily ground.

Plainview (b) - The majority of the blade is missing from this point. Yet it can be placed with some certainty into the Plainview style due to the concavity of the base and the straightness of the hafting element. The point is made of Liston Creek chert. From what is left of the blade, it appears that this point was also heavily resharpened. It seems likely that the point was broken during resharpening. The base and hafting element have been ground.

Archaic

Early Archaic: Eleven points were classified as Early Archaic (Figures 8.2 and 8.3). At least four different styles are represented.

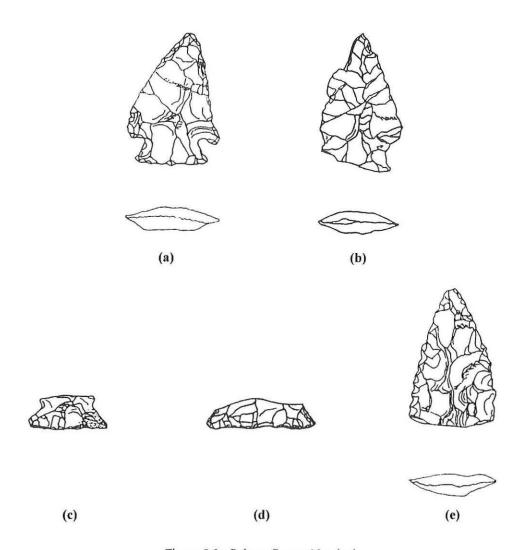


Figure 8.2: Palmer Corner Notched

Palmer Corner Notched - Five points (Figure 8.2) resemble the Palmer Corner Notched style. Two (a and b) are fairly good examples of this style. Point (a) is made from Liston Creek chert. The evident serration indicates resharpening. (b) is made from what appears to be heat treated Attica chert, and also exhibits some serration. The two bases (c) and (d) could also justifiably be classified as a number of different notched styles. However, the heavy grinding on (c) and the wide base and sharply pointed ears of (d), lead to inclusion in this category. (c) is made from Liston Creek chert, and (d) is Attica. The refined appearance and serration on (e) contributed to inclusion in this category. Although the lack of a base and shoulders make it impossible to be sure of the precise style. It is made from Laurel chert.



Figure 8.3: In-Situ Kirk Stemmed



Figure 8.4: Kirk Stemmed

Kirk Stemmed - This point (Figures 8.3 and 8.4) is missing its tip and an entire blade edge through the shoulder. These were probably lost during retouch of the blade. The stem is contracting and the shoulder weak, but in most respects this point fits well in this basic style. The chert used is Flint Ridge.

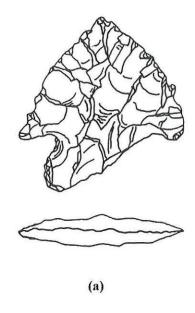


Figure 8.5: MacCorkle Stemmed

MacCorkle Stemmed - Only one point (Figure 8.5) can be included in this classification with any certainty. This point is missing one ear, but clearly exhibits most of the other formal characteristics commonly ascribed to the MacCorkle Stemmed style. It is made from Flint Ridge chert and has been heavily reworked showing moderate serration.

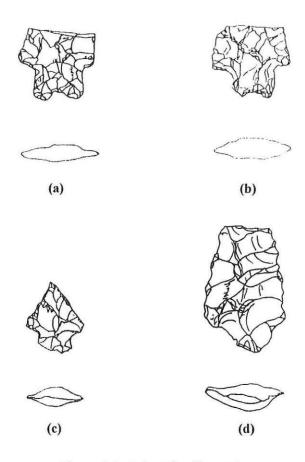


Figure 8.6: Lake Erie Bifurcated

Lake Erie Bifurcated - The first three points (Figure 8.6) in this category are good examples of the Lake Erie Bifurcated style. (a) and (b) are both missing their tip, but are otherwise excellent specimens. It is not clear how they were damaged, but in both cases reworking is the likely cause. (a) is made from Attica chert, and (b) is Liston Creek chert. The diminutive size of (c) likely resulted from extensive resharpening, which may also explain the lack of ears. It is made from Wyandotte chert. Although (d) is missing the tip and much of the base, the general morphology and flaking characteristics of the blade are good evidence that this point fits in the Lake Erie Bifurcated category. The striking platform of the flake blank is still evident on what remains of the base. The blade is extremely beveled and the tip was apparently lost during reworking. It is made from heat treated Liston Creek chert.

Middle to Late Archaic: Thirty-four Middle to Late Archaic points (Figures 8.7 - 8.10) were recovered from 12-Hu-935.

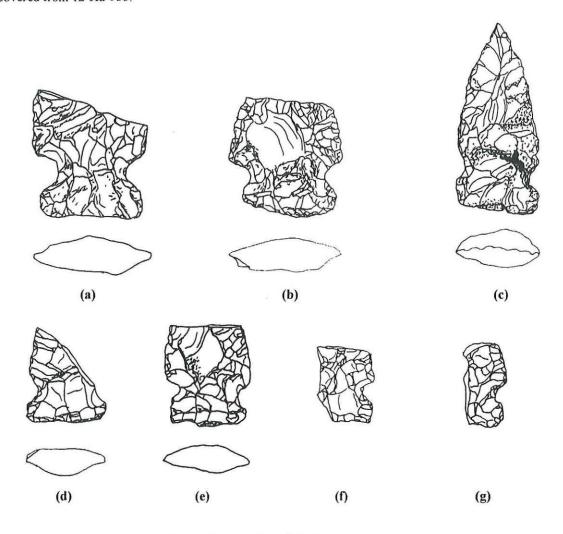


Figure 8.7: Raddatz Side Notched

Raddatz Side Notched - Seven points (Figure 8.7) appear to made in the Raddatz style. Even without their tips, points (a) and (b) fit into the larger end of the range given for the Raddatz Side Notch style. Point (b) shows evidence of resharpening. This could have resulted in the apparent tip toss. It is made from Bayport chert. The cause of breakage on point (a) is not clear. It is made from Liston Creek chert. The rest of the Raddatz points fall well inside the normal range. Point (c) is undamaged except for the erosion of cortex material that is mottled through most of the non-blade edge portions. The blade has been reworked extensively, showing some serration. It is made from heat treated Liston Creek chert. Points (d) and (e) have complete bases which fall within the norm for this style. It is not clear what caused a shoulder and most of the blade to be snapped from (d). It is made from heat treated glacial chert. (e) is missing only the tip half of the blade. What remains shows signs of reworking, indicating the probable cause of breakage. It is made from Liston Creek chert. Both (f) and (g) have just one notch remaining along with half the base and the shoulder. This is enough to place them with some confidence into this category. Both are made from heat treated chert. (f) is Attica but (g) remains undetermined.

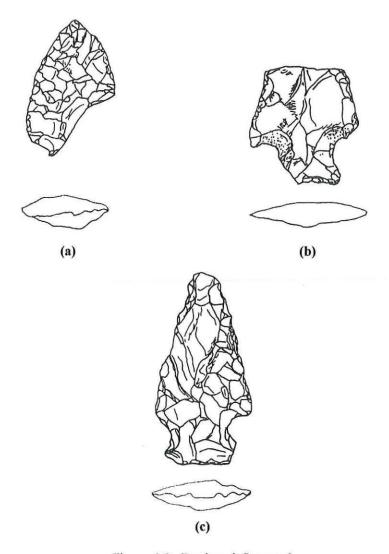


Figure 8.8: Bottleneck Stemmed

Bottleneck Stemmed - Three points (Figure 8.8) fit into the Bottleneck Stemmed style. (a) is missing its base and one shoulder. The shape of the remaining shoulder, notch depth, and precise pressure flaking, place it tentatively within this style. It is made from Liston Creek chert that has been heat treated. (b) is missing the tip half of the blade and one of its ears. What remains of the base and shoulders falls well within the bounds of this style. It is made from a very poor grade of Liston Creek chert that has been heat treated. (c) is missing only the tip of one ear. The blade edges show signs of extensive resharpening and use wear, which explains their straightness. The tip is extremely worn, possibly the result of having been recycled as a scraper or graver. This may be an exhausted knife. It is made from what looks like Laurel chert, but could be Liston Creek.



Figure 8.9: Lamoka

Lamoka - One point (Figure 8.9) is made in the Lamoka style. The undamaged point (a) has the small, excurvate blade and thick, expanding stem with some cortex still evident that are characteristic of this style. It is made from heat treated Liston Creek chert and shows evidence of fairly extensive reworking.

Brewerton - This style accounts for twenty-three of the Mid-Late Archaic points (Figures 8.10-8.13). Within the Brewerton style are a number of different varieties, all of which are represented to some degree.

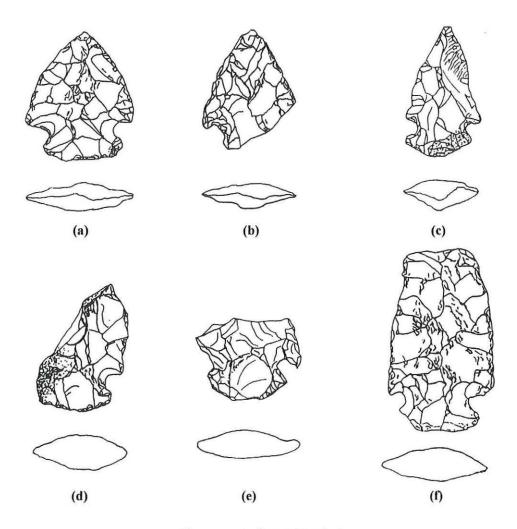


Figure 8.10: Corner Notched

Corner Notched (Figure 8.10) - Point (a) is one of the few Brewerton that are undamaged, and even it shows evidence of reworking. It is made from heat treated Liston Creek chert. (b) is missing the base and one shoulder. The fact that it exhibits many typical production characteristics, and is made of heat treated Liston Creek chert, places it firmly in this style. It also shows evidence of resharpening, a possible cause of damage. (c) is similar enough to be included in this category. It is simply a shaped flake of Liston Creek chert, which could represent any number of corner notched styles. Point (d) is missing the majority of one side. Enough of the base and the other side remain to place it confidently within this Brewerton style. It is made from Liston Creek chert. It also shows signs of reworking, which is the probable cause of damage. (e) is very similar to (d) even down to the cause and results of damage. The only major difference is that (e) is made of a much finer material, some as yet unidentified type of heat treated chert. (f) is a less reworked example of this style. It is missing its tip, otherwise it would likely be the longest of the Brewerton points from 12-Hu-935. It was made from very low grade Liston Creek chert that has been heat treated.

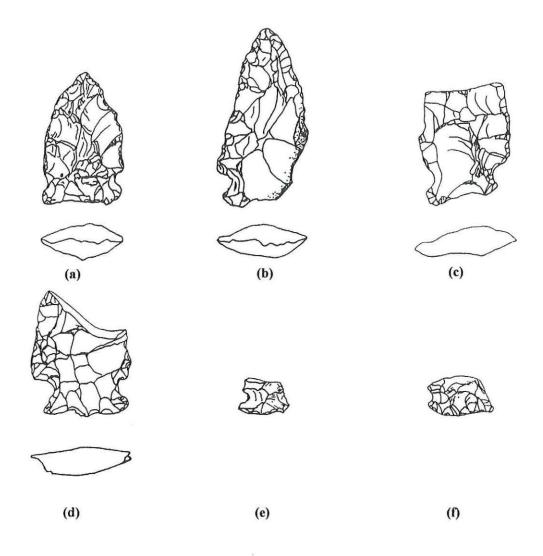


Figure 8.11: Eared Notched

Eared Notched (Figure 8.11) - Another complete point (a) is an excellent example of the Brewerton Eared Notched style. It is made from heat treated Liston Creek chert. (b) would have been complete, but for erosion of cortex material mottled through one side. It has been reworked enough to fit into the upper bounds of this type. It is made from heat treated Liston Creek chert. Even without its tip, it is clear that point (c) is very similar in style to (b). The main difference is that (c) is made of a higher grade of Liston Creek chert that is not heat treated. It appears to have been broken during an attempt to remove the weathered dorsal face. Point (d), also missing the tip, is like (b) and (c) except that the base is straight rather than concave. It is made from Liston Creek chert that may have been heat treated, and was likely damaged during resharpening. (e) is just a single notch with the shoulder and half the base. The small ear and shallow side notch are well within the Brewerton range. It is made from an unidentified chert type. (f) is another notch only fragment that is included here because of the shallow notch and small ear. It is made from high grade Liston Creek chert.

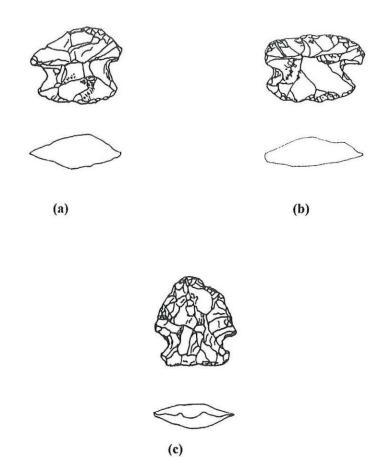


Figure 8.12: Hafted Scraper

Hafted Scraper (Figure 8.12) - These three artifacts have what are clearly Brewerton Corner Notched style bases, but all have been recycled into scrapers. (a) is made of Attica chert that has been heat treated. (b) and (c) are made from Liston Creek chert, and (b) is heat treated. (c) is not what one would typically expect a scraper to look like. However, its unusual wear pattern suggests that its last use prior to deposition was not as a projectile.

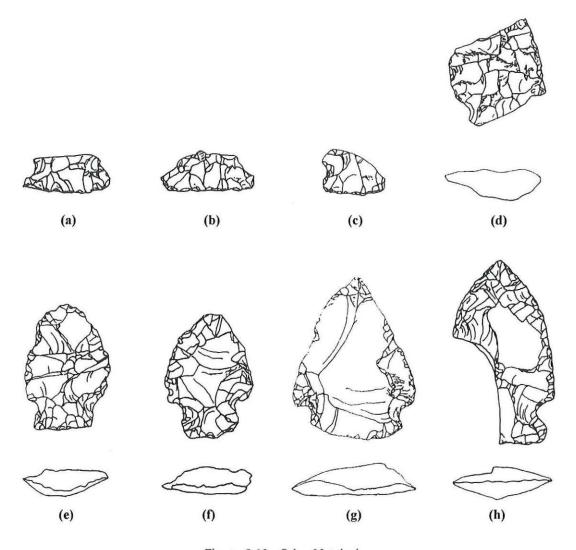


Figure 8.13: Other Notched

Other Notched (Figure 8.13) - The three bases (a), (b), and (c) all resemble other Brewerton bases from 12-Hu-935. For this analysis they are included as such, even though they can not unambiguously be distinguished from other notched varieties. All of the bases are made from Liston Creek chert. (a) and (c) are heat treated. The one intact shoulder on (d) and the overall appearance tentatively place this within the Brewerton style. The missing base makes classification difficult. It is made from Liston Creek chert that has been heat treated. The extremely crude point (e), is included as Brewerton mainly because the base is similar to the Eared Notched style. It is very poorly reworked and is made from an unidentified chert. (f) exhibits many of the same characteristics as (e) except that it more resembles the corner notched variety. It is made from a glacial cobble chert. It may have been heat treated. Very minimal retouch was used to shape (g), which is virtually nothing more than a notched flake. It is included with the Brewerton points mainly because it is corner notched, and it is clearly not Palmer. It is made from Liston Creek chert. (h) is one of the most aesthetically pleasing points from 12-Hu-935, even with an entire corner broken away. What remains is a good example of a particularly well made Brewerton Side Notched point. This point appears to have been broken during a resharpening attempt. It is made from a very high grade Liston Creek chert that may have been heat altered after it was broken.

Woodland

Late Archaic / Early Woodland Transition: Nine of the points (Figures 8.14 - 8.15) from 12-Hu-935 have been placed into this time period. All of them are made in a Saratoga style.

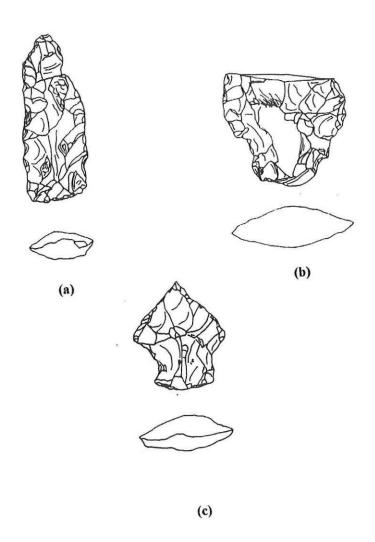


Figure 8.14: Wyandotte Chert Points

Wyandotte chert (Figure 8.14) - Of the four points from 12-Hu-935 made of Wyandotte chert, three fit within the possible range of the Saratoga style. (a) is a straight stemmed, square based point that could very well be an extensively resharpened example of a Saratoga Parallel Stemmed. The impact fracture visible on the top suggests that the apparent fire alteration occurred after the point was discarded. (b) seems to be an unfinished version of a Parallel Stemmed point that was snapped during manufacture. (c) has an expanding stem that was reworked from the sides only, leaving the flat base characteristic of this type. The blade has been reworked to exhaustion.

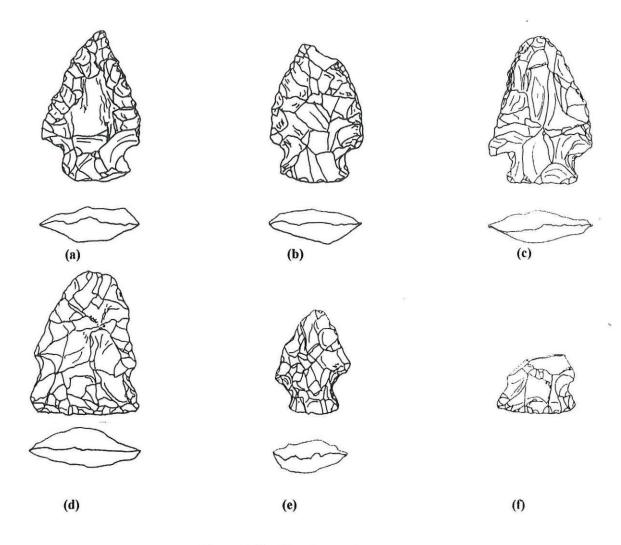


Figure 8.15: Other Stemmed

Other Stemmed (Figure 8.15) - Point (a) is a crude point, with much of the ventral face of the flake blank still intact. It does exhibit the flattened base common to this style. The chert type is unidentified. (b) does not have the flattened base, but it is beveled. The stem is somewhat short for this type. It is made from Attica chert. The damage to the tip appears to be recent. (c) has a wide, expanding stem that is beveled on much of the base. The barbed shoulder is not outside the accepted range of variation for this point style. The blade is resharpened leaving the barbed edge steeply beveled. The tip is either reworked or has some slight impact damage. It is made from an unidentified, heat treated chert. (d) does not have either a flat or beveled base, but its very wide, expanding stem fits well within this style. The blade has been reworked extensively and its edges display much use wear. The tip has been reworked into a scraper. It may have been a hafted knife. It is made from heat treated Liston Creek chert. (e) has been reworked to exhaustion. Its base exhibits either a portion of the original flake surface, or it was reworked from a point that had snapped. The expanding stem is within the range of this style. It is made from Liston Creek chert that has been heat treated. (f) is a base only, and does not exhibit a flattened or beveled edge. It is include only because it is wide and expanding. It is made from heat treated Liston Creek chert. The cause of damage is uncertain.

Middle Woodland: No evidence of a middle woodland occupation was recovered at 12-Hu-935 during mitigation.

Late Woodland: All six arrow points (Figure 8.16) recovered from 12-Hu-935 fit within the Madison style.

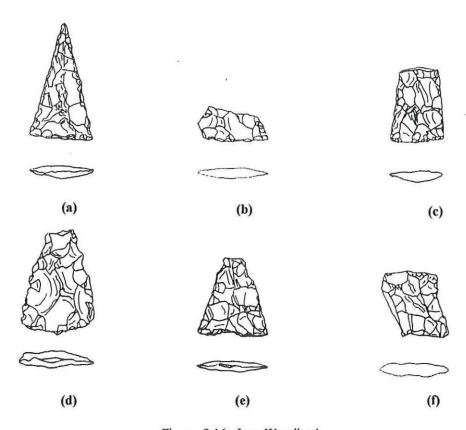


Figure 8.16: Late Woodland

Hamilton - Point (a) is the only complete Madison triangulate recovered from 12-Hu-935. Its long slender blade and acutely pointed basal corners put it well inside the range for the Hamilton Incurvate style. It is made from an as yet unidentified chert. (b) is missing most of the blade and one of the basal corners. Its thin cross section and remaining sharp corner give this point a Hamilton appearance. It is made from Liston Creek chert. (c) does not have the acutely pointed basal corners. Its slender design and thin cross section are indicative of the Hamilton style. It is made from Liston Creek chert. Both (b) and (c) were likely broken during manufacture. Point (d) is missing just the tip. Only one edge appears to have been finished. It seems to be a Hamilton point that was broken as it was being finished. It is made from Liston Creek chert.

Levanna - Two of the triangular arrow points (e) and (f) appear to exhibit the concave base indicative of the Levanna style. (e) has what may be impact damage on its tip. The basal concavity may have resulted during the same episode, or by other unintentional causes. In other respects though, it could also fit into a Hamilton style. It is made from an unidentified chert. (f) is missing the tip and all of one basal corner. This makes it difficult to be sure if the base is in fact concave, or if the point was broken during the final stages of production. It is made from Liston Creek chert.

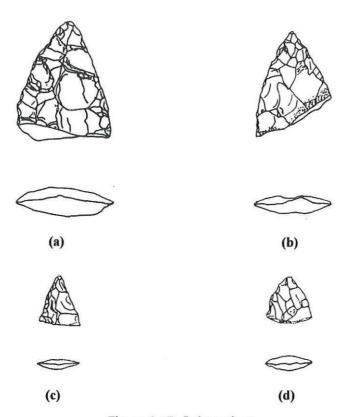


Figure 8.17: Indeterminate

Indeterminate: Four point tips (Figure 8.17) could not be assigned to any particular time period. (a) is made from Attica chert. Based on its thickness, it was most likely a Mid-Late Archaic point. (b) is made from an undetermined chert type. It snapped off along the line of a cortex, banded inclusion. (c) is made from Liston Creek chert. (b) and (c) appear to be from Early Archaic points, though (c) is small enough to have come from a Late Woodland type. (d) is made from an undetermined, but very high quality chert. It snapped off along the line of a crystalline inclusion. It could have come from any time period, though the projected blade width excludes anything more recent than the beginning of the Late Woodland.

8.2. Discussion

The variety of point styles in 12-Hu-935 lithic assemblage can be used to propose a relative occupational chronology. This assemblage indicates occupations during five major cultural historical periods. The actual length of each of these periods and the number of distinct cultural groups exploiting the region during them is subject to debate. Recognizing individual occupational episodes is further complicated by the difficulty of placing the entire assemblage into a chronological framework. During many periods, especially the Mid-Late Archaic, one style blends into both its predecessors and its successors. On occasion, it is also the case that the available sources offer conflicting dates for the various styles. The occupational intensity of 12-Hu-935 during each of these periods was also likely to have been highly variable. There were almost certainly multiple occupational episodes within some of these time spans, such as during the Middle to Late Archaic, while during others, such as the Transitional Woodland, likely only one. Furthermore, the nature of these separate occupations was also probably variable. The two separate occupational episodes proposed for the Paleoindian period indicate only sporadic use of the site. In contrast the number and variety of lithic artifacts arguably deposited during the Middle to Late Archaic are suggestive of a somewhat more intensive use of space.

It was not possible to associate absolute dates with any of the points recovered from 12-Hu-935, but the styles make it possible to propose a relative occupational chronology (Table 8.4). As will be seen, the beginning and ending points for each tradition are subject to debate. This listing represents the most likely sequence, based on the data available from this site and information reported for other research done in this region. The actual dates used are a compromise between those given in Justice (1987) and DeRegnaucourt (1991), as well as the stylistic sequence apparent in the points found at 12-Hu-935.

Period	Tradition	Time Span (years B.P.)	# pts.	
	Plainveiw	10500 - 9500	1	
Plano	Agate Basin	10500 - 9500	1	
Early	Kirk/Palmer	9500 - 8700	6	
Archaic	Bifurcated	8700 - 7800	6 5	
Middle	Raddatz	7800 - 5700	7	
to	Bottleneck	5700 - 5000	3	
Late	Lamoka	5000 - 4500	1	
Archaic	Brewerton	4500 - 3700	23	
Transitional	Saratoga	3700 - 3000	9	
Late Woodland	Madison/Hamilton	1500 - 1000	6	

Table 8.1: Relative Occupational Chronology at 12-Hu-935

Paleoindian

The two Plano points from 12-Hu-935 are indicative of two separate Paleoindian occupations. It is possible, but not probable, that a single band produced both types of points. The Agate Basin point (8.1a) was formed from Attica Chert and suggests that the population that deposited the point had a territorial range that included much of the Wabash Valley. The nearest outcrop of this chert is about 125 km down river from 12-Hu-935. It is widely accepted that Plano peoples traveled extensively following seasonal migrations of the large game animals that were their mainstay. The Plainview point (8.1b), formed of Liston Creek Chert, may have been made at this very location. The site is close to some of the many outcrops of Liston Creek chert found throughout the Upper Wabash region. Both points are lanceolate

forms, reflecting an emphasis on big game hunting. This reinforces the theory of nomadic bands following herds of bison or caribou.

It is difficult to give a time when the Plano peoples came to 12-Hu-935, since there are no sound dates offered for any of the finds in the Midwest. The dates used are from the Great Plains. The period represented is roughly equivalent for both points, ca. 10,000 B.P. according to Justice (1987). DeRegnaucourt (1991) places the Plainview point somewhat earlier, ca. 11,000 B.P., but includes it in the catch all category of Plano Lanceolate.

It is likely that throughout the Paleo period, one or more bands of nomadic hunters took advantage of the migration corridors which followed the Wabash and its tributaries. Although no fluted points were found in the immediate vicinity of 12-Hu-935, earlier Paleo bands did not neglect the resources that drew so many of the cultures that followed. There have been 140 fluted points reported in 19 counties of central and northern Indiana along the Wabash River (Cochran, Richey and Maust, 1990).

Early Archaic

The occupational patterns established during the Paleoindian period of wide ranging generalized hunting and gathering bands seems to have continued into the Early Archaic (Mohow 1987). Variation in the raw materials of points from this period is suggestive of numerous, short term occupational episodes. Of the 11 points from this period only 4 were formed of Liston Creek chert. Three were formed from Attica, 2 from Flint Ridge, one from Laurel, and 1 from Wyandotte chert.

There is evidence for at least four separate occupations at 12-Hu-935, spanning the entire Early Archaic period. These are represented by four distinct point styles - Palmer Corner Notched, Kirk Stemmed, MacCorkle Stemmed, and Lake Erie Bifurcated.

The Palmer points (Figure 8.2) are included in the Kirk tradition and placed in the time period from 9500 to 8900 B.P. by both Justice (1987) and DeRegnaucourt (1991). These are likely precursors to the Kirk Stemmed point (Figure 8.4), which the same sources place in the period from 8900 to 8000 B.P. Palmer Corner Notched points are a smaller, more delicate style than the Plano Lanceolates. Therefore, they would be better suited for atlatl darts or a light javelin. These then, show an apparent subsistence shift to somewhat lighter game such as whitetail deer.

Here it becomes unclear whether there were two cultural groups sharing this region, or if one supplanted the other. Both Justice and DeRegnaucourt place the MacCorkle (Figure 8.5) style around 9000 to 8500 B.P. which overlaps the times of both Kirk styles. What seems likely is that there was a transition near the midpoint of the time where the MacCorkle and the later Kirk traditions overlap (ca. 8700 B.P.). This may explain why there are so few of either type. The replacement scenario is also supported by the four bifurcated points (Figure 8.6) recovered from the site. Both sources place these in the LeCroy group, but Justice's Lake Erie sub-class better describes them. In both cases they indicate an occupation between 8500 and 7800 B.P., which overlaps the ending dates for the Kirk style.

The two larger stemmed points seem to indicate a return to the heavier points of the Plano period. This could mean that big game hunting continued to play a role in Early Archaic times. Another possibility is that they were used as knives. The very light and delicate Lake Erie prove that the Kirk and Bifurcated traditions each had both large and small points. Both groups probably hunted smaller game the majority of the time, supplementing that with larger animals when available. This is an alternate explanation for the relative frequencies of the different sizes of points. It can support either the replacement or coexistence theory equally.

The argument is not strong for either interpretation, replacement or coexistence. The most probable scenario is that people producing the Kirk style point arrived first sometime after 9000 B.P. with the corner notched style. Sometime before 8700 B.P., between this occupation and the next, they changed

to a stemmed style which involved only minor changes in technique. This could represent an eastern influence, as the stemmed point is made of Flint Ridge chert, found 300 km to the east. Whether this technological shift resulted from cultural or subsistence factors is unclear. However, both interpretations suggest a continuing pattern of occupation at this location. It is possible that the site continued to be used by the makers of bifurcated points until as late as 7800 B.P.

Middle to Late Archaic

The next major occupational period ranges between the Middle and Late Archaic. Another shift in lithic technology seems to have occurred during this period. Again it is not clear if this resulted from a shift in subsistence strategy by related populations or sequential occupation by distinct cultural groups. This technological shift is seen in a higher percentage of lower quality, but locally abundant cherts used to produce bulkier style dart points. Furthermore, more effort was expended to improve the consistency of the local cherts with heat treating during this period than during any other. 63.6% of the Mid to Late Archaic points were heat treated and fully 72.7% of these were formed from Liston Creek chert. It is plausible that all of these points were formed on or near 12-Hu-935. While the expected usage of the later points is not significantly different from the earlier types, procurement and reduction strategies seem to have altered somewhat and suggest a more intensive occupation of 12-Hu-935.

This apparent shift may have included longer term occupational episodes and a concomitant greater diversity of activities. Fully 51.5% of the entire assemblage of diagnostic points were from this period. Also during this period the greatest number of recycled diagnostic lithics were deposited. Three heat treated Brewerton corner notched points, two of Liston Creek chert and one of Attica chert, had been recycled into scrapers. These were possibly heat treated and probably used at 12-Hu-935. It is probable too that a high percentage of the non-diagnostic lithics, including spent cores, utilized bifaces, scrapers, and heat treated Liston Creek flakes were deposited during this period.

The Middle to Late Archaic period shows by far the most intense usage of 12-Hu-935. It is also the most problematic for chronometric analysis. Many different styles are represented, and there are no clear boundaries between them. Justice dates the Raddatz style around 8000 to 5000 B.P. which could make it the next style temporally. DeRegnaucourt's range of 8000 to 6000 B.P. for his Big Sandy style, in which he includes the Raddatz, makes this placement more solid. This would be well within the later part of the Middle Archaic. The problem occurs when one looks at some of the smaller Raddatz points, (Figure 8.7e) in particular. These could also be interpreted as examples of the Brewerton and Matanzas Side Notched styles which have been dated to much later periods. If it is assumed that there was a continuing pattern of reoccupation at this site, than it would follow that one style would eventually be replaced by another. It may be the case here that the Raddatz style gradually replaced the Brewerton style.

Temporally, the Bottleneck Stemmed style is thought to follow the Raddatz, 5700 to 5000 B.P. according to Justice. Again DeRegnaucourt includes this style within a larger grouping -- his Table Rock Stemmed which is dated between 7200 and 5500 B.P. contradicting Justice. Both sources cite Tom Cook (1976) as the source of their dates. Arguably this is a transitional type, somewhere between the Raddatz and the Brewerton styles. This allows room for either set of dates. Evidence for this interpretation can be seen in the wide U shaped side notches on (Figures 8.8b and c) which are very similar to the Raddatz style. Then the wide, excurvate blade of (Figures 8.8a) can be seen as very Brewerton.

The Lamoka style follows on the time line. DeRegnaucourt places this style contemporaneous to the Brewerton Tradition. Justice has this style beginning at 5500 B.P., roughly 500 years prior to the Brewerton and then overlapping it. It is very possible in this case, that these are simply heavily reworked versions of the Brewerton Corner Notched, (Figure 8.9a) especially fits this theory. The limited numbers of both Lamoka and Bottleneck like points supports the claim that these are transitional forms at this site.

More than two thirds of the Mid-Late Archaic points and fully one-third of the identifiable points from 12-Hu-935 have been placed within the Brewerton category. Although some were included only

tentatively, it is certain that the majority are in fact made in this style. If DeRegnaucourt's definition of the Brewerton style is used alone, even more points would be included. The Brewerton style appears towards the end of the Late Archaic period. Both Justice and DeRegnaucourt have it beginning around 5000 B.P. and ending around 3700 B.P.

There were undoubtedly multiple separate occupations associated with this period. This is attested to by the occurrence of such a wide variety of styles within the overall Brewerton grouping. These range from the classic corner notching of (Figure 8.10a) to the near perfect example of the eared style seen in (Figure 8.11a). Sizes range from the small hafted scraper (Figure 8.12c) up to the damaged, but otherwise nearly pristine (Figure 8.10f).

When the Mid-Late Archaic portion of the assemblage is considered as a group it seems to reflect a pattern of cultural continuity rather than new traditions supplanting their predecessors. Although a great number of styles are represented, the manner in which they blend into one another indicates gradual change. This pattern apparently continues into the Woodland period.

Late Archaic/Early Woodland Transition

The only distinct point style from the Early Woodland period recovered from 12-Hu-935 is the Saratoga. Yet even this style can be seen as a continuation of the Brewerton Corner Notched. Justice places the beginnings of the Saratoga style sometime after 4000 B.P. On the other hand, if DeRegnaucourt's Late Archaic Stemmed tradition, in which he includes the Saratoga, is considered a more accurate type for such a northerly location, then the 5500 to 3000 B.P. date would apply better. This time span fits the rest of the assemblage better. Points (Figure 8.13a-d) can be seen as a minor variation of the Brewerton Corner Notched style, while (Figure 8.13f) appears to be a more transitional form, and (Figure 8.13e) is a classic example of a well used Saratoga Expanding Stem knife/scraper.

The three Wyandotte points (Figure 8.14a-c) clearly show the southern influence expected for this style, which Justice places in a region well south of 12-Hu-935. Wyandotte chert is only found in Harrison County, Indiana, more than 300 km south of this site. These also help to support the argument for continued occupation of this location into the Early Woodland. Curtis Tomak (personal communication) has stated that higher quality, exotic cherts are diagnostic of Woodland traditions, and possibly indicate increased levels of long distance trade at this time.

After this period there seems to be a significant gap in the occupations of 12-Hu-935. No points were recovered that could be dated to any time within or even near the Middle Woodland. This is consistent with the findings of ARMS, who report only two percent of the points recovered in their surveys of the Upper Wabash and its major tributaries were Middle Woodland. Non-transitional Early Woodland points comprise less than five percent. Late Woodland points make up a quarter of those recovered, but only six of them could possibly be considered early period types. That equates to just five percent of the total sample of diagnostic points recovered during that survey (Anuszyk and Cochran 1984).

Late Woodland

The latest point style recovered from 12-Hu-935 is a complete departure from the continuum seen from earlier times. The six Madison Triangular points are arrowheads rather than spear, dart, or atlatl points and knives. They represent a clear departure from the technologies required to produce and use any of the previous types. There are a range of styles represented, from the less refined (Figure 8.16d), through the almost Levanna (Figure 8.16f), to the Hamilton (Figure 8.16a). It is possible that all these points were produced by a single cultural group, possibly even during a single extended occupation. Although the Woodland Hamilton culture is set in a more southerly range by Justice, it clearly had some influence on the points found at this site. That would indicate an occupation sometime between 1500 and 1000 B.P. This is fairly early in the development of bow and arrow technology in this region, but would correspond fairly well with the ceramic types that were also recovered from this site.

8.3. Summary

When the chronology derived from 12-Hu-935 is compared to the chronology from the ARMS report on the survey of the Upper Wabash Valley (Table 8.2), it becomes apparent that 12-Hu-935 is a location that has attracted the attention of most, if not all cultures that have exploited the region and made use of the locally abundant chert sources. Only three of ARMS occupational periods were not represented in the assemblage from this site.

	Wabash Valley*		12-Hu-935 ⁴	
Period	% pts.	# pts.	# pts.	% pts
Early Paleoindian	1.7	2	0	0
Plano	1.7	2	3	4.2
Early Archaic	12.0	14	11	15.3
Middle-Late Archaic	33.3	39	38	52.8
Transitional	4.3	5	9	12.5
Early Woodland	6.0	7	0	0
Middle Woodland	1.7	2	0	0
Late Woodland	26.5	31	7	9.7
Unidentified	12.8	15	4	5.5
Total	100	117	72	100

Table 8.2: Wabash Valley and 12-Hu-935 Point Chronology

During the Paleoindian period occupation of the Wabash Valley was sporadic. In the Wabash Valley survey only four points from this period were recovered. The two Plano points in the 12-Hu-935 assemblage represent the first known occupations there. The two formally distinct points were likely deposited during two separate short term occupational episodes. These were nomadic big-game hunters who perhaps stopped at 12-Hu-935 to provision their tool kits or process an ungulate while following seasonal game migrations through the Wabash Valley.

The evident low intensity occupational patterns during the Paleoindian seem to have changed radically during the Early Archaic. There was very likely a cultural break between the Plano and Early Archaic. Whether this was new people replacing the older tradition, or a change in life styles is unimportant to the current analysis. The point styles likely reflect a subsistence shift, but not necessarily a concomitant shift in settlement patterns. The smaller and more delicate dart points indicate a focus on lighter game. While the use of high quality exotic cherts, such as Flint Ridge and Wyandotte, as well as various lower quality regional cherts, such as Liston Creek, Laurel, and Attica suggests a high degree of mobility. The two Early Archaic traditions represented at 12-Hu-935 are Kirk/Palmer and Bifurcated. This indicates that there were a minimum of two occupational episodes during this period. The quantity of these points could result from one of two things. It could mean either more separate occupations, or it could mean that the site was more intensively exploited during each occupational episode.

Sometime between the late Early Archaic and early Middle Archaic periods the range of activities conducted at 12-Hu-935 seems to have increased. For the most part, the bulkier dart points produced at this time were made of marginal local cherts that have been heat treated to improve their consistency. This may indicate a less nomadic, though not necessarily sedentary lifestyle.

The Middle to Late Archaic period saw the most intensive use of the site. The four Middle to Late Archaic traditions are separated on the timeline. However, it is not entirely certain that all of them are distinct traditions. The manner in which one style blends into those before and after makes it difficult to place some points into a particular group. Even some of the transitional Archaic/Woodland Saratoga points

^{*}Survey Conducted by ARMS (Anuszyk and Cochran 1984)

⁴ 12-Hu-935 type totals here include the Paleoindian mimiature, Matanzas, Madison, Riverton, and the 2 Brewertons recovered by ARMS during 1989 and 1991.

are not easily separated from the Brewerton tradition. What this seems to indicate is a long history of a single cultural group repeatedly returning to this location over the course of four millennia. There is evidence that this location was used for heat treating chert during this period. The quantity of fire cracked rocks and heat treated lithic debris support this claim. The exact number of distinct occupational episodes can not be determined from the evidence available.

At least one occupational episode occurred during the Later Archaic-Early Woodland transitional period. Evidence of this are the nine Saratoga points. Three of the Saratoga points were made of Wyandotte chert and may represent a single occupational episode. The remaining Saratoga points, made of Liston Creek and Attica cherts could also have been deposited during the same episode.

During the Middle Woodland times a lower population density seems to be evident throughout the Upper Wabash region. Sometime during the Late Woodland, with the adoption of bow and arrow technologies, local cherts were once again utilized. All of the Madison points were very likely from a single extended episode.

9. Ceramics

A total of 61 prehistoric ceramic sherds were recovered from 12-Hu-935. All of these were undecorated body sherds. No rim sherds were recovered. For the most part the ceramic assemblage from 12-Hu-935 was homogeneous with respect to temper, paste, color, and surface treatment. These characteristics bear a strong resemblance to the non-decorated sherds described by Cochran in "Ceramics from 12-We-240 and Ceramic Sites in the Upper Wabash Drainage (1985)," and some resemblance to the grit tempered non-sandy paste-ware from the all seasons site (Cochran and James 1986:2). This suggests a likely Late Woodland affiliation. The diagnostic lithic assemblage recovered from 12-Hu-935 also suggests a possible Late Woodland association for the ceramic assemblage. The Great Lakes association for the pottery described by Cochran and James (1986) may not apply for the pottery recovered from 12-Hu-935. The high occurrence of smoothed over cordmarking, as opposed to cord roughening, distinguishes the ceramics from 12-Hu-935 from the Great Lakes region utility wares described by Stothers and Pratt (1981).

However, for two reasons the diagnosis of the pottery as Late Woodland must remain tentative. First, no sherds were recovered from a datable context. Although ARMS recovery of a radio carbon date of 460 AD +/- 60 from their Feature 3 fits well with both the ceramic assemblage and diagnostic lithic assemblage, Feature 3 lacked ceramics. Second, the sherds were examined by Bobby McCullough at the Glenn A Black Laboratory, who felt the sherds were generally too thick and poorly made to be securely classified as Late Woodland, and yet not thick enough to remotely resemble Early Woodland "thick" wares.

All sherds were grit tempered, with a sandy paste. One sherd was tempered with both grit and grog. Nearly all sherds exhibited a dark core, indicating a low firing temperature. Surface color varied from 5YR 6/6 and 7.5YR 6/4, to 10YR 5/3. Most sherds ranged from orange to brown. Spalling was fairly common; 12 of the 61 sherds were so badly spalled that thickness was indeterminate. Of the 49 remaining sherds thickness ranged from 4 to 11 mm, averaging 6.2 mm with a standard deviation of 1.7 mm. 59.2% of all sherds were between 5 and 6 mm. Surface treatment on the majority of sherds was smoothed over

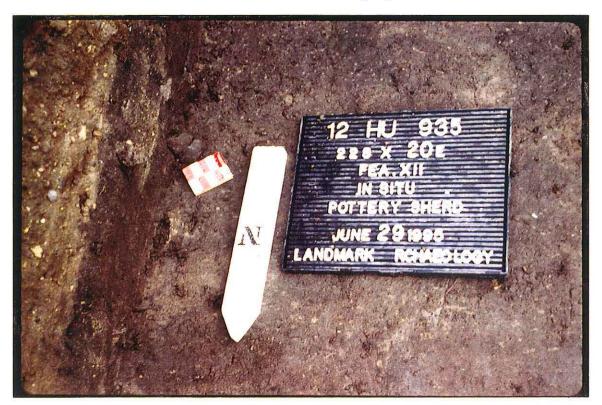


Figure 9.1: Feature 12, in-situ sherd and partial West Wall, 22S/20E

cordmarked. Twenty-one out of the 61 recovered sherds however, did not have enough surface to confidently assess treatment.

Over two thirds, 72%, of the ceramic assemblage was recovered from one unit -22S/6W, in association with Features 13 and 14. Surface treatment and thickness was determined for 38 out of the 44 sherds recovered from this unit. Sherds from this unit were of uniform temper, surface treatment, and color. Thickness ranged from 4 to 8 mm, with an average of 5.74 mm and a standard deviation of .99. 7.9% were smaller than 5 mm, 85% were between 5 and 7 mm, and 5.3% were larger than 7 mm. The uniformity of these sherds suggest the possibility that they came from a single vessel. The smaller sherds probably came from closer to the neck while the thicker sherds probably came from closer to the base. The vertical distribution of sherds recovered form 22S/6W is depicted in table 9.6. 17 of the remaining 19 sherds came from 22S/20-22E in association with Feature 12. The remaining 2 sherds came from within the tree line north of U.S. 24.

Table 9.1: Vertical Distribution of Ceramics in 22S/6W

Context	Number	Percentage
A/F-10	37	81.9%
F-14	2	4.6%
B1	5	11.2%
B2	1	2.3%
Total	44	100.00%

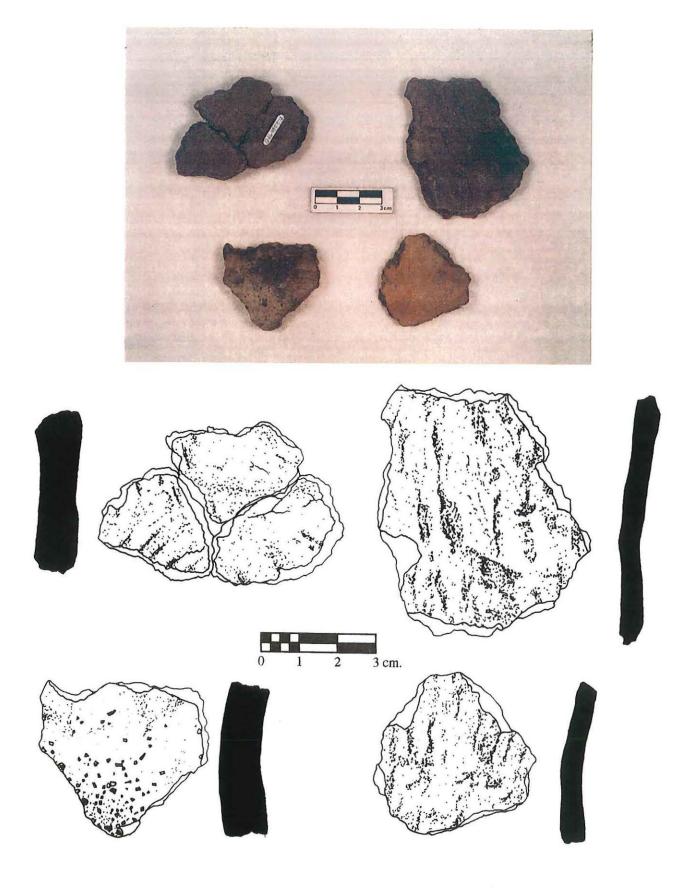


Figure 9.2: Ceramics

10. Features

The most important factor determining feature expression was their context of preservation. Three distinct preservation contexts were encountered at 12-Hu-935. These were 1) beneath the plowzone, 2) within the tree line - adjacent to the north side of U.S. 24, and 3) beneath gravel canal fill. Each context was impacted by unique ranges of formation processes and resulted in definable feature types. Each preservation context will be described below, followed by an examination of the full range of feature variability in each context.

10.1. Below the Plowzone

Features encountered beneath the plowzone can be placed into 3 sub-categories; 1) deep amorphous basins containing dark soil, lithic artifacts, and carbon flecks, 2) ephemeral amorphous soil stains, containing dark soil, carbon flecks, and lithic artifacts, and 3) lithic concentration containing large numbers of cores, bifaces, and lithic debitage. The formation histories of the first two feature types are ambiguous, and seem to result from both natural and cultural formation processes. Organic leaching, root activity, and faunalturbation all seemed to have influenced the character of features recovered from within this context. Plan maps from 10 cm levels often show multiple discrete areas of mottled or darkened soil that undoubtedly resulted from these natural processes. The plan map from level one of 0N/34E (Figure 10.1) is a good example, and shows both sorts of feature types. The formation of the third type of feature found beneath the plowzone, lithic concentrations, were undoubtedly influenced by some of the same processes as the first two types. However, the fact of their existence in spite of plowing indicates a robust pattern that likely resulted from past activities that typically result in the deposition of large numbers of lithic artifacts.

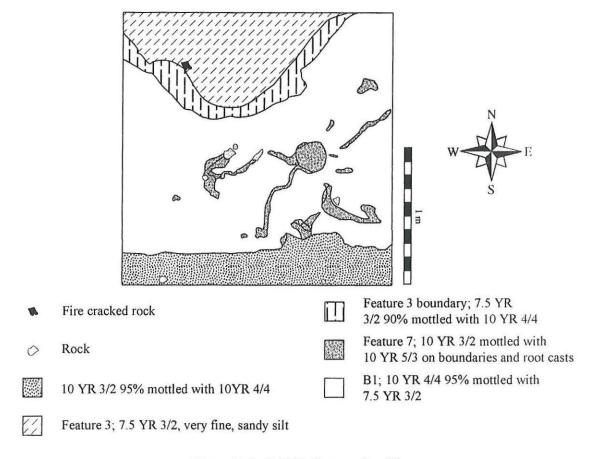


Figure 10.1: 0N/34E, Features 3 and 7

10.2. Units Within the Tree Line

Two types of cultural deposits were encountered within this preservation context, FCR concentration with lithic artifacts, and a core concentration from Profile Trench 5E. Units within the tree line with and without features contained the only faunal remains and prehistoric ceramics recovered on the north side of U.S. 24. The only significant depositonal source identified on the north side of the highway was in this context. This was modern deposition of debris that originated during the construction and use of the highway.

10.3. Units Beneath Gravel Fill

Canal construction resulted in the most significant deposition encountered during mitigation. In units on the south side of the highway this canal related overburden averaged 41.6 cm thick and varied from 34 to 62 cm. This overburden was made up of multiple fill episodes. The average number of fill episodes encountered per unit in this portion of the site was 5.33 and varied from 4 to 7. Fill episodes included various admixtures of displaced midden, A, B1 and B2 soils, and bituminous debris. Fill episodes were placed into Canal Fill Types 1 through 4, and Inter-Urban Fill Types 1-3. Fill types were defined by primary constituents: gravel, sand, silt, and bituminous debris. It is clear that the lowest fill strata, also composed of multiple fill episodes, was deposited soon after the Miami abandoned 12-Hu-935, when the canal was constructed. A number of events post dating canal construction have also resulted in fill deposition. Construction of the Inter-Urban rail line resulted in the redeposition of the canal berm. The construction and use of the highway and gravel driveway also resulted in some deposition to this context.

Features encountered within this preservation context can be subdivided into four different subtypes, Miami midden (Feature 10), displaced Miami midden (Feature 11), Woodland pit features (Features 12, 13, and 14), post mold alignment (postmolds 1-5), rail-road tie depressions (Feature 8), and lastly, ambiguous linear stains (Feature 9).

10.4. Feature Catalog

Feature 1

Feature Type: FCR concentration

Dimensions: Feature 1 was encountered throughout 3 arbitrary ten centimeter excavation levels in a pair of

adjacent units.

Location: 4S/66E - 4S/64E, within the tree line on the north side of U.S. 24

Context: Feature 1 was encountered in the A soil horizon 10 cm above the conformation with the B1. No clear stratigraphy separated Feature 1 from this horizon. Feature distinction was based on the presence of the FCR concentration itself. The entire feature was contained within three arbitrary 10 cm excavation levels. The A horizon above Feature 1 contained road debris, recent historic garbage, and lithic artifacts, evidencing the vertical migration of artifacts.

Contents: Over 100 pieces of FCR, 516 Pieces of Debitage, 11 Cores, and 4 Bifaces.

Formation: The density of FCR and heat treated flakes of Liston creek chert suggest that Feature 1 likely resulted from one or more episodes of heat treating local Liston Creek chert. It is plausible that this event occurred some time during the Mid-Late Archaic period. This interpretation is based on the fact that 1) it was during the Mid-Late Archaic period that the most intensive use of 12-Hu-935 occurred, and 2) over half of the diagnostic projectile points formed of Liston Creek chert were heat treated.

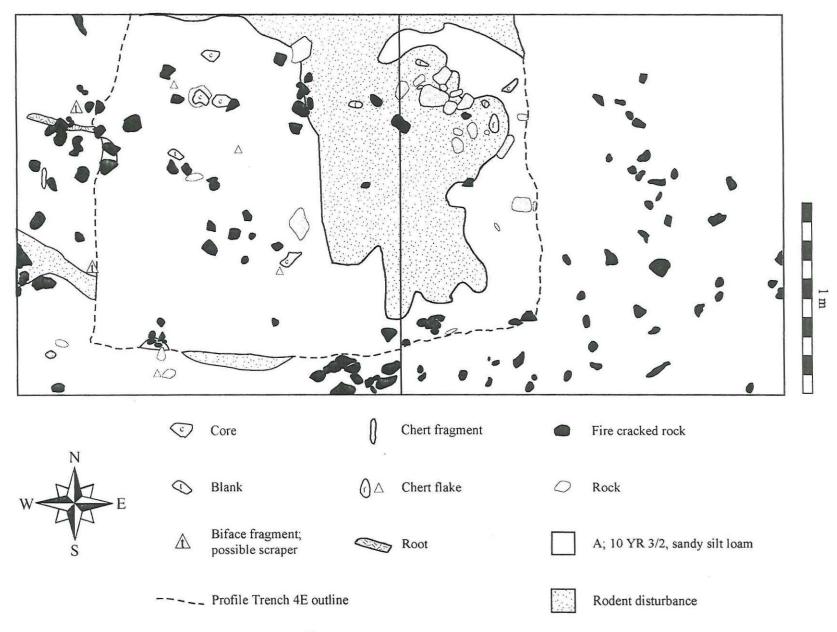


Figure 10.2: 4S/64-66E, Feature 1

Feature 2

Feature Type: Nearly circular, shallow, soil discoloration with lithic artifacts and carbon flecks

Dimensions: Diameter = 33 cm, Maximum depth = 15 cm

Location: 16N/6-8E

Context: Subplowzone, Lithic Scatter A

Contents: Dark 10YR 2/1 soil, carbon flecks, debitage, possible FCR.

Formation: Feature 2 was identified at the interface of the plowzone and B1 as a small, nearly circular, soil discoloration with a few associated flakes and carbon flecks. The vertical distribution of artifacts in Feature 2 was unique with respect to other similar stains and features encountered beneath the plowzone.

Throughout the entire feature debitage was distributed evenly (Table 7.1). In the west ½ of Feature 2, four flakes were visible at the surface while one flake was visible at the base. The association between artifacts and discolored soil, however, remains somewhat

suspect. Feature 2 was located in an area of the site with a low scatter density, and some distance from any of the main occupation areas. It is therefore suspected that the co-occurrence of darkened soil and a handful of lithic flakes is fortuitous and holds no interpretive potential.

Table 10.1: 16N/6E, Vertical Distribution Debitage

Level	Context	Number	Percentage
1	B1	39	55.70%
2	B1/B2	31	44.30%
Total		70	100.00%

Feature 3

Feature Type: Amorphous basin

Dimensions: Diameter = 2m, Depth = 1m

Location: 0N/34E

Contents: 1 chert axe, 9 bifaces, 7 cores, 1 hammer stone, 1 unidentified heat treated Liston Creek

projectile point.

Context: Feature 3 was encountered beneath the plowzone.

Formation: There are two possible origins of Feature 3. Excavation unit 0N/34E conscribed the southern ½ of Feature 3, a deep amorphous basin which contained a moderate concentration of lithic debris. Feature 3 was located less than 1 meter from the southern extent of plowing in the current agricultural field, within a 6 meter wide strip, adjacent to the tree line along U.S. 24, where the majority of the sub-plowzone stains and features occurred north of the highway.

At the interface Feature 3 did not differ in any significant way from any of the stains and features encountered within this strip. The soil was darker than the surrounding interface B1 and included carbon fleks, lithic debris, and rocks. The vertical distributions of artifacts within Feature 3 itself and within 0N/34E were similar (Tables 10.2 and 10.3). In both contexts the majority of lithics were recovered from the first ten centimeter level into the sub-plowzone B1. Feature 3, however, contained nearly five times as many pieces of debitage. The formation history of Feature 3 is ambiguous. Both natural and cultural processes are implicated. Although recorded as a "basin" this term does not fully evoke its undulating natural stair-step contours. An ant's nest was encountered within Feature 3, which in profile appears as a discrete area of mottling. There are two possible origins for the shape. First, it could be the base of or stain from a cultural pit feature. In this scenario debitage and carbon would have down migrated from a deflated and plowed through cultural feature. Feature 3 could also be the result of a tree well filling up with washed in cultural material and carbon. The latter scenario may account better for the "organic" shape of the feature. However, the density of lithic materials may be better accounted for by the former.

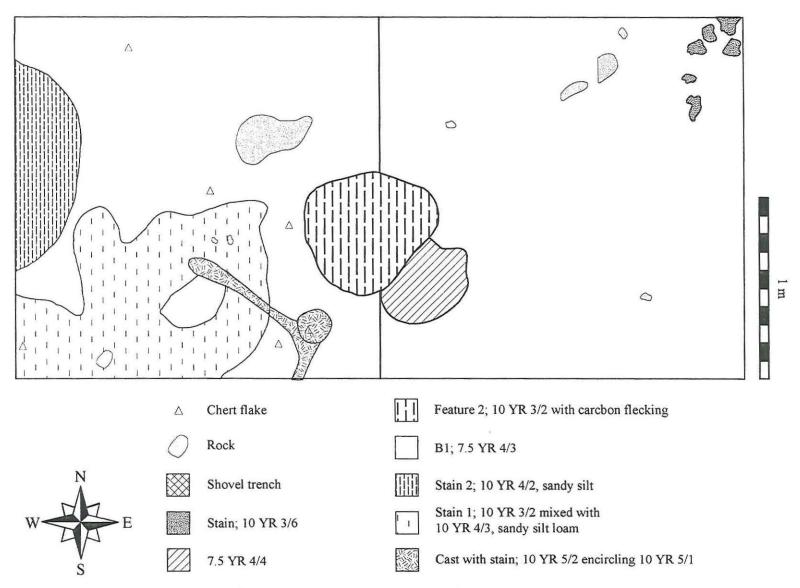
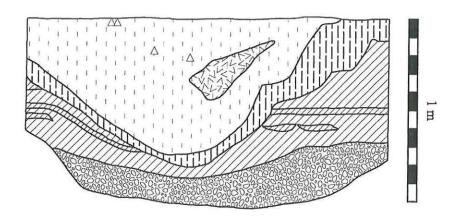


Figure 10.3: 16N/6-8E, Feature 2 and Stains 1 and 2



- Feature 3; 7.5 YR 3/2, very fine, sandy silt
- 10 YR 3/6; sand and gravel
- Feature 3 boundary; 7.5 YR 3/2 50% mottled with 10 YR 4/4
- Ants Nest; 10 YR 4/4 90% mottled with 7.5 YR 3/2

B1; 7.5 YR 4/6

△ Chert flake

B1; 7.5 YR 4/4

Figure 10.4: 0N/34E, Feature 3 Profile

Table 10.3: Feature 3, Vertical Distribution Debitage

Level	Context	Number	Percentage
1	F-3	378	55.26%
2	F-3	201	29.39%
3	F-3	56	8.19%
4	F-3	34	4.97%
5	F-3	15	2.19%
Total		684	100.00%

Table 10.2: 0N/34E Vertical Distribution Debitage

Level	Context	Number	Percentage
1	B1	98	78.40%
2	B1	15	12.00%
3	B2	13	10.40%
Total		125	100.00%

Feature 4

Feature Type: Basin shaped soil discoloration

Dimensions: Diameter = 40 cm, Maximum depth = 20 cm

Location: 2N/37E

Contents: 13 pieces of debitage, darkened soil

Context: Sub-plowzone B1

Formation: The formation history of Feature 4, like that of the vast majority of the sub-plowzone features encountered during mitigation, is unclear. The small size of the stain and the recovery of only 13 chert pieces of chert debitage within it suggest that the feature's form may be accounted for more efficiently by natural than cultural processes.

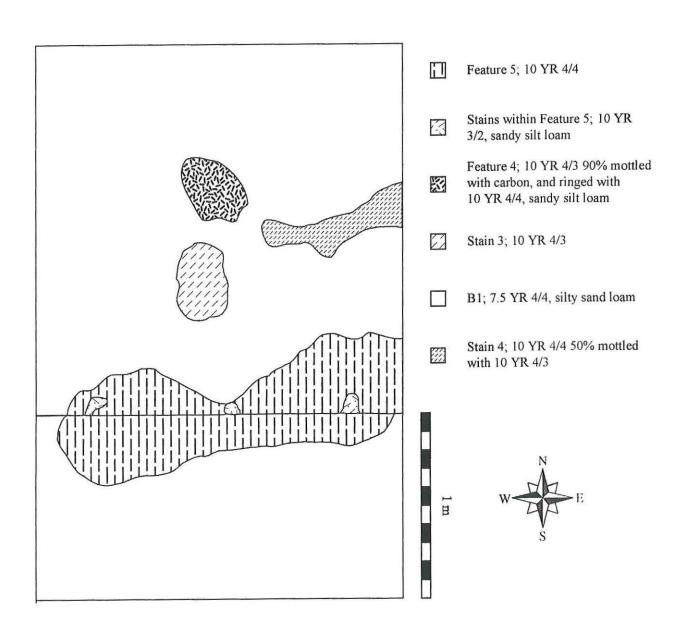


Figure 10.5: 2N/37E, Features 4 and 5

Feature 5

Feature Type: Oval soil discoloration

Dimensions: 180 cm x 60 cm, Maximum depth = 10 cm

Location: 2N/37E

Contents: 10YR 4/4 dark yellow - brown sandy silt loam throughout, light gravel deposit. No cultural

materials were recovered from Feature 5

Context: Sub-plowzone B1.

Formation: The formation of Feature 5 is ambiguous, and most likely natural. The stain that defined the boundaries of Feature 5 became diffuse quickly and were indistinct at the bottom of the first arbitrary 10 cm level. The lack of cultural materials within the soil discoloration suggests that its formation may be explained with reference to natural causes.

Feature 6

Feature Type: Core concentration

Dimensions: Feature 6 was defined on the basis of artifactual content rather than soil color. The majority of

the deposit was recovered in one 10cm arbitrary level.

Location: 10N/100E

Contents. 10 cores, 12 pieces of FCR, 511 pieces of debitage, and 17 utilized flakes.

Context: Feature 6 was found suspended within the sandy B1 horizon in the south eastern portion of the site, and in the possible path of a former intermittent drainage.

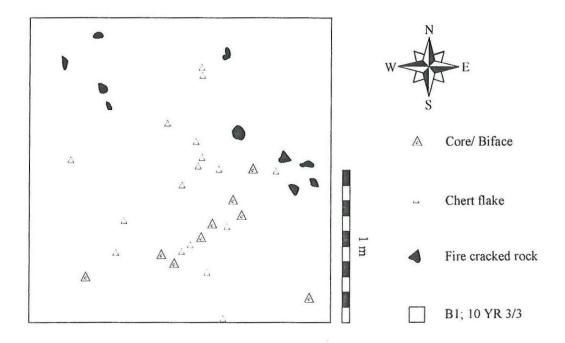


Figure 10.6: 10N/100E, Feature 6

Formation: Feature 6 probably resulted from one episode of core reduction and tool manufacturing. Feature 6 resembles ARMS's Feature 3. Zoll's assessment of ARMS's Feature 3 as a possible chipping station may accurately describe Feature 6.

Feature 7

Feature Type: Soil discoloration (Figure 10.1) Dimensions: Diameter = 20 cm, Depth = 23 cm

Location: 0N/34E

Contents: 10YR 3/2 sandy loam. No artifactual remains were recovered from within Feature 7

Context: Sub-plowzone B1

Formation: At the interface of the plowzone and B1 soils Feature 7 appeared as a circular stain with dark wavy lines radiating from its center. Although the lithic scatter visible beneath the plowzone included 0N/34E no lithic artifacts were recovered from Feature 7. For these reasons it seems likely that Feature 7's origins were natural, probably a tap root from a tree.

Feature 8

Feature Type: Inter-Urban railroad tie depressions

Location: 26S/27E, 26S/21E, and 27S/3E, and partially in 25S/3E.

Contents: Gravel Canal Fill, lithic debitage, FCR and 1 Madison (Hamilton like) projectile point (From unit 27S/3E)

Context: Feature 8 was encountered in excavation units placed closest to the canal at the interface of the A soil horizon and gravel canal fill.

Formation: Feature 8 resulted from the construction, use, and removal of the Inter-Urban rail-way. After the rail-line was removed depressions left by the ties were covered and preserved with gravel canal fill. Depressions were found in the A soil horizon and indicate that the rail line was constructed on top of it rather than on top of a gravel and cinder road bed.

Feature 9

Feature Type: Parallel linear stains

Dimensions: Parallel lines were 2 cm wide and 20 cm apart. They traversed the unit.

Location: 22S/36E

Contents: No cultural materials were recovered from Feature 9

Context: Feature 9 was encountered in the A horizon at the interface with canal fill. This portion of the site had the least amount of overlying fill. 22S/36E also had only remnants of Feature 10 in the A soil horizon.

Formation: The linear stains most likely originated during one of the modern transformations to the site. The stains probably arose as a result of mechanical earth movement.

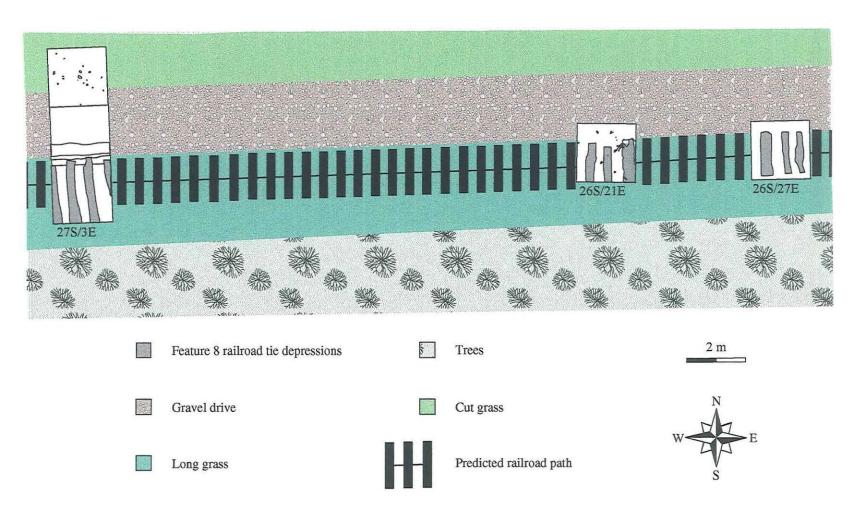


Figure 10.7: Feature 8

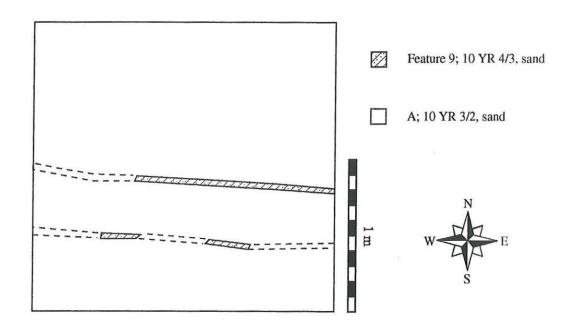


Figure 10.8: Feature 9

Feature 10

Feature Type: Sheet midden

Dimensions: Across the site midden depth averaged 10.7 cm. Depth varied from trace amounts in the far eastern portion of the site (in 22S/36E) and along the line of the Inter-Urban, (26S/21E, 26S/27E, 27S/3E) to a maximum of 22 cm (23S/14W).

Location: Feature 10 was encountered in nearly all units on the south side of U.S. 24.

Contents: Dark 10YR 2/1-2/2 organically rich sandy silt loam. Both historic Miami and prehistoric artifacts were recovered from Feature 10.

Prehistoric Artifacts	Historic Artifacts	
11 Ceramic sherds	Large Miami faunal assemblage	
9388 Pieces of debitage	3 Pieces of trade silver	
31 Bifaces	5 Clay pipe fragments	
26 Cores	1 Lead disk	
20 Projectile Points	1 Metal lock fragment	
355 Utilized flakes	8 Pieces of metal	
	1 Sherd European	
	Ceramics	
	1 Ramrod fragment	

Context: Feature 10 was encountered directly below a layer of canal fill. Feature 10 ended at the interface of the A and B1 soil horizons. Within the feature the A horizon varied from 10YR 2/1-10YR 2/2.



Figure 10.9: Feature 10, 22S/12E at exposure

The interface between Feature 10 and the underlying B1 is similar to the interface between the A and B1 horizons in units in unplowed soil on the north side of U.S. 24. The interface is wavy and often blurred, the probable result of natural turbation. Organic leaching from the A horizon into the B1 is also indicated.

Feature 10 was quickly preserved beneath a layer of canal fill during canal construction. During canal construction and fill deposition some portions of Feature 10 were displaced and subsequently redeposited with canal fill. Small deposits of displaced Feature 10 were encountered between layers of canal fill. In units where the rail tie depressions from the inter urban (Feature 8) were found only remnants from Feature 10 were recovered.

The vertical distribution of debitage, outlined in Table 3.1, is indicative of the depositional environment at 12-Hu-935. The majority, 61.09%, of all debitage recovered in units on the south side of U.S. 24 came from the A soil horizon. Debitage recovery decreased geometrically below this level. This suggests that the prehistoric living surface was probably close to the current A soil horizon.

Feature 10, in units 23S/10,12, and 14 W, contained possible structural remains. These units were traversed by a trench lined with bark, encountered near the base of Feature 10. Midden materials were recovered from above and below the bark deposit. The bark likely originated from a Miami structure (See Mann 1996). The five post molds, (Figure 4.10) discovered on the south side of U.S. 24 also likely resulted from the Miami Occupation.

Formation: The Miami sheet midden was deposited on top of a prehistoric multi-component site. The A horizon and Feature 10 were virtually synonymous on the south side of U.S. 24. This determination was based on the consistent recovery of well preserved faunal materials throughout the dark sandy A horizon. There were some exceptions to this rule. Excavation units 22S/36E, 26S/27E, 26S/21E, and 27S/3E all contained some A horizon soil with only turbated remnants of the Miami midden. In addition to Miami materials, Feature 10 contained artifacts from all identified occupational periods. The lithic density in

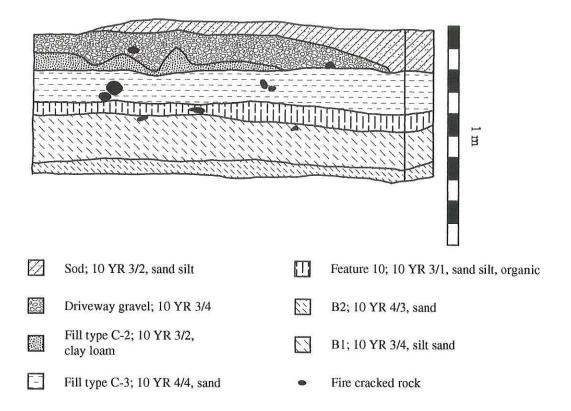
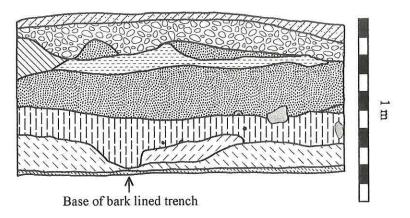




Figure 10.10: 22S/28E West Profile



- Sod; 10 YR 4/3, silty sand
- U.S. 24 gravel; 10 YR 4/2
- Fill type R-2; 10 YR 3/3, silty sand with gravel
- Fill type C-3; 10 YR 5/4, sand
- Fill type C-2; 5 YR 4/4, sandy clay
- A; Feature 10, 10 YR 3/2, sandy silt

- Burnt soil; 5 YR 3/3 mottled with 2.5 YR 4/8, silty sand
- B1; 10 YR 4/4; silty sand
- B2; 7.5 YR 4/4, silty sand and gravel
- Carbon
- a Rock



Figure 10.11: 23S/14W West Profile

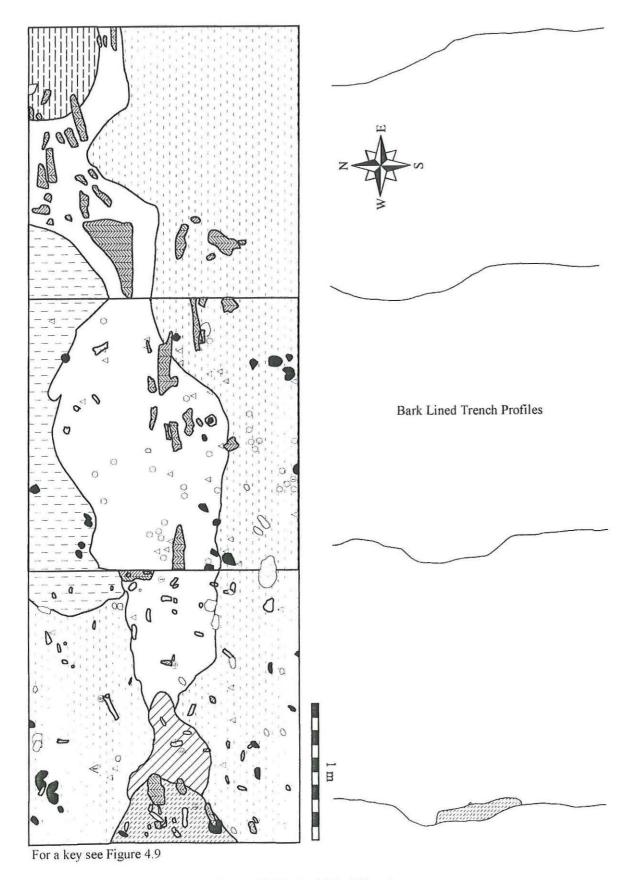


Figure 10.12: Bark Lined Trench

Feature 10 was greater than in any other portion of the site. The recovery of both historic Miami artifacts and prehistoric projectile points from nearly all phases of Indiana's prehistory is not surprising in light of 12-Hu-935's geo-history. The terrace upon which Feature 10 was deposited is well above the waters of the Wabash and therefore immune to its alluvium. This coupled with bioturbation and Miami site trampling should predictably result in little to no stratification between occupations. No clear indications of stratigraphy existed between the base of Feature 10 and Features 12 and 13, two woodland pit features. Here, the base of Feature 10 graded into the tops of these two features with only a slight change in color.

Feature 10 was first defined by the presence of dense concentrations of well preserved animal bone, in association with historic Miami Indian artifacts, prehistoric projectile points, and lithic debitage. For a number of reasons it is clear that the faunal assemblage is unequivocally of Miami origin. First, the bone was too well preserved to be from an earlier occupation. No bone was recovered from any of the woodland pit features encountered below Feature 10. Second, bone preservation was identical to that recovered from 12-Hu-1022.

Feature 10 was encountered in nearly all units excavated south of U.S. 24, however midden thickness and preservation varied across this part of the site. The layer of gravel canal fill directly overlying the midden was consistent in units containing intact midden, while turbated in units without intact midden. Feature 10 was absent, or in remnant form only, in units where rail tie depressions from the Inter-Urban were encountered. In these units, 27S/3E, 25S/3E, 26S/21E, and 26S/27E, most of the midden and A horizon were removed, probably with the canal berm during construction of the Inter-Urban. 22S/36E, the eastern most unit south of U.S. 24, also contained only small remnants of the A horizon and midden. Here, at the interface between what was left of the A horizon and the B1, 2 parallel linear stains -- Feature 9, which looked like mechanical scraping marks, were encountered.

The organic component to Feature 10 may have resulted from either cultural or natural processes. Feature 10 was identified only in well developed and intact A horizon soils. In all areas of the site where A horizon soils were encountered they were uniformly dark and included a high organic content. However, the density of faunal remains encountered throughout this soil context (indicating large scale domestic activities), strongly suggest the former as a significant source of carbon. The organic component of Feature 10 has ambiguous origins. Feature 10 was conscribed by the A soil horizon.

Feature 11

Feature Type: Displaced A horizon and Miami midden.

Dimensions: Feature 11 varied from 2 - 5 cm in depth, and covered the southern 1/2 of the unit.

Location: 23S/3E

Contents: 239 Pieces of Debitage, 1 Biface, 2 Cores, 1 Silver Tinkling Cone, 1 Brewerton like projectile point, and 1 sherd European-American ceramic.

Context: Feature 11 was encountered intervening between two layers of gravel canal fill in the densest part of the site.

Formation: Feature 11 originated from prehistoric and historic cultural formation processes. Feature 11 most likely was displaced during canal construction. Feature 11 was found above the densest part of the site in terms of both historic and prehistoric cultural materials. Below Feature 11 in Feature 10, 5 projectile points, 7 bifaces, and 1,532 pieces of debitage were recovered. This suggest that Feature 11 was displaced during canal construction from close by.

Feature 12

Feature Type: Shallow pit feature

Dimensions: Diameter = 1m, Maximum depth = 22cm

Location: 22S/22E and 22S/20E

Contents: 76 Pieces of debitage, 3 Utilized Flakes, FCR concentration, 10 Late Woodland ceramic sherds, and darkened soil.

Context: Found just below Feature 10. No depositional stratigraphy was evident. Feature graded into Feature 10 above it. The presence of ceramics indicates that Feature 12 was deposited prior to the Miami component of Feature 10.

Formation: Most plausibly Feature 12 is a Late Woodland pit feature.

Feature 13

Feature Type: Shallow pit feature

Dimensions: Diameter = 53 cm, Maximum depth = 30 cm. These measurements correspond to the basic

shape of the feature. However, feature boundaries upon exposure were somewhat larger.

Location: 22S/6W

Contents: 10YR 2/2 sandy silt, lithic debitage and FCR. It is noteworthy that 31 prehistoric ceramic sherds were recovered from 22S/6W in the first arbitrary 10 cm level below Feature 10, and in the same soil context as Feature 13. This sherd deposit accounts for nearly half of all prehistoric sherds.

Context: Feature 13 was encountered just below Feature 10. Feature 10 graded into Feature 13 below it. No stratigraphic distinction between the two features could be made.

Formation: Feature 13 was a Late Woodland pit feature that most likely filled in after abandonment as a result of natural processes.

Feature 14

Feature Type: Shallow pit feature

Dimensions: Diameter = 20 cm, Maximum depth = 16 cm

Location 22S/6W

Contents: 2 prehistoric ceramic sherds

Formation: Feature 14 was formally indistinguishable from Feature 13, therefore the formation of Feature 14 was likely similar to Feature 13.

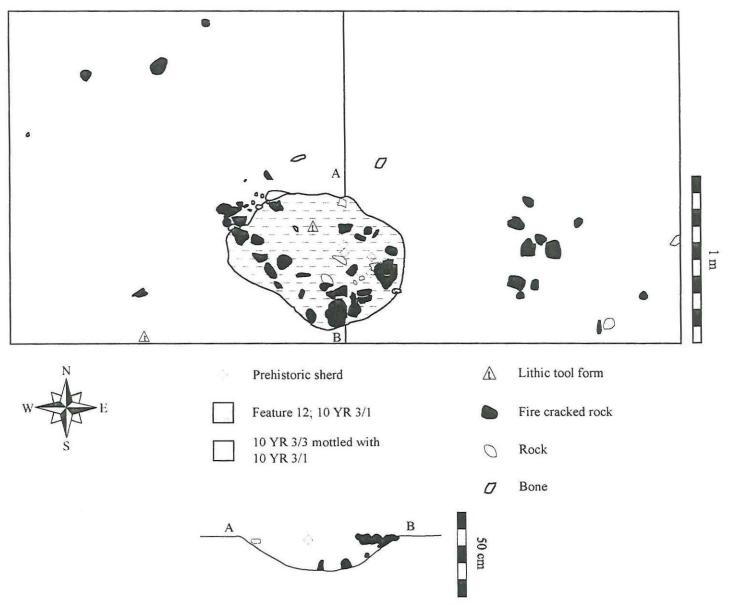


Figure 10.13: Feature 12, Plan and Profile Outline

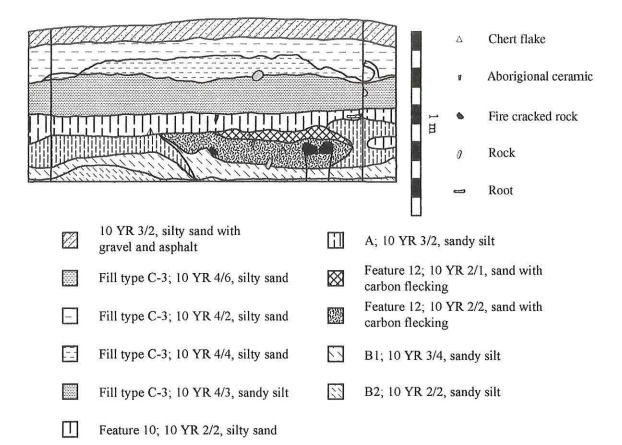




Figure 10.14: Feature 12, 22S/20E East Profile

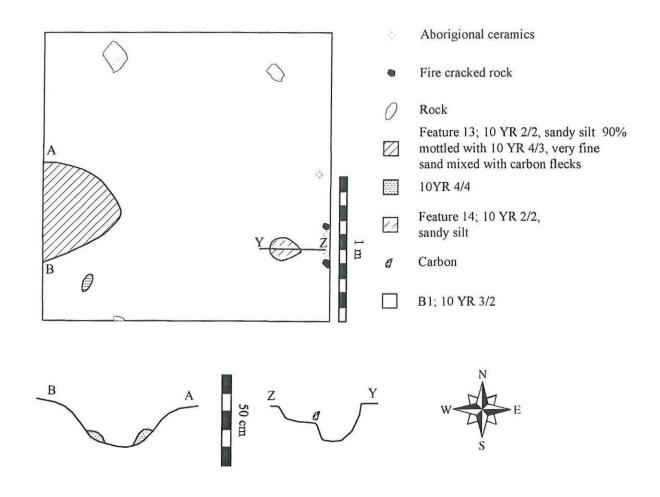


Figure 10.15: Features 13 and 14

Stain 1

Stain Type: Amorphous soil discoloration

Dimensions: Stain 1 was encountered in the southwest 1/4 of the unit. It averaged 5 cm in depth.

Location: 16N/6E

Contents: 3 pieces chert debitage, 10YR 3/2 mixed with 10YR 4/3 sandy silt loam.

Context: Stain 1 was encountered in the sandy sub-plowzone B1 soil horizon

Formation: The formation history of Stain 1 is ambiguous. It likely resulted from both cultural and natural formation processes. The lack of any significant artifactual remains implies that the interpretive potential of stain is limited.

Stain 2

Stain Type: Ephemeral soil discoloration, similar to above in all significant respects

Dimensions: Diameter = 50 cm, Depth = 3 cm

Location: 16N/6E

Contents: 10YR 4/2 sandy silt loam and 1 chert flake.

Context: Sub-plowzone B1

Formation: Stain 2 was an ephemeral soil discoloration containing one flake. The formation history of Stain 2 is similarly ambiguous as Stain 1 above. Stain 2 lacks any interpretive potential.

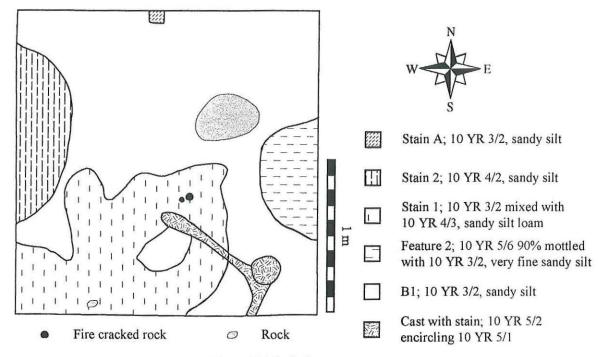


Figure 10.16: Stains 1 and 2.

Stain 3

Stain Type: Small amorphous soil discoloration Dimensions: Diameter = 22 cm, Depth = 15 cm

Location: 2N/37E

Contents: Darkened soil, no artifacts were recovered from this stain.

Context: B1 beneath plowzone

Formation: The formation of Stain 3 is ambiguous.

Stain 4

Stain Type: Amorphous soil discoloration, Stain 4 was similar to Feature 4

Dimensions: Length = 47 cm, Width = 14 cm, Depth = 5 cm

Location: 2N/37E

Contents: No artifactual remains were recovered.

Context: Stain 4 was encountered as a dark stain at the interface between the plowzone and B1.

Formation: During the excavation of Stain 4 it became clear that it was a natural feature

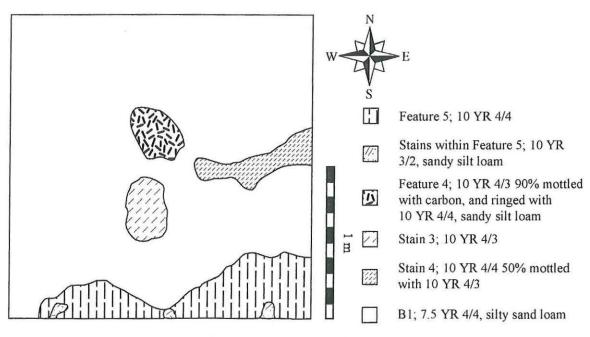


Figure 10.17: Stains 3 and 4.

Stain 5

Stain Type: Ephemeral oval lens

Dimensions: 113 cm by 98 cm, Maximum depth = 10 cm

Location: 2N/30E

Contents: 1 biface, 138 chert flakes, 2 utilized chert flakes, 2 pieces of FCR,

Context: Stain 5 was identified at the interface of the B1 and plowzone in Scatter Area # A

Formation: Stain 5 likely results from a combination of both natural and cultural formation processes. Stain 5 was defined by the presence of darkened soil and lithic artifacts. Stain contours became more diffuse with excavation depth. Multiple areas of mottling and color changes were visible throughout, and suggest natural impaction. The stain is ambiguous with respect to its origins.

Stain 6

Stain type: Shallow amorphous basin

Dimensions: Diameter = 45 cm, Maximum depth = 25 cm

Location: 2N/19E

Contents: 10YR 3/2 sandy silt loam, 1 biface, 19 chert flakes.

Context: B1

Formation: Stain 6 was encountered at the interface between the plowzone and B1 soils as a small, basically circular, dark stain. The formation history of Stain 6 is ambiguous, and likely includes both natural and cultural formation processes. The dark soil could have originated from cultural as well as natural sources. Stain 6 was identified in area with a low scatter density. Stain 6 was similar to ARMS' Feature 7, soil discoloration with 17 associated chert flakes.

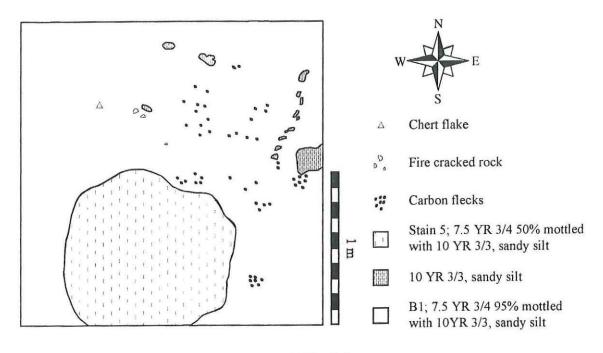


Figure 10.18: Stain 5

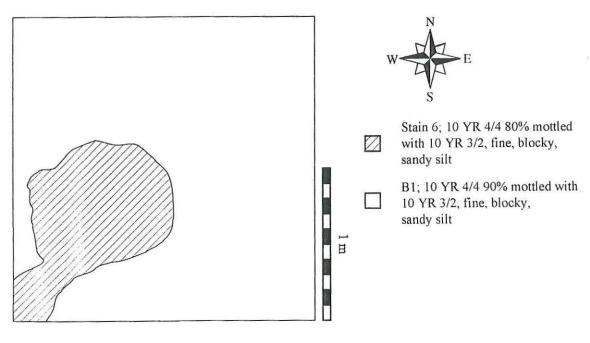


Figure 10.19: Stain 6

Stain 7

Stain Type: Deep amorphous soil discoloration with associated artifacts

Dimensions: At the interface the stain filled the entire Western half of the unit. Dark soil continued, in

increasingly lower quantities, until a maximum depth of 54 cm below.

Location: 10N/92E

Contents: Mottled variegated pockets of sandy silt loam, ranging from 10YR 2/2 to 4/4 and 7.5YR 2.5/1. Deposits of large carbon flecks. An assortment of non-diagnostic lithic artifacts, including 3 cores, 5 utilized flakes, 178 chert flakes, and a few pieces of FCR.

Context: Sup-plowzone B1, scatter area B.

Formation: Stain 7 was identified at the interface of the plowzone and B1 as a dark, 10YR 2/2 amorphous stain with associated artifacts, surrounded by 10YR 3/3 B1. The observed expression of Stain 7, like all features and stains found beneath the plowzone, evidences natural formation processes endemic to its context. In both the photograph (Figure 10.20) and the map (Figure 10.21) the downward movement of organic material is indicated by the number and diversity of soil pockets. An ant nest is visible in the west wall photograph near the southwest corner of the unit as a diffuse and mottled lens of lighter colored soil.

The organic component of Stain 7 remained ambiguous with respect to its origins after excavation and laboratory analysis. Both natural and cultural processes are implicated. Its amorphous shape and mottled matrix are suggestive of decayed tree roots, however the slightly higher concentration of flakes encountered within the stain may have resulted from prehistoric behavior. The vertical distribution of artifacts indicates migration. Tables 10.4 and 10.5 depict the vertical distribution of non-diagnostic lithic artifacts recovered from 10N/92E from within and without Stain 7 respectively. Level one from both contexts contains the greatest concentration of artifacts. This pattern suggest first, the majority of the artifacts were most likely deposited closer to the interface - probably within the A, and second, a few of the artifacts deposited at this level down migrated. The discrepancy between Levels 3 and 4 in the number of flakes recovered from within the stain and from within the unit is ambiguous, and perhaps results from its proximity to the intermittent drainage mentioned above. Stain 7 contained nearly five times as many chert flakes as did the rest of the unit. In content Stain 7 is similar to ARMS "Feature 3," and like it, could very plausibly be interpreted as a chipping station.

Table 10.4: Stain 7, Vertical Distribution Flakes

Level	Context	Number	Percentage
1	B1	95	53.37%
2	B1	51	28.65%
3	B1	0	0.00%
4	B1/B2	32	17.97%
Total		178	100.00%

Table 10.5: 10N/92E, Vertical Distribution Flakes

Level	Context	Number	Percentage
1	B1	22	44.00%
2	B1	19	38.00%
3	B1	8	16.00%
4	B2	1	2.00%
Total		50	100.00%

Stain 8

Stain Type: Circular basin/tree cast

Dimensions: Diameter 20 cm, Depth 43 cm

Location: 6N/108E

Contents: 10YR 3/2(60-75%) mottled with 10YR 3/4 (25-40%) sandy silt loam that, with depth, became increasingly indistinguishable from the lighter colored sandy B1, suspended 7 chert flakes. Lining the base of this stain were 4 large granitic cobbles. During the course of excavation 5 linear carbon deposits were encountered radiating from the center.

Context: Sub-plowzone B1

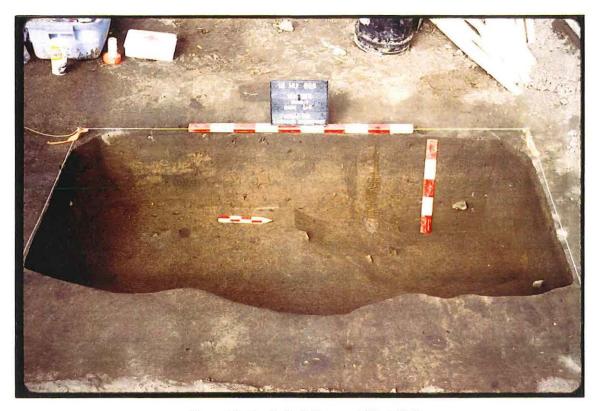


Figure 10.20: Stain 7, Base and West Wall

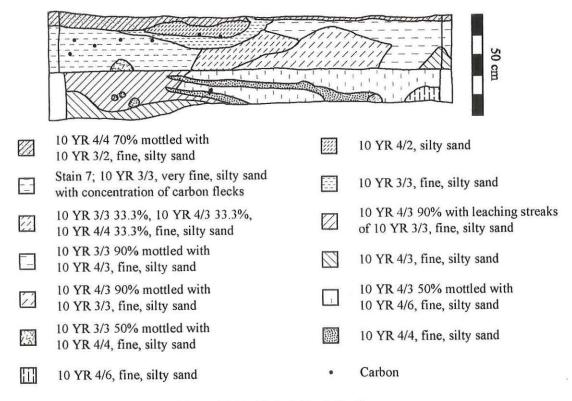


Figure 10.21: Stain 7, North Profile

Formation: Stain 8 is, quite possibly, the best preserved example encountered at 12-Hu-935 of a tree cast, or more accurately, a tap root cast. The linear carbon stains are no doubt in situ decayed roots. The large granitic cobbles, which originally made their way to the first terrace when glacial lake Maumee drained, probably became entangled within the trees roots and brought closer to the surface. Stain 8 was encountered in scatter B, the densest cline beneath the plowzone. A number of possible sources of turbation that often result in the down migration of lithic artifacts could account for the presence of the 7 chert flakes.

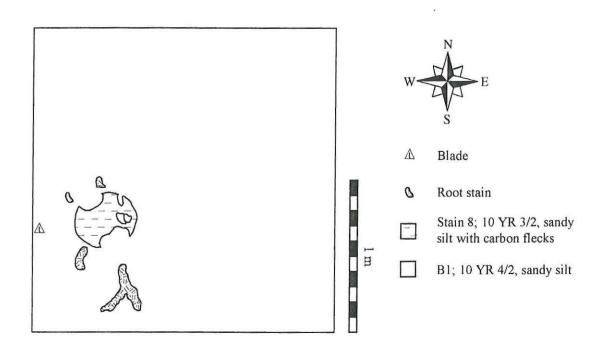


Figure 10.22: Stain 8, 6N/108E

Stain 9

Stain Type: Basin

Dimensions: Diameter = 90 cm, Maximum thickness = 30 cm

Location: 10N/100E

Contents: Gravel, silty sand and clay, 53 flakes.

Context: Stain 9 was found beneath Feature 6 suspended in the same sandy B1 matrix.

Formation: Stain 9 was encountered as a large gravel deposit below Feature 6. The origin of this gravel deposit is not clear, and most likely results from its location adjacent to a former intermittent drainage. The gravel itself is most likely a natural feature. The majority of the cultural materials recovered form Stain 9, the 53 chert flakes, were recovered near its surface. It is probable that these materials migrated from Feature 6.

Stain 9 was identified below the lithic concentration in unit 10N/100E. Stain 9 was a shallow basin containing darkened soil, FCR, and 53 flakes. The formation history of Stain 9 is ambiguous. Stain 9 likely resulted from both natural and cultural processes. The lithic concentration above Stain 9 contained over 500 flakes. For this reason it seems likely that the artifact content of Stain 9 may have originated from the lithic concentration overlying it. The darkened soil could most easily be accounted for by root activity, however,

the vast numbers of flakes recovered from levels above the darkened stain means that cultural processes can not be ruled out. On the other hand, the gravel from the stain most likely was deposited through natural agency - the intermittent drainage in the south-eastern portion of the site mentioned above.

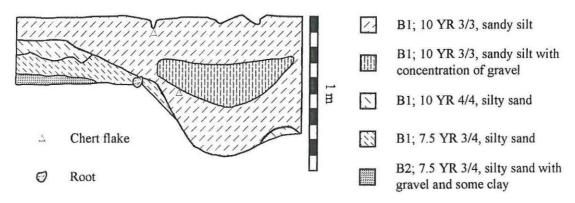


Figure 10.23: Stain 9, West Wall Profile

11. Summary and Conclusions

Phase III archaeological excavations at the Moore Site (12-Hu-935) were designed to mitigate adverse effects to the cultural resources present at the site by the proposed improvements to U.S. Highway 24 (INDOT project MAF-146-0). It is the opinion of these archaeologists that by this report Federal and State provisions concerning the identification of archaeological resources have been accomplished.

Data obtained during mitigation was used to formulate conclusions concerning; 1) the geological, natural, and cultural formation history of the site, 2) the site's occupational chronology, 3) subsistence activities, and 4) site structure.

Both natural and cultural formation processes have unevenly influenced the character of the archaeological record observed at 12-Hu-935. Three preservation contexts across the site were identified; 1) beneath the plowzone in the agricultural field north of U.S. 24, 2) within the tree line adjacent to U.S. 24, and 3) below gravel fill between the Wabash and Erie Canal and U.S. 24. Across the site the migration of artifactual material, the likely result of a host of turbation sources, was universally indicated. Depositional sources at 12-Hu-935 were limited, for the most part, to historic cultural ones. The most significant depositional episodes were related to the construction of the Wabash and Erie Canal and the construction and subsequent dismantlement of the Inter-Urban rail line. The impact of modern sources of deposition was evident in units within the tree line adjacent to the north side of U.S. 24.

Little evidence suggesting recent, within roughly the last 14,000 years, geological deposition was encountered during mitigation. Although this fact would be surprising for a site in an active flood plain it is less so for one on a natural levee on the first terrace of the Wabash. The glacial outwash soils at 12-Hu-935 were prone to turbation and did not uniformly maintain the integrity of archaeological deposits. This proved to be especially true in the subplowzone preservation context. The only culturally significant stratigraphy occurring at the site resulted from the modern construction events outlined above. A broad ranging significance of this is that it is now possible to better predict the impact of Wabash-Erie Canal construction on archaeological remains. It is likely that further evidence of the Miami settlement which formerly stretched along the Wabash from the forks for 3 or 4 miles, are preserved beneath canal fill between 12-Hu-935 and 12-Hu-1022.

The assemblage of diagnostic lithics indicates that 12-Hu-935 had been repeatedly occupied and re-occupied from Paleoindian to Late Woodland times. The majority, 51.5%, of this assemblage was made up of Mid-Late Archaic point types. Early Archaic types composed 16.7% of the assemblage while transitional Late Archaic-Early Woodland types made up another 13.6%. This patterned distribution of point types indicates that 12-Hu-935 was repeatedly occupied and re-occupied throughout much of Indiana's prehistory. This pattern further indicates that the Mid to Late Archaic period saw the most intensive prehistoric use of 12-Hu-935. Diagnostic lithics were recovered *in situ* from preservation contexts 2 and 3. Diagnostic projectile points were also recovered from original stripping back dirt piles.

The densest concentration of lithics was encountered below gravel fill on the south side of U.S. 24. It therefore seems probable that this area was also the center of prehistoric lithic producing activities during all identified periods of prehistory. In addition, two other possible activity areas were encountered north of U.S. 24. These include: 1) the FCR and lithic concentration in 4S/64-66E which likely resulted from one episode of Liston Creek chert heat treating, 2) the lithic artifact scatter in 10N/100E that possibly resulted from one episode of core reduction. It is unclear whether or not any of the prehistoric occupations included activities normally associated with habitation. Two prehistoric periods may have seen some habitation related activities. As the Mid-Late Archaic saw the most intensive occupation of the site it seems likely that much of the extensive lithic assemblage, including the two activity areas, was deposited during this period. The variety of non-diagnostic lithics, including a large assemblage of utilized cores and utilized flakes suggests that a range of activities, other than those related to lithic tool production, were conducted at 12-Hu-935 during this period. Three Woodland pit features, with associated ceramics, also may have been deposited as a result of some habitation related activities. However, only six Late Woodland points were

recovered during mitigation. The question whether these were deposited during one extended occupation or a number of short term occupations is moot.

The area of the site south of U.S. 24 was also the most intensively utilized during the Miami occupation. Faunal materials from a Miami sheet midden were encountered in all units south of U.S. 24. Intact midden was encountered in 10.5 units in this context. Possible Miami structural remains were found in association with two concentrations of faunal materials. Over 500 grams of faunal materials were recovered in 23S/14W and over 200 grams were recovered in 22S/20E. The archaeobotanical summary conducted by Dr. Annette Eriksen was inconclusive. The majority of seeds recovered were raspberry. Raspberry bushes today are common within the tree line along the edge of the canal.

The area of the site north of U.S. 24 in the current agricultural field contained little in the way of intact sub-surface cultural remains. The features and stains encountered within this context remained ambiguous with respect to their origins after excavation and laboratory analyss. The record in this portion of the site was mixed, a probable result of modern plowing and subsequent soil deflation.

At this time little is known about prehistoric subsistence economies in the Upper Wabash drainage. Findings so far (see Wepler and Cochran 1983, Anuszyk and Cochran 1984, Mohow 1987) indicate significant contrasts to southern Indiana. Although Indian villages were recorded during contact it is not clear when this area first withstood sedentary occupations. The location of archaeological sites from most periods of Indiana's prehistory in the Upper Wabash, concentrated along major drainageways in flood and terrace environments, along with a paucity of large village sites, gives the appearance of a landscape utilized by mobile populations. Therefore the commonly invoked connection between sedentism, agriculture, and ceramics may not apply in the Upper Wabash region.

The excavation of 12-Hu-935 has provided a unique opportunity to explore both prehistoric and historic occupational patterns in the Upper Wabash Drainage. The recovery of intact cultural remains from both periods beneath gravel canal fill indicates the strong possibility of recovering further significant data from locations impacted by Wabash-Erie Canal construction. It is important to note that significant data have been recovered from 12-Hu-935 and 12-Hu-1022 from contexts previously ignored, written off, or incorrectly identified. The Miami midden encountered at 12-Hu-935, for example, was discovered below what is currently a gravel driveway. Further data recovery in the area between 12-Hu-935 and 12-Hu-1022 may help to provide a better understanding of the history and prehistory of the Upper Wabash Drainage.

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Appendix A: Artifact Inventory

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
036	0N 34E	2	F-3 S 1/2	5		CHERT	UTILIZED FLAKES	1/4" SCREEN
036	0N 34E	2	F-3 S 1/2	202		CHERT	FLAKES	1/4" SCREEN
037	2N 37E	1	F-4 N 1/2	13		CHERT	FLAKES	1/4" SCREEN
039	2N 37E	1	STAIN 3 E 1/2	3		CHERT	UNMODIFIED	1/4" SCREEN
042	2N 37E	2		25		CHERT	FLAKES	1/4" SCREEN
042	2N 37E	2		1		CHERT	CORE	1/4" SCREEN
043	0N 34E	3	F-3	1	13.1	ROCK	FCR	1/4" SCREEN
043	0N 34E	3	F-3	56		CHERT	FLAKE	1/4" SCREEN
044	0N 34E	4	F-3	2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
044	0N 34E	4	F-3	32		CHERT	FLAKES	1/4" SCREEN
044	0N 34E	4	F-3	1		CHERT	SCRAPER	1/4" SCREEN
045	0N 34E	5	F-3 S 1/2	1		CHERT	CORE FRAGMENT	1/4" SCREEN
045	0N 34E	5	F-3 S 1/2	15		CHERT	FLAKES	1/4" SCREEN
046	0N 34E	1		9		CHERT	FLAKES	1/4" SCREEN
046	0N 34E	1		1		GLASS	CLEAR GLASS	1/4" SCREEN
047	TRENCH 4 EAST	11	F-7 W 1/2		4536	ROCK	FCR	MAPPED
048	TRENCH 4 EAST	1	F-7 W 1/2	1		CHERT	BIFACIAL BLANK	TROWEL
049	TRENCH 4 EAST	1	F-7 W 1/2	1		CHERT	FLAKE	TROWEL
050	TRENCH 4 EAST	1	F-7 W 1/2	1		CHERT	CORE	TROWEL
051	TRENCH 4 EAST	1	F-7 W 1/2	1		CHERT	FLAKE	TROWEL
052	TRENCH 4 EAST	1	F-7 W 1/2	1		CHERT	FLAKE	TROWEL
053	TRENCH 4 EAST	I	F-7 W 1/2	1		CHERT	CORE	TROWEL
054	TRENCH 4 EAST	1	F-7 W 1/2	1		CHERT	CORE	TROWEL
055	TRENCH 4 EAST	1	F-7 W 1/2	1		CHERT	CORE	TROWEL
056	0N 34E	1		2	133.9	ROCK	FCR	1/4" SCREEN
056	0N 34E	1		1		CHERT	CORE	1/4" SCREEN
056	0N 34E	1		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
056	0N 34E	1		87		CHERT	FLAKES	1/4" SCREEN
059	2N 37E	2		1		GLASS	CLEAR BOTTLE	1/4" SCREEN
059	2N 37E	2		27		CHERT	FLAKES	1/4" SCREEN
060	TRENCH 4 EAST	1	F-7 E 1/2		1714.4	ROCK	FCR	MAPPED
061	TRENCH 4 EAST	1	F-7 E 1/2	1		CHERT	PREFORM	TROWEL
062	TRENCH 4 EAST	1	F-7 E 1/2	1		CHERT	FLAKE	TROWEL
063	TRENCH 4 EAST	1	F-7 E 1/2	1		CHERT	CORE	TROWEL
065	0N 34 E	2		1		CHERT	WORKED FLAKE	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
065	0N 34 E	2		15		CHERT	FLAKES	1/4" SCREEN
067	ON 34E	3		13		CHERT	FLAKES	1/4" SCREEN
068	2N 30E	BASE OF PZ	STAIN 5	1		CHERT	SCRAPER	1/4" SCREEN
068	2N 30E	BASE OF PZ	STAIN 5	46		CHERT	FLAKES	1/4" SCREEN
068	2N 30E	BASE OF PZ	STAIN 5	1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
070	2N 30E	1	STAIN 5	2	119.5	ROCK	FCR	1/4" SCREEN
070	2N 30E	1	STAIN 5	2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
070	2N 30E	1	STAIN 5	89		CHERT	FLAKES	1/4" SCREEN
070	2N 30E	1	STAIN 5	1		CHERT	UTILIZED FLAKES	1/4" SCREEN
070	2N 30E	1	STAIN 5	1		CHERT	BIFACE/SCRAPER	1/4" SCREEN
071	2N 30E	1		3	97.9	ROCK	FCR	1/4" SCREEN
071	2N 30E	1		8		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
071	2N 30E	1		279		CHERT	FLAKES	1/4" SCREEN
071	2N 30E	1		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
071	2N 30E	1		3		CHERT	SCRAPERS	1/4" SCREEN
071	2N 30E	1		1		CHERT	BIFACE	1/4" SCREEN
071	2N 30E	1		1		CHERT	WORKED FLAKE	1/4" SCREEN
073	2N 30E	2		1	129.8	ROCK	FCR	1/4" SCREEN
073	2N 30E	2		6		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
073	2N 30E	2		118		CHERT	FLAKES	1/4" SCREEN
074	4S 64E	1		1	24.6	ROCK	FCR	1/4" SCREEN
074	4S 64E	1		1		GLASS	CLEAR	1/4" SCREEN
074	4S 64E	1	1	1		PLASTIC	YELLOW PLASTIC	1/4" SCREEN
074	4S 64E	1		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
074	4S 64E	1		24		CHERT	FLAKES	1/4" SCREEN
074	4S 64E	1		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
075	2N 30E	3		64		CHERT	FLAKES	1/4" SCREEN
075	2N 30E	3		1		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
078	4S 64E	2		67		CHERT	FLAKES	1/4" SCREEN
078	4S 64E	2		5	215.8	ROCK	FCR	1/4" SCREEN
078	4S 64E	2		1		PLASTIC		1/4" SCREEN
078	4S 64E	2		1		COAL		1/4" SCREEN
078	4S 64E	2		2		GLASS	GREEN VESSEL	1/4" SCREEN
078	4S 64E	2		2		BONE		1/4" SCREEN
080	4S 66E	1		4		GLASS	CLEAR VESSEL	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
080	4S 66E	1		9		CHERT	FLAKES	1/4" SCREEN
083	4S 64E	3		14	582.8	ROCK	FCR	1/4" SCREEN
083	4S 64E	3		2		CHERT	CORES	1/4" SCREEN
083	4S 64E	3		1		CHERT	CORE FRAGMENT	1/4" SCREEN
083	4S 64E	3		7		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
083	4S 64E	3		128		CHERT	FLAKES	1/4" SCREEN
083	4S 64E	3		2		CHERT	UTILIZED FLAKES	1/4" SCREEN
083	4S 64E	3		2		CHERT	SCRAPERS	1/4" SCREEN
083	4S 64E	3		2		CHERT	BIFACE	1/4" SCREEN
083	4S 64E	3		1		GLASS	GREEN GLASS	1/4" SCREEN
084	4N 66E	2		2		PLASTIC		1/4" SCREEN
084	4N 66E	2		1		GLASS	MIRROR FRAGMENT	1/4" SCREEN
084	4N 66E	2		46		GLASS	PEPSI BOTTLE	1/4" SCREEN
084	4N 66E	2		1		METAL	SCREW	1/4" SCREEN
084	4N 66E	2		1		METAL	WASHER	1/4" SCREEN
084	4N 66E	2		1		METAL		1/4" SCREEN
084	4N 66E	2		65		CHERT	FLAKES	1/4" SCREEN
084	4N 66E	2		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
084	4N 66E	2		2		CHERT	WORKED FLAKES	1/4" SCREEN
084	4N 66E	2		1	33.8	ROCK	FCR	1/4" SCREEN
086	2N 19E	BASE OF PZ		13		CHERT	FLAKES	1/4" SCREEN
089	4S 64E	4		1		SLATE		1/4" SCREEN
089	4S 64E	4		1		PLASTIC	YELLOW PLASTIC	1/4" SCREEN
089	4S 64E	4		2		CHERT	MODIFIED FLAKES	1/4" SCREEN
089	4S 64E	4		122		CHERT	FLAKES	1/4" SCREEN
089	4S 64E	4		8		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
089	4S 64E	4			907.2	ROCK	FCR	1/4" SCREEN
090	2N 19E	1	STAIN 6	1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
090	2N 19E	1	STAIN 6	14		CHERT	FLAKES	1/4" SCREEN
092	4S 66E	2		18		CHERT	FLAKES	1/4" SCREEN
092	4S 66E	2		1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
092	4S 66E	2		2	55.8	ROCK	FCR	1/4" SCREEN
092	4S 66E	2		3		GLASS	BOTTLE FRAGMENT	1/4" SCREEN
092	4S 66E	2		1		METAL	SCREW	1/4" SCREEN
094	4S 66E	3		1		GLASS	BOTTLE FRAGMENT	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
094	4S 66E	3		1		METAL		1/4" SCREEN
094	4S 66E	3		1		COAL		1/4" SCREEN
094	4S 66E	3		1		SLATE		1/4" SCREEN
094	4S 66E	3		2	68.3	ROCK	FCR	1/4" SCREEN
094	4S 66E	3		2		CHERT	WORKED FLAKES	1/4" SCREEN
094	4S 66E	3		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
094	4S 66E	3		17		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
094	4S 66E	3		149		CHERT	FLAKES	1/4" SCREEN
094	4S 66E	3			907.2	ROCK	FCR	1/4" SCREEN
095	2N 19E	1		1		CHERT	BIFACE	TROWEL
096	2N 19E	1		1		GLASS	CLEAR BOTTLE	1/4" SCREEN
096	2N 19E	1		1		CHERT	GRAVER	1/4" SCREEN
096	2N 19E	1		1	18.9	ROCK	FCR	1/4" SCREEN
096	2N 19E	1		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
096	2N 19E	1		150		CHERT	FLAKES	1/4" SCREEN
097	2N 19E	2	STAIN 6	4		CHERT	FLAKES	1/4" SCREEN
098	4S 64E	4		3		CHERT	FLAKES	MAPPED
099	4S 64E	BASE OF 4		3		CHERT	UNMODIFIED	TROWEL
099	4S 64E	BASE OF 4		1		CHERT	FLAKE	TROWEL
099	4S 64E	BASE 0F 4			6350.4	ROCK	FCR	TROWEL
101	4S 64E	5		93		CHERT	FLAKES	1/4" SCREEN
101	4S 64E	5		3		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
101	4S 64E	5		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
101	4S 64E	5			907.2	ROCK	FCR	1/4" SCREEN
103	4S 66E	4		2	56.7	ROCK	FCR	1/4" SCREEN
103	4S 66E	4		81		CHERT	FLAKES	1/4" SCREEN
103	4S 66E	4		14		CHERT	UTILIZED FLAKES	1/4" SCREEN
104	4S 64E	5		1		CHERT	CORE FRAGMENTS	TROWEL
104	4S 66E	5		1		CHERT	FLAKES	TROWEL
104	4S 66E	5			680.4	ROCK	FCR	TROWEL
106	4S 64E	6		17	393.3	ROCK	FCR	1/4" SCREEN
106	4S 64E	6		1		CHERT	CORE FRAGMENT	1/4" SCREEN
106	4S 64E	6		1		SLATE	FRAGMENT	1/4" SCREEN
106	4S 64E	6		143		CHERT	FLAKES	1/4" SCREEN
108	4S 64E	7		3	107.9	ROCK	FCR	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
108	4S 64E	7		5		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
108	4S 64E	7		38		CHERT	FLAKES	1/4" SCREEN
109	2N 19E	2		18		CHERT	FLAKES	1/4" SCREEN
110	2N 19E	3		8		CHERT	FLAKES	1/4" SCREEN
113	4S 64E	8		6		CHERT	FLAKES	1/4" SCREEN
115	4S 66E	4		1		CHERT	FLAKE	TROWEL
117	4S 66E	5		1		CHERT	CORE FRAGMENT	1/4" SCREEN
117	4S 66E	5		44		CHERT	FLAKES	1/4" SCREEN
117	4S 66E	5		4	770.2	ROCK	FCR	1/4" SCREEN
117	4S 66E	5		2		SLAG		1/4" SCREEN
117	4S 66E	5		1		CORTEX		1/4" SCREEN
117	4S 66E	5		45		CHERT	DEBRIS	1/4" SCREEN
117	4S 66E	5		7		ROCK	FCR	1/4" SCREEN
119	4S 64E	9		1		CHERT	FLAKE	1/4" SCREEN
120	4S 64E	WALL SCRAPINGS		20		CHERT	FLAKES	1/4" SCREEN
120	4S 64E	WALL SCRAPINGS			1360.8	ROCK	FCR	1/4" SCREEN
122	4S 66E	6		12		CHERT	FLAKES	1/4" SCREEN
123	4S 66E	6		2		CHERT	SCRAPERS	1/4" SCREEN
123	4S 66E	6		3		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
123	4S 66E	6		6		CHERT	FLAKES	1/4" SCREEN
125	6N 96E	INTERFACE		52		CHERT	FLAKES	1/4" SCREEN
125	6N 96E	INTERFACE		1		CHERT	SPOKE SHAVER	1/4" SCREEN
126	6N 90E	INTERFACE			907.2	ROCK	FCR	MAPPED
126	6N 90E	INTERFACE		11		CHERT	CORE FRAGMENTS	MAPPED
126	6N 90E	INTERFACE		1		CHERT	BIFACE FRAGMENT	MAPPED
126	6N 90E	INTERFACE		141		CHERT	FLAKES	MAPPED
126	6N 90E	INTERFACE		9		CHERT	UTILIZED FLAKES	MAPPED
126	6N 90E	INTERFACE		1	30.3	ROCK	FCR	MAPPED
127	6N 96E	INTERFACE		1		ROCK	HAMMERSTONE	TROWEL
127	6N 96E	INTERFACE		4		CHERT	CORE FRAGMENTS	TROWEL
127	6N 96E	INTERFACE		13		CHERT	BLOCKY FRAGMENTS	TROWEL
127	6N 96E	INTERFACE		54		CHERT	FLAKES	TROWEL
127	6N 96E	INTERFACE			907.2	ROCK	FCR	TROWEL
127	6N 96E	INTERFACE		1	9.9	ROCK	FCR	TROWEL
129	10N 92E	1		91		CHERT	FLAKES	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
129	10N 92E	1		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
129	10N 92E	1		1		CHERT	CORE FRAGMENT	1/4" SCREEN
129	10N 92E	1			226.8	ROCK	FCR	1/4" SCREEN
132	8N 94E	1		110		CHERT	FLAKES	1/4" SCREEN
132	8N 94E	1	1	1		CHERT	SPOKE SHAVER	1/4" SCREEN
135	8N 94E	2		17		CHERT	FLAKES	1/4" SCREEN
135	8N 94E	2		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
136	6N 102E	INTERFACE		1		CHERT	BLOCKY FRAGMENT	TROWEL
136	6N 102E	INTERFACE		10		CHERT	FLAKES	TROWEL
136	6N 102E	INTERFACE		5		CHERT	UTILIZED FLAKES	TROWEL
136	6N 102E	INTERFACE			1360.8	ROCK	FCR	TROWEL
137	6N 108E	INTERFACE		30		CHERT	FLAKES	1/4" SCREEN
137	6N 108E	INTERFACE		3		CHERT	UTILIZED FLAKES	1/4" SCREEN
138	8N 94E	3		3	106.9	ROCK	FCR	1/4" SCREEN
138	8N 94E	3		14		CHERT	FLAKES	1/4" SCREEN
142	10N 92E	2	STAIN 7	51		CHERT	FLAKES	1/4" SCREEN
142	10N 92E	2	STAIN 7	1		CHERT	CORE	1/4" SCREEN
142	10N 92E	2	STAIN 7	4		CHERT	UTILIZED FLAKES	1/4" SCREEN
143	6N 100E	1		2	113.6	ROCK	FCR	1/4" SCREEN
143	6N 100E	1		1		CHERT	WORKED FLAKE	1/4" SCREEN
143	6N 100E	l		137		CHERT	FLAKES	1/4" SCREEN
143	6N 100E	1		1		CHERT	UTILIZED CORE	1/4" SCREEN
143	6N 100E	1		1		CHERT	CORE	1/4" SCREEN
143	6N 100E	1		6		CHERT	UTILIZED FLAKES	1/4" SCREEN
148	4S 66E	7	1	1		CHERT	CRUDE BIFACE	1/4" SCREEN
148	4S 66E	7		9		CHERT	FLAKES	1/4" SCREEN
151	10N 100E	C-1		433		CHERT	FLAKES	1/4" SCREEN
151	10N 100E	C-1		12		CHERT	UTILIZED FLAKES	1/4" SCREEN
151	10N 100E	C-1		2	26.8	ROCK	FCR	1/4" SCREEN
153	6N 100E	2		39		CHERT	FLAKES	1/4" SCREEN
153	6N 100E	2		1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
153	6N 100E	2		1		CHERT	CORE FRAGMENT	1/4" SCREEN
153	6N 100E	2		1	46.8	ROCK	FCR	1/4" SCREEN
153	6N 100E	2		3		CHERT	UTILIZED FLAKES	1/4" SCREEN
154	4S 66E	8		2		CHERT	FLAKES	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
158	10N 92E	4	S-7	2	75.2	ROCK	FCR	1/4" SCREEN
158	10N 92E	4	S-7	32		CHERT	FLAKES	1/4" SCREEN
158	10N 92E	4	S-7	1		CHERT	CORE FRAGMENT	1/4" SCREEN
158	10N 92E	4	S-7	1		CHERT	UTILIZED FLAKE	1/4" SCREEN
160	6N 104E	1		59		CHERT	FLAKES	1/4" SCREEN
160	6N 104E	1		5		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
160	6N 104E	1		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
161	10N 92E	1		2		CHERT	CORES	1/4" SCREEN
161	10N 92E	1		22		CHERT	FLAKES	1/4" SCREEN
161	10N 92E	1		4	154.3	ROCK	FCR	1/4" SCREEN
161	10N 92E	1		5		CHERT	UTILIZED FLAKES	1/4" SCREEN
163	10N 92E	2		17		CHERT	FLAKES	1/4" SCREEN
166	6N 104E	2		49		CHERT	FLAKES	1/4" SCREEN
166	6N 104E	2		2	30.3	ROCK	FCR	1/4" SCREEN
167	6N 108E	1		139		CHERT	FLAKES	1/4" SCREEN
167	6N 108E	1		10		CHERT	UTILIZED FLAKES	1/4" SCREEN
170	6N 104E	3		17		CHERT	FLAKES	1/4" SCREEN
170	6N 104E	3		1		CHERT	CORE FRAGMENT	1/4" SCREEN
172	10N 92E	3		7		CHERT	FLAKES	1/4" SCREEN
172	10N 92E	3		1		CHERT	CORE FRAGMENT	1/4" SCREEN
174	10N 92E	2		1		CHERT	FLAKE	MAPPED
175	10N 92E	3		1		CHERT	FLAKE	MAPPED
176	6N 108E		STAIN 8	7		CHERT	FLAKES	1/4" SCREEN
177	10N 92E	3		1		CHERT	FLAKE	MAPPED
179	10N 92E	4		1		CHERT	FLAKE	1/4" SCREEN
180	6N 108E	2		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
180	6N 1008E	2		10		CHERT	FLAKES	1/4" SCREEN
183	TRENCH 4E			101		CHERT	FLAKES	HAND
183	TRENCH 4E			1		IRON	SQUARE NAIL	HAND
183	TRENCH 4E			2		CHERT	CRUDE BIFACES	HAND
183	TRENCH 4E				453.6	ROCK	FCR	HAND
183	TRENCH 4E			5		CHERT	UTILIZED FLAKES	HAND
184	SCATTER A	BASE OF PZ		49		CHERT	FLAKES	SURFACE
184	SCATTER A	BASE OF PZ		1	21.9	ROCK	FCR	SURFACE
184	SCATTER A	BASE OF PZ		2		CHERT	CRUDE BIFACES	SURFACE

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
184	SCATTER A	BASE OF PZ		29		CHERT	UTILIZED FLAKES	SURFACE
184	SCATTER A	BASE OF PZ		2		CHERT	UTILIZED CORE	SURFACE
185	BACKDIRT			1		GLASS	GREEN WINE BOTTLE	SURFACE
185	BACKDIRT			1		GLASS	AMETHYST GLASS	SURFACE
185	BACKDIRT			1		GLASS	CLEAR GLASS	SURFACE
185	BACKDIRT			1		GLASS	AQUA GLASS	SURFACE
185	BACKDIRT			1		IRON	SPIKE	SURFACE
185	BACKDIRT			1		BRICK		SURFACE
185	BACKDIRT			2		STONEWARE		SURFACE
185	BACKDIRT			3		CERAMIC	UNDECORATED WHITEWARE	SURFACE
185	BACKDIRT			2		CHERT	DRILLS	SURFACE
185	BACKDIRT			7		CHERT	KNIVES/FRAGMENTS	SURFACE
185	BACKDIRT			20		CHERT	POINTS/FRAGMENTS	SURFACE
185	BACKDIRT			50		CHERT	BIFACES	SURFACE
185	BACKDIRT			63		CHERT	CORES/FRAGMENTS	SURFACE
185	BACKDIRT			13		CHERT	UTILIZED CORES	SURFACE
185	BACKDIRT			1		QUARTZITE	CORE	SURFACE
185	BACKDIRT			194		CHERT	UTILIZED FLAKES	SURFACE
185	BACKDIRT			5		ROCK	HAMMERSTONES	SURFACE
185	BACKDIRT			1		SLATE	FRAGMENT	SURFACE
185	BACKDIRT			385		CHERT	FLAKES	SURFACE
186	PLOWZONE			1		CHERT	PROJECTILE POINT	SURFACE
187	TRENCH 1E	BASE OF PZ		6		CHERT	CORE FRAGMENTS	SURFACE
187	TRENCH 1E	BASE OF PZ		11		CHERT	BLOCKY FRAGMENTS	SURFACE
187	TRENCH IE	BASE OF PZ		46		CHERT	FLAKES	SURFACE
187	TRENCH 1E	BASE OF PZ		1		CHERT	BIFACE FRAGMENTS	SURFACE
187	TRENCH 1E	BASE OF PZ		1		ROCK	HAMMERSTONE	SURFACE
188	TRENCH 3E	BASE OF PZ		3		CHERT	CORES	SURFACE
188	TRENCH 3E	BASE OF PZ		88		CHERT	FLAKES	SURFACE
188	TRENCH 3E	BASE OF PZ		5		GLASS	COKE BOTTLE	SURFACE
188	TRENCH 3E	BASE OF PZ		9		CHERT	UTILIZED FLAKES	SURFACE
188	TRENCH 3E	BASE OF PZ		1		CHERT	BIFACE	SURFACE
189	TRENCH 5E	BASE OF PZ		2		CHERT	FLAKE	SURFACE
190	TRENCH 5E	BASE OF PZ		1	56.9	ROCK	FCR	HAND
190	TRENCH 5E	BASE OF PZ		3		CHERT	CORES	HAND

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
190	TRENCH 5E	BASE OF PZ		11		CHERT	UTILIZED FLAKES	HAND
190	TRENCH 5E	BASE OF PZ		1		CHERT	BIFACE FRAGMENT	HAND
190	TRENCH 5E	BASE OF PZ		1		SHELL	MUSSEL	HAND
190	TRENCH 5E	BASE OF PZ		1		BONE	BURNED BONE	HAND
190	TRENCH 5E	BASE OF PZ		1		CLAY	PREHISTORIC POTTERY	HAND
191	TRENCH 2E	BASE OF PZ		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
191	TRENCH 2E	BASE OF PZ		16		CHERT	FLAKES	1/4" SCREEN
192		SUBPLOWZONE		2		CHERT	CORES	SURFACE
192		SUBPLOWZONE		13		CHERT	FLAKES	SURFACE
192		SUBPLOWZONE		1	27.7	ROCK	FCR	SURFACE
192		SUBPLOWZONE		8		CHERT	UTILIZED FLAKES	SURFACE
193	TRENCH 5E	BASE OF A2		5		CHERT	CORE FRAGMENTS	MAPPED
193	TRENCH 5E	BASE OF A2		1	103.9	ROCK	FCR	MAPPED
193	TRENCH 5E	BASE OF A2		1		CHERT	UTILIZED CORE	MAPPED
193	TRENCH 5E	BASE OF A2		1		CHERT	FLAKE	MAPPED
194	TRENCH 3E	PROFILE		56		CHERT	FLAKES	1/4" SCREEN
194	TRENCH 3E	PROFILE		1		CHERT	BIFACE	1/4" SCREEN
194	TRENCH 3E	PROFILE		1		METAL	UNIDENTIFIED	1/4" SCREEN
194	TRENCH 3E	PROFILE		1		CHERT	CORE	1/4" SCREEN
194	TRENCH 3E	PROFILE		21		CHERT	UTILIZED FLAKES	1/4" SCREEN
195	TRENCH 2E	PROFILE		3	18	ROCK	FCR	1/4" SCREEN
195	TRENCH 2E	PROFILE		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
195	TRENCH 2E	PROFILE		26		CHERT	FLAKES	1/4" SCREEN
195	TRENCH 2E	PROFILE		17		CHERT	UTILIZED FLAKE	1/4" SCREEN
196	TRENCH 5E	PROFILE		1		ROCK	PITTED STONE	MAPPED
196	TRENCH 5E	PROFILE		1		GRANITE	UNMODIFIED	MAPPED
197	TRENCH 5E	PROFILE		1		GLASS	PEPSI BOTTLE	TROWEL
198	10N 100E	1		1	1	ROCK	FCR	1/4" SCREEN
198	10N 100E	1		64		CHERT	FLAKES	1/4" SCREEN
198	10N 100E	1		2		CHERT	UTILIZED FLAKES	1/4" SCREEN
199	10N 100E	1		5		CHERT	CORES	MAPPED
199	10N 100E	11		5		CHERT	UTILIZED CORES	MAPPED
199	10N 100E	1		3		CHERT	BLOCKY FRAGMENTS	MAPPED
199	10N 100E	11		11		CHERT	FLAKES	MAPPED
199	10N 100E	1		3		CHERT	UTILIZED FLAKES	MAPPED

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
199	10N 100E	1		10	1091.7	ROCK	FCR	MAPPED
201	10N 100E	2		1	14	ROCK	FCR	1/4" SCREEN
201	10N 100E	2		136		CHERT	FLAKES	1/4" SCREEN
202	10N 100E	BASE OF 2		2		ROCK	FCR	MAPPED
205	10N 100E	3		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
205	10N 100E	3		58		CHERT	FLAKES	1/4" SCREEN
207	10N 100E	4		2	87.4	ROCK	FCR	1/4" SCREEN
207	10N 100E	4		1		MICA	FLAKE	1/4" SCREEN
207	10N 100E	4		2		SHELL		1/4" SCREEN
207	10N 100E	4		12		CHERT	CORE FRAGMENTS	1/4" SCREEN
207	10N 100E	4		7		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
207	10N 100E	4		243		CHERT	FLAKES	1/4" SCREEN
207	10N 100E	4		1		CHERT	SCRAPER	1/4" SCREEN
207	10N 100E	4		1		CHERT	WORKED FLAKE	1/4" SCREEN
208	6N 108E	PROFILE		34		CHERT	FLAKES	1/4" SCREEN
210	6N 108E	2		25		CHERT	FLAKES	1/4" SCREEN
210	6N 108E	2		1		CHERT	CORE	1/4" SCREEN
210	6N 108E	2		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
211	6N 108E	3		2		CHERT	FLAKES	1/4" SCREEN
214	10N 100E		STAIN 9	49		CHERT	FLAKES	1/4" SCREEN
214	10N 100E		STAIN 9	1	15	ROCK	FCR	1/4" SCREEN
216	10N 100E		S-9	4		CHERT	BLOCKY FRAGMENTS	MAPPED
216	10N 100E		S-9		907.2	ROCK	FCR	MAPPED
219	10N 92E	PROFILE		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
219	10N 92E	PROFILE		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
219	10N 92E	PROFILE		1	70.4	ROCK	FCR	1/4" SCREEN
219	10N 92E	PROFILE		88		CHERT	FLAKES	1/4" SCREEN
220	6N 108E	4		3		CHERT	FLAKES	1/4" SCREEN
222	10N 92E		STAIN 1	1		CHERT	CORE	1/4" SCREEN
222	10N 92E	4	STAIN 1	31		CHERT	FLAKES	1/4" SCREEN
222	10N 92E	4	STAIN 1	6		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
222	10N 92E	4	STAIN 1	1		SLATE	FRAGMENT	1/4" SCREEN
222	10N 92E	4	STAIN 1		113.4	ROCK	FCR	1/4" SCREEN
225	5S 84E	2		1		GLASS	CLEAR BOTTLE BASE	1/4" SCREEN
226	5S 84E	3		9	100.3	ROCK	FCR	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	ОВЈЕСТ	COLLECTION
226	5S 84E	3		1		CHERT	CORE	1/4" SCREEN
226	5S 84E	3		1		CHERT	CORE FRAGMENT	1/4" SCREEN
226	5S 84E	3		5		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
226	5S 84E	3		27		CHERT	FLAKES	1/4" SCREEN
226	5S 84E	3		1		METAL	UNIDENTIFIED	1/4" SCREEN
229	55N 84E	4		3		BONE		1/4" SCREEN
229	55N 84E	4		172		CHERT	FLAKES	1/4" SCREEN
229	55N 84E	4		22		CHERT	UTILIZED FLAKES	1/4" SCREEN
229	55N 84E	4		1		CHERT	CORE	1/4" SCREEN
229	55N 84E	4		9	160.5	ROCK	FCR	1/4" SCREEN
229	55N 84E	4		1		SLATE	FRAGMENT	1/4" SCREEN
229	55N 84E	4		3		CERAMIC	UNDECORATED WHITEWARE	1/4" SCREEN
229	55N 84E	4		15		GLASS	FRAGMENTS	1/4" SCREEN
229	55N 84E	4		6		METAL	CAN FRAGMENTS	1/4" SCREEN
229	55N 84E	4		31		METAL	FRAGMENTS	1/4" SCREEN
229	55N 84E	4		1		ALUMINUM	BAR FRAGMENT	1/4" SCREEN
230	5S 84E	BASE OF 4		1		CHERT	CORE FRAGMENT	MAPPED
230	5S 84E	BASE OF 4		4		CHERT	BLOCKY FRAGMENT	MAPPED
230	5S 84E	BASE OF 4		4		CHERT	FLAKES	MAPPED
230	5S 84E	BASE OF 4			1360.8	ROCK	FCR	MAPPED
232	5S 84E	5		1		GLASS	AQUA HAND BLOWN	1/4" SCREEN
232	5S 84E	5		3		BONE	BURNED BONE	1/4" SCREEN
232	5S 84E	5		3		CHERT	CORE FRAGMENTS	1/4" SCREEN
232	5S 84E	5		16		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
232	5S 84E	5	T	310		CHERT	FLAKES	1/4" SCREEN
232	5S 84E	5		1		IRON	NAIL	1/4" SCREEN
232	5S 84E	5		1		IRON	STAPLE	1/4" SCREEN
232	5S 84E	5		19	628.3	ROCK	FCR	1/4" SCREEN
233	5S 84E	BASE OF 5		5		CHERT	BLOCKY FRAGMENTS	MAPPED
233	5S 84E	BASE OF 5		5		CHERT	FLAKES	MAPPED
233	5S 84E	BASE OF 5			3402	ROCK	FCR	MAPPED
235	5S 84E	6		9	273.6	ROCK	FCR	1/4" SCREEN
235	5S 84E	6		9		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
235	5S 84E	6		242		CHERT	FLAKES	1/4" SCREEN
235	5S 84E	6		1		IRON	NAIL	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
235	5S 84E	6		1		UNIDENTIFIED		1/4" SCREEN
237	5S 84E	6		1		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
238	5S 84E	6		2		CHERT	CORE FRAGMENTS	MAPPED
238	5S 84E	6		5		CHERT	FLAKES	MAPPED
238	5S 84E	6	T	1		CHERT	WORKED FLAKE	MAPPED
238	5S 84E	6		1		GLASS	VESSEL	MAPPED
238	5S 84E	6			1134	ROCK	FCR	MAPPED
240	5S 84E	7		1		CHERT	CORE FRAGMENT	1/4" SCREEN
240	5S 84E	7		5		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
240	5S 84E	7		112		CHERT	FLAKES	1/4" SCREEN
240	5S 84E	7		1		CHERT	WORKED FLAKE	1/4" SCREEN
240	5S 84E	7		3		CHERT	UTILIZED FLAKE	1/4" SCREEN
240	5S 84E	7		2		ROCK	FCR	1/4" SCREEN
240	5S 84E	7		2		GLASS	CLEAR VESSEL	1/4" SCREEN
241	5S 84E	7			1360.8	ROCK	FCR	1/4" SCREEN
242	5S 84E	7		1		CHERT	BIFACE	TROWEL
242	5S 84E	7		2		CHERT	FLAKES	TROWEL
244	5S 84E	8		46		CHERT	FLAKES	1/4" SCREEN
244	5S 84E	8		5		CHERT	UTILIZED FLAKES	1/4" SCREEN
244	5S 84E	8			907.2	ROCK	FCR	1/4" SCREEN
244	5S 84E	8		1		SLAG		1/4" SCREEN
245	5S 84E	8		1	60.5	ROCK	FCR	MAPPED
245	5S 84E	8		1		CHERT	CORE FRAGMENT	MAPPED
245	5S 84E	8		3		CHERT	FLAKES	MAPPED
245	5S 84E	8		2		CHERT	CORE FRAGMENTS	MAPPED
246	5S 84E	9		28		CHERT	FLAKES	1/4" SCREEN
248	TRENCH 1E	PROFILE		1		WHITE CLAY	PIPE STEM	TROWEL
250	5S 84E	10		2	145	ROCK	FCR	1/4" SCREEN
250	5S 84E	10		11		CHERT	FLAKES	1/4" SCREEN
251	16N 6E	TOP OF 1		2	59.2	ROCK	FCR	1/4" SCREEN
251	16N 6E	TOP OF 1		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
251	16N 6E	TOP OF 1		46		CHERT	FLAKES	1/4" SCREEN
252	16N 6E	1		32		CHERT	FLAKES	1/4" SCREEN
252	16N 6E	1		1	22.2	ROCK	FCR	1/4" SCREEN
253	6S 108E	TOP OF 1		3	64.3	ROCK	FCR	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
253	6S 108E	TOP OF 1		34		CHERT	FLAKES	1/4" SCREEN
253	6S 108E	TOP OF 1		1		CERAMIC	UNDECORATED WHITEWARE	1/4" SCREEN
253	6S 108E	TOP OF 1		2		PLASTIC		1/4" SCREEN
253	6S 108E	TOP OF 1		37		GLASS	CLEAR VESSEL	1/4" SCREEN
253	6S 108E	TOP OF 1		2		GLASS	LIGHT GREEN GLASS	1/4" SCREEN
253	6S 108E	TOP OF 1		2		GLASS	DARK GREEN GLASS	1/4" SCREEN
253	6S 108E	TOP OF 1		1		ALUMINUM		1/4" SCREEN
253	6S 108E	TOP OF 1		1		METAL	FRAGMENT	1/4" SCREEN
255	6S 108E	1		1		GLASS	COKE BOTTLE	1/4" SCREEN
255	6S 108E	1		14	306.4	ROCK	FCR	1/4" SCREEN
255	6S 108E	1		9		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
255	6S 108E	1		237		CHERT	FLAKES	1/4" SCREEN
255	6S 108E	1		1		CHERT	SPOKE SHAVER	1/4" SCREEN
255	6S 108E	1		1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
255	6S 108E	1		62		GLASS	GREEN GLASS	1/4" SCREEN
255	6S 108E	1		19		GLASS	CLEAR GLASS	1/4" SCREEN
255	6S 108E	i		1		COAL		1/4" SCREEN
255	6S 108E	1		1			1978 PENNY	1/4" SCREEN
255	6S 108E	1		1		PLASTIC		1/4" SCREEN
255	6S 108E	1		1		CLAY	PIGEON FRAGMENT	1/4" SCREEN
255	6S 108E	1		1		METAL	HINGE	1/4" SCREEN
257	6S 108E	2		245		CHERT	FLAKES	1/4" SCREEN
257	6S 108E	2		8	296.2	ROCK	FCR	1/4" SCREEN
257	6S 108E	2		54		GLASS	FRAGMENTS	1/4" SCREEN
257	6S 108E	2		25		METAL	FRAGMENTS	1/4" SCREEN
257	6S 108E	2		3		PLASTIC		1/4" SCREEN
257	6S 108E	2		1		CHERT	SPOKE SHAVER	1/4" SCREEN
258	FALLEN TREE	SOUTH OF US 24		1		CHERT	CORE	TROWEL
258	FALLEN TREE	SOUTH OF US 24		3		COBBLES		TROWEL
258	FALLEN TREE	SOUTH OF US 24		4		CHERT	BIFACE FRAGMENTS	TROWEL
258	FALLEN TREE	SOUTH OF US 24		15		CHERT	FLAKES	TROWEL
258	FALLEN TREE	SOUTH OF US 24		1		CHERT	PREFORM	TROWEL
258	FALLEN TREE	SOUTH OF US 24		2		CHERT	BIFACE FRAGMENTS	TROWEL
258	FALLEN TREE	SOUTH OF US 24		3		CHERT	BLOCKY FRAGMENTS	TROWEL
258	FALLEN TREE	SOUTH OF US 24		1		METAL	BOLT	TROWEL

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
258	FALLEN TREE	SOUTH OF US 24		1		CERAMIC	BLUE TRANSFER PRINT	TROWEL
260	6S 108E	3		1		STONE	HAMMER/GRINDING	1/4" SCREEN
260	6S 108E	3		2		CHERT	BIFACES	1/4" SCREEN
260	6S 108E	3		5		CHERT	UTILIZED FLAKES	1/4" SCREEN
260	6S 108E	3		11		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
260	6S 108E	3		1		SLATE	FLAKED FRAGMENT	1/4" SCREEN
260	6S 108E	3		486		CHERT	FLAKES	1/4" SCREEN
260	6S 108E	3		4	269.3	ROCK	FCR	1/4" SCREEN
260	6S 108E	3		48		GLASS	FLAT GLASS	1/4" SCREEN
260	6S 108E	3		1		GLASS	BROWN BOTTLE	1/4" SCREEN
260	6S 108E	3		1		GLASS	CLEAR BOTTLE	1/4" SCREEN
260	6S 108E	3		1		BRICK		1/4" SCREEN
260	6S 108E	3		2		GLASS	GREEN BOTTLE	1/4" SCREEN
260	6S 108E	3		1		CERAMIC	UNDECORATED WHITEWARE	1/4" SCREEN
260	6S 108E	3		1		GLASS	BUTTON	1/4" SCREEN
260	6S 108E	3		1		PLASTIC	BRAKE LIGHT FRAG	1/4" SCREEN
262	5.5 S 40E	1		1		GLASS	GREEN BOTTLE	1/4" SCREEN
262	5.5 S 40E	1		41		GLASS	CLEAR BOTTLE	1/4" SCREEN
262	5.5S 40E	1		7		GLASS	HEADLIGHT FRAGS	1/4" SCREEN
262	5.5S 40E	1		1		GLASS	FLAT GLASS	1/4" SCREEN
262	5.5S 40E	1		15		GLASS	BEER BOTTLE FRAGS	1/4" SCREEN
262	5.5S 40E	1		1		STEEL	SPRITE CAN	1/4" SCREEN
262	5.5S 40E	1		1		METAL	PABST CAN TOP	1/4" SCREEN
262	5.5S 40E	1		1		METAL	BOLT & WASHER	1/4" SCREEN
262	5.5S 40E	1		1		METAL	UNIDENTIFIED	1/4" SCREEN
262	5.5S 40E	1		12		METAL	FRAGMENTS	1/4" SCREEN
262	5.5S 40E	1		1		ALUMINUM	FRAGMENT	1/4" SCREEN
262	5.5S 40E	1		5		PLASTIC	FRAGMENTS	1/4" SCREEN
262	5.5S 40E	11		1		PLASTIC	CAR LIGHT	1/4" SCREEN
262	5.5S 40E	1		1		RUBBER	O RING	1/4" SCREEN
262	5.5S 40E	1		1		RUBBER	TIRE FRAGMENT	1/4" SCREEN
262	5.5S 40E	1		1		WOOD	FRAGMENT	1/4" SCREEN
262	5.5S 40E	11		3		BONE		1/4" SCREEN
262	5.5S 40E	11		147		CHERT	FLAKES	1/4" SCREEN
262	5.5S 40E	1		14		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
262	5.5S 40E	1		3		CORTEX		1/4" SCREEN
262	5.5S 40E	1		11	238.5	ROCK	FCR	1/4" SCREEN
262	5.5S 40E	1		7		CHERT	CORE FRAGMENTS	1/4" SCREEN
262	5.5S 40E	1		2		CHERT	GRAVERS	1/4" SCREEN
263	5.5S 40E	TOP OF 1		1		TIN	FRAGMENT	1/4" SCREEN
263	5.5S 40E	TOP OF 1		1		METAL	UNIDENTIFIED	1/4" SCREEN
263	5.5S 40E	TOP OF 1		6		GLASS	CLEAR VESSEL	1/4" SCREEN
263	5.5S 40E	TOP OF 1		3	60.4	ROCK	FCR	1/4" SCREEN
263	5.5S 40E	TOP OF 1		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
263	5.5S 40E	TOP OF 1		35		CHERT	FLAKES	1/4" SCREEN
265	6S 108E	4		1		GLASS	CLEAR BOTTLE FRAGMENT	1/4" SCREEN
265	6S 108E	4		8		GLASS	LIGHT GREEN GLASS	1/4" SCREEN
265	6S 108E	4		2		CHERT	PROJECTILE POINT	1/4" SCREEN
265	6S 108E	4		10	1310.1	ROCK	FCR	1/4" SCREEN
265	6S 108E	4		10		CHERT	UTILIZED FLAKES	1/4" SCREEN
265	6S 108E	4		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
265	6S 108E	4		252		CHERT	FLAKES	1/4" SCREEN
265	6S 108E	4		1		SLATE	FLAKE	1/4" SCREEN
265	6S 108E	4		1		ROCK	HAMMERSTONE	1/4" SCREEN
265	6S 108E	4		1		CHERT	BIFACE	1/4" SCREEN
265	6S 108E	4		1		CHERT	PROJECTILE POINT	1/4" SCREEN
266	6S 108E	4		1		CHERT	CORE	MAPPED
268	6S 108E	5		1		ROCK	HAMMERSTONE	1/4" SCREEN
268	6S 108E	5		2		CHERT	CRUDE BIFACE	1/4" SCREEN
268	6S 108E	5		6		CHERT	UNMODIFIED	1/4" SCREEN
268	6S 108E	5		277		CHERT	FLAKES	1/4" SCREEN
268	6S 108E	5		2		SLATE	FLAKES	1/4" SCREEN
268	6S 108E	5		26		CHERT	UTILIZED FLAKES	1/4" SCREEN
268	6S 108E	5		17	570.5	ROCK	FCR	1/4" SCREEN
270	5.5S 40E	2		11	118.8	ROCK	FCR	1/4" SCREEN
270	5.5S 40E	2		537		CHERT	FLAKES	1/4" SCREEN
270	5.5S 40E	2		1		QUARTZITE	FLAKE	1/4" SCREEN
270	5.5S 40E	2		4		CHERT	CORE FRAGMENT	1/4" SCREEN
270	5.5S 40E	2		1		CHERT	PROJECTILE POINT	1/4" SCREEN
270	5.5S 40E	2		1		CHERT	BIFACE FRAGMENT	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
270	5.5S 40E	2		8		BONE		1/4" SCREEN
270	5.5S 40E	2		41		GLASS	CLEAR GLASS	1/4" SCREEN
270	5.5S 40E	2		2		GLASS	LIGHT GREEN GLASS	1/4" SCREEN
270	5.5S 40E	2		1		BAKELITE		1/4" SCREEN
270	5.5S 40E	2		1		IRON	NAIL	1/4" SCREEN
270	5.5S 40E	2		58		CHERT	UTILIZED FLAKES	1/4" SCREEN
270	5.5S 40E	2			2041.2	ROCK	FCR	1/4" SCREEN
272	6S 108E	6		2	5.5	ROCK	FCR	1/4" SCREEN
272	6S 108E	6		116		CHERT	FLAKES	1/4" SCREEN
272	6S 108E	6		1		UNIDENTIFIED		1/4" SCREEN
272	6S 108E	6		8		CHERT	UTILIZED FLAKES	1/4" SCREEN
274	5.5S 40E	3		1		GLASS	FLAT GLASS	1/4" SCREEN
274	5.5S 40E	3		4		GLASS	CLEAR BOTTLE	1/4" SCREEN
274	5.5S 40E	3		2		IRON	SQUARE NAILS	1/4" SCREEN
274	5.5S 40E	3		1		IRON	ROUND NAIL	1/4" SCREEN
274	5.5S 40E	3		1		GLASS	BEER BOTTLE	1/4" SCREEN
274	5.5S 40E	3		1		TILE		1/4" SCREEN
274	5.5S 40E	3		434		CHERT	FLAKES	1/4" SCREEN
274	5.5S 40E	3		6		CHERT	CORE	1/4" SCREEN
274	5.5S 40E	3		34		CHERT	UTILIZED FLAKE	1/4" SCREEN
274	5.5S 40E	3			5670	ROCK	FCR	1/4" SCREEN
274	5.5S 40E	3		1		CHERT	POINT BASE	1/4" SCREEN
274	5.5S 40E	3		1		CHERT	PROJECTILE POINT	1/4" SCREEN
274	5.5S 40E	3		1		CHERT	WORKED FLAKE	1/4" SCREEN
274	6S 75E	1		1		CHERT	FLAKE	1/4" SCREEN
274	5.5S 40E	3		2	17	ROCK	FCR	1/4" SCREEN
276	6S 75E	1		1		CHERT	FLAKE	1/4" SCREEN
278	6S 75E	2		6		PLASTIC		1/4" SCREEN
278	6S 75E	2		2		RIBBON	CASSETTE TAPE	1/4" SCREEN
278	6S 75E	2		1		STYROFOAM		1/4" SCREEN
278	6S 75E	2		1		ALUMINUM		1/4" SCREEN
278	6S 75E	2		1		WOOD	FRAGMENT	1/4" SCREEN
278	6S 75E	2		1		METAL	WIRE	1/4" SCREEN
278	6S 75E	2		2		METAL	UNIDENTIFIED	1/4" SCREEN
278	6S 75E	2		1		METAL	FUEL CAP	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
280	5.5S 40E	4		1		IRON	NAIL	1/4" SCREEN
280	5.5S 40E	4		1		GLASS	WINDOW GLASS	1/4" SCREEN
280	5.5S 40E	4		3		CHERT	BIFACE FRAGMENTS	1/4" SCREEN
280	5.5S 40E	4		2		CHERT	CORES	1/4" SCREEN
280	5.5S 40E	4		1		ROCK	HAMMERSTONE	1/4" SCREEN
280	5.5S 40E	4		380		CHERT	FLAKES	1/4" SCREEN
280	5.5S 40E	4			1814.4	ROCK	FCR	1/4" SCREEN
280	5.5S 40E	4		14		CHERT	UTILIZED FLAKE	1/4" SCREEN
280	5.5S 40E	4		1	48.7	ROCK	FCR	1/4" SCREEN
282	6S 75E	3		4		METAL	UNIDENTIFIED	1/4" SCREEN
282	6S 75E	3		2		IRON	HINGES	1/4" SCREEN
282	6S 75E	3		1		CHERT	FLAKE	1/4" SCREEN
284	6S 75E	4		1		GLASS	AQUA GLASS FRAGMENT	1/4" SCREEN
284	6S 75E	4		1		GLASS	CLEAR BOTTLE FRAGMENT	1/4" SCREEN
284	6S 75E	4		3		GLASS	BEER BOTTLE	1/4" SCREEN
284	6S 75E	4		3		METAL	FRAGMENTS	1/4" SCREEN
284	6S 75E	4		1		METAL	SPARK PLUG	1/4" SCREEN
284	6S 75E	4		1		PLASTIC		1/4" SCREEN
284	6S 75E	4		2		UNIDENTIFIED		1/4" SCREEN
284	6S 75E	4		1		CHERT	FLAKE	1/4" SCREEN
286	5.5S 40E	5		2		METAL	BARBED WIRE	1/4" SCREEN
286	5.5S 40E	5			4082.4	ROCK	FCR	1/4" SCREEN
286	5.5S 40E	5		163		CHERT	FLAKES	1/4" SCREEN
286	5.5S 40E	5		1		CHERT	BIFACE	1/4" SCREEN
286	5.5S 40E	5		1		SHELL	SNAIL SHELL	1/4" SCREEN
286	5.5S 40E	5		9		CHERT	UTILIZED FLAKES	1/4" SCREEN
286	5.5S 40E	5		3	38.6	ROCK	FCR	1/4" SCREEN
288	6S 75E	5		11		CHERT	FLAKES	1/4" SCREEN
288	6S 75E	5		1		CHERT	CORE	1/4" SCREEN
288	6S 75E	5		1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
288	6S 75E	5		1		ROCK	FCR	1/4" SCREEN
288	6S 75E	5		3		GLASS	CLEAR GLASS	1/4" SCREEN
288	6S 75E	5		3		GLASS	BROWN GLASS	1/4" SCREEN
288	6S 75E	5		1		GLASS	GREEN GLASS	1/4" SCREEN
288	6S 75E	5		3		IRON	NAILS	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
288	6S 75E	5		7		METAL	FRAGMENTS	1/4" SCREEN
288	6S 75E	5		2		METAL	PLATE HINGES	1/4" SCREEN
288	6S 75E	5		1		METAL	CAN FRAGMENT	1/4" SCREEN
288	6S 75E	5		2		PLASTIC	FRAGMENTS	1/4" SCREEN
288	6S 75E	5		3		CHERT	UTILIZED FLAKES	1/4" SCREEN
290	5.5S 40E	6		1		GLASS	BEER BOTTLE	1/4" SCREEN
290	5.5S 40E	6		1		CARBON	SAMPLE	1/4" SCREEN
290	5.5S 40E	6		3		CHERT	CORE FRAGMENTS	1/4" SCREEN
290	5.5S 40E	6		2		CHERT	UNMODIFIED	1/4" SCREEN
290	5.5S 40E	6		126		CHERT	FLAKES	1/4" SCREEN
290	5.5S 40E	6		1		CHERT	BIFACE FRAGMENTS	1/4" SCREEN
290	5.5S 40E	6		4		CHERT	UTILIZED FLAKES	1/4" SCREEN
292	6S 75E	6		1		PLASTIC	CIGAR FILTER	1/4" SCREEN
292	6S 75E	6		12		PLASTIC		1/4" SCREEN
292	6S 75E	6		1		METAL	BOLT	1/4" SCREEN
292	6S 75E	6		1		METAL	WIRE	1/4" SCREEN
292	6S 75E	6		2		METAL	CAN TOPS/BOTTOMS	1/4" SCREEN
292	6S 75E	6		1		METAL	UNIDENTIFIED	1/4" SCREEN
292	6S 75E	6		13		METAL	FRAGMENTS	1/4" SCREEN
292	6S 75E	6		1		GLASS	LIGHT GREEN GLASS	1/4" SCREEN
292	6S 75E	6		1		GLASS	RED GLASS	1/4" SCREEN
292	6S 75E	6		3	253.1	ROCK	FCR	1/4" SCREEN
292	6S 75E	6		74		CHERT	FLAKES	1/4" SCREEN
292	6S 75E	6		1		QUARTZ	SHATTER	1/4" SCREEN
292	6S 75E	6		1		CHERT	CORE FRAGMENT	1/4" SCREEN
292	6S 75E	6		3		CHERT	BIFACE FRAGMENTS	1/4" SCREEN
292	6S 75E	6		1		SLATE	FRAGMENT	1/4" SCREEN
292	6S 75E	6		4		CHERT	UTILIZED FLAKES	1/4" SCREEN
294	5.5S 40E	7		48		CHERT	FLAKES	1/4" SCREEN
294	5.5S 40E	7		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
294	5.5S 40E	7		3		CHERT	CORE FRAGMENTS	1/4" SCREEN
294	5.5S 40E	7		1		CARBON	SAMPLE	1/4" SCREEN
296	5.5S 40E	8		1		CHERT	GRAVER	1/4" SCREEN
296	5.5S 40E	8		25		CHERT	FLAKES	1/4" SCREEN
296	5.5S 40E	8		1		CARBON	SAMPLE	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
298	6S 75E	7		4		PLASTIC		1/4" SCREEN
298	6S 75E	7		3		METAL	POP CAN FRAGMENTS	1/4" SCREEN
298	6S 75E	7		1		METAL	UNIDENTIFIED	1/4" SCREEN
298	6S 75E	7		4		GLASS	BEER BOTTLE FRAGS	1/4" SCREEN
298	6S 75E	7		7		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
298	6S 75E	7		31		CHERT	FLAKES	1/4" SCREEN
298	6S 75E	7		1		CHERT	CORE FRAGMENT	1/4" SCREEN
298	6S 75E	7		1		CHERT	UNMODIFIED	1/4" SCREEN
299	6S 75E	7			453.6	ROCK	FCR	1/4" SCREEN
300	6S 75E	7		2		CHERT	CORES	MAPPED
300	6S 75E	7		3		CHERT	FLAKES	MAPPED
301	6S 75E	7			113.4	ROCK	FCR	MAPPED
302	6S 75E	7		1		IRON	NAIL	MAPPED
302	6S 75E	7		1		IRON	BARBED WIRE	MAPPED
302	6S 75E	7		1		METAL	FRAGMENT	MAPPED
303	6S 75E	7		1		GLASS	CLEAR FLAT GLASS	MAPPED
303	6S 75E	7		1		GLASS	CLEAR VESSEL	MAPPED
304	6S 75E	8		1		GLASS	RED CAR LIGHT	1/4" SCREEN
304	6S 75E	8		1		GLASS	BROWN BOTTLE	1/4" SCREEN
304	6S 75E	8		4		GLASS	FLAT GLASS	1/4" SCREEN
304	6S 75E	8		26		GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN
304	6S 75E	8		2		METAL	WIRE	1/4" SCREEN
304	6S 75E	8		1		METAL	CAP	1/4" SCREEN
304	6S 75E	8		1			PIPE SECTION	1/4" SCREEN
304	6S 75E	8		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
304	6S 75E	8		39		CHERT	FLAKES	1/4" SCREEN
304	6S 75E	8		1		CHERT	PREFORM	1/4" SCREEN
304	6S 75E	8		1		CHERT	SCRAPER	1/4" SCREEN
304	6S 75E	8		4		CHERT	UTILIZED FLAKES	1/4" SCREEN
304	6S 75E	8		3	109.7	ROCK	FCR	1/4" SCREEN
307	7S 20E	TOP OF 1		23		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
307	7S 20E	TOP OF 1		11		CHERT	FLAKES	1/4" SCREEN
307	7S 20E	TOP OF 1		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
307	7S 20E	TOP OF 1			226.8	ROCK	FCR	1/4" SCREEN
307	7S 20E	TOP OF 1		9		METAL	UNIDENTIFIED	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
307	7S 20E	TOP OF 1		2		PLASTIC		1/4" SCREEN
308	6S 75E	BASE OF 7		1		METAL	UNIDENTIFIED	MAPPED
309	6S 75E	8		1		METAL	FENCE POST	MAPPED
309	6S 75E	8		2		GLASS	BOTTLE FRAGMENT	MAPPED
311	7S 20E	1		6		METAL	POP CAN FRAGMENTS	1/4" SCREEN
311	7S 20E	1		1			SHOE HEEL FRAGMENT	1/4" SCREEN
311	7S 20E	1		6		METAL	FRAGMENTS	1/4" SCREEN
311	7S 20E	1		8		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
313	7S 20E	2		2		METAL	BOTTLE CAPS	1/4" SCREEN
313	7S 20E	2		7		ALUMINUM	CAN FRAGMENTS	1/4" SCREEN
313	7S 20E	2		5		METAL	FRAGMENTS	1/4" SCREEN
313	7S 20E	2		4		RUBBER	FRAGMENTS	1/4" SCREEN
313	7S 20E	2		1		METAL	LOCKET	1/4" SCREEN
313	7S 20E	2		30		PLASTIC		1/4" SCREEN
313	7S 20E	2		2		GLASS	GREEN GLASS	1/4" SCREEN
313	7S 20E	2		6		GLASS	BROWN BOTTLE GLASS	1/4" SCREEN
313	7S 20E	2		53		GLASS	CLEAR BOTTLE	1/4" SCREEN
313	7S 20E	2		4		CHERT	FLAKES	1/4" SCREEN
313	7S 20E	2		1		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
314	6S 75E	8		82		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
314	6S 75E	8		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
314	6S 75E	8		11		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
314	6S 75E	8		120		CHERT	FLAKES	1/4" SCREEN
314	6S 75E	8		1	1.0	CHERT	DRILL FRAGMENT	1/4" SCREEN
314	6S 75E	8		2		IRON	NAILS	1/4" SCREEN
314	6S 75E	8		1		IRON	WASHER	1/4" SCREEN
314	6S 75E	8		27		METAL	FRAGMENTS	1/4" SCREEN
314	6S 75E	8	V.		453.6	ROCK	FCR	1/4" SCREEN
316	6S 75E	9		1		CHERT	POINT FRAGMENT	1/4" SCREEN
316	6S 75E	9		1		SLAG		1/4" SCREEN
316	6S 75E	9		7		CHERT	CORE FRAGMENTS	1/4" SCREEN
316	6S 75E	9		25		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
316	6S 75E	9		226		CHERT	FLAKES	1/4" SCREEN
316	6S 75E	9		1		CHERT	KNIFE	1/4" SCREEN
316	6S 75E	9		6	45.7	ROCK	FCR	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
316	6S 75E	9		4		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
316	6S 75E	9		2		IRON	NAILS	1/4" SCREEN
316	6S 75E	9			226.8	ROCK	FCR	1/4" SCREEN
318	7S 20E	3		6		GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN
318	7S 20E	3		2		GLASS	LIGHT GREEN BOTTLE GLASS	1/4" SCREEN
318	7S 20E	3		1		PLASTIC		1/4" SCREEN
318	7S 20E	3		3		METAL	SCREWS	1/4" SCREEN
318	7S 20E	3		1		METAL	WIRE	1/4" SCREEN
318	7S 20E	3		4		METAL	FRAGMENTS	1/4" SCREEN
318	7S 20E	3		1		RUBBER	FRAGMENT	1/4" SCREEN
318	7S 20E	3		1		GLASS	BEER BOTTLE	1/4" SCREEN
318	7S 20E	3			330	ROCK	FCR	1/4" SCREEN
318	7S 20E	3		1		CHERT	CORE FRAGMENT	1/4" SCREEN
318	7S 20E	3		8		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
318	7S 20E	3		50		CHERT	FLAKES	1/4" SCREEN
318	7S 20E	3		1		CHERT	BIFACE	1/4" SCREEN
318	7S 20E	3		8		CHERT	UTILIZED FLAKES	1/4" SCREEN
320	6S 75E	10		2	107.8	ROCK	FCR	1/4" SCREEN
320	6S 75E	10		139		CHERT	FLAKES	1/4" SCREEN
320	6S 75E	10		7		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
320	6S 75E	10		3		CHERT	UTILIZED FLAKES	1/4" SCREEN
322	7S 20E	4		67		GLASS	BROWN BOTTLE GLASS	1/4" SCREEN
322	7S 20E	4		7		GLASS	CLEAR GLASS	1/4" SCREEN
322	7S 20E	4		1		CLAY	PIPE STEM FRAGMENT	1/4" SCREEN
322	7S 20E	4		2		ROCK	HAMMERSTONES	1/4" SCREEN
322	7S 20E	4		1		METAL	BOTTLE CAP	1/4" SCREEN
322	7S 20E	4		3		CHERT	CORE FRAGMENT	1/4" SCREEN
322	7S 20E	4		11		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
322	7S 20E	4		132		CHERT	FLAKES	1/4" SCREEN
322	7S 20E	4		1		CHERT	SCRAPER	1/4" SCREEN
322	7S 20E	4			1134	ROCK	FCR	1/4" SCREEN
324	7S 20E	5		2		ROCK	HAMMERSTONES?	1/4" SCREEN
324	7S 20E	5		2		METAL	FRAGMENTS	1/4" SCREEN
324	7S 20E	5		1		CHARCOAL	SAMPLE	1/4" SCREEN
324	7S 20E	5		5		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
324	7S 20E	5		224		CHERT	FLAKES	1/4" SCREEN
324	7S 20E	5			2494.8	ROCK	FCR	1/4" SCREEN
326	6S 75E	11		1		ROCK	TAR COVERED ROCK	1/4" SCREEN
326	6S 75E	11		1		CLAY	BRICK	1/4" SCREEN
326	6S 75E	11		5	41.6	ROCK	FCR	1/4" SCREEN
326	6S 75E	11		121		CHERT	FLAKES	1/4" SCREEN
326	6S 75E	11		1		CHERT	CORE	1/4" SCREEN
326	6S 75E	11		6		ROCK	CORTEX	1/4" SCREEN
326	6S 75E	11		15		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
327	6S 75E	10		4		CHERT	FLAKES	MAPPED
327	6S 75E	10		1		UNIDENTIFIED		MAPPED
328	2N 34E	1	3		66	ROCK	FCR	1/4" SCREEN
328	2N 34E	1	3	46		CHERT	FLAKES	1/4" SCREEN
328	2N 34E	1	3	16		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
328	2N 34E	1	3	6		CHERT	CORE FRAGMENTS	1/4" SCREEN
328	2N 34E	1	3	22		CHERT	UTILIZED FLAKES	1/4" SCREEN
328	2N 34E	1	3	7		CHERT	BIFACES	1/4" SCREEN
328	2N 34E	1	3	1		CHERT	POINT FRAGMENT	1/4" SCREEN
328	2N 34E	1	3	1		ROCK	HAMMERSTONE	1/4" SCREEN
328	2N 34E	1	3	1		ROCK	AXE	1/4" SCREEN
330	7S 20E	6		1		ROCK	HAMMERSTONE	1/4" SCREEN
330	7S 20E	6		1		CHERT	PROJECTILE POINT	1/4" SCREEN
330	7S 20E	6		1		CHERT	POINT FRAGMENT	1/4" SCREEN
330	7S 20E	6		5		CHERT	CORES/FRAGMENTS	1/4" SCREEN
330	7S 20E	6		19		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
330	7S 20E	6		122		CHERT	FLAKES	1/4" SCREEN
330	7S 20E	6		4		CHERT	UTILIZED FLAKES	1/4" SCREEN
330	7S 20E	6		4		CHERT	BIFACES	1/4" SCREEN
330	7S 20E	6			1360.8	ROCK	FCR	1/4" SCREEN
330	7S 20E	6		2	24.4	ROCK	FCR	1/4" SCREEN
332	7S 20E	7		21			RED OCHRE FRAGMENTS	1/4" SCREEN
332	7S 20E	7		7		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
332	7S 20E	7		122		CHERT	FLAKES	1/4" SCREEN
332	7S 20E	7		1		CHERT	MODIFIED FLAKE	1/4" SCREEN
332	7S 20E	7			453.6	ROCK	FCR	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
332	7S 20E	7		1	20.3	ROCK	FCR	1/4" SCREEN
334	6S 75E	12		11		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
334	6S 75E	12		109		CHERT	FLAKES	1/4" SCREEN
334	6S 75E	12	1	5		CHERT	UTILIZED FLAKES	1/4" SCREEN
334	6S 75E	12		1		CHERT	SCRAPER	1/4" SCREEN
334	6S 75E	12			2268	ROCK	FCR	1/4" SCREEN
335	6S 75E	BASE OF 11		14		CHERT	FLAKES	MAPPED
335	6S 75E	BASE OF 11		1		CHERT	BLOCKY FRAGMENT	MAPPED
335	6S 75E	BASE OF 11			2721.6	ROCK	FCR	MAPPED
337	7S 30E	1		2		PLASTIC		1/4" SCREEN
337	7S 30E	1		1		TIN	FRAGMENT	1/4" SCREEN
337	7S 30E	1		2		GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN
339	7S 30E	2		1		CHERT	UNMODIFIED	1/4" SCREEN
339	7S 30E	2		2		BONE		1/4" SCREEN
339	7S 30E	2		1		GLASS	CLEAR GLASS	1/4" SCREEN
339	7S 30E	2		1		METAL	POP CAN	1/4" SCREEN
339	7S 30E	2		3		METAL	FRAGMENTS	1/4" SCREEN
341	7S 20E	8		1		CARBON	SAMPLE	1/4" SCREEN
341	7S 40E	8			907.2	ROCK	FCR	1/4" SCREEN
341	7S 40E	8		63		CHERT	FLAKES	1/4" SCREEN
341	7S 40E	8		6		CHERT	CORES	1/4" SCREEN
341	7S 40E	8		7		CHERT	UTILIZED FLAKES	1/4" SCREEN
343	6S 75E	13		78		CHERT	FLAKES	1/4" SCREEN
343	6S 75E	13		6		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
343	6S 75E	13		1		SLATE	FRAGMENT	1/4" SCREEN
343	6S 75E	13		1		ROCK	CELT	1/4" SCREEN
343	6S 75E	13			2268	ROCK	FCR	1/4" SCREEN
345	7S 30E	3		7		GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN
345	7S 30E	3		1		GLASS	MIRROR FRAGMENT	1/4" SCREEN
345	7S 30E	3		1		PLASTIC	FRAGMENT	1/4" SCREEN
345	7S 30E	3		2			EYE GLASS FRAGMENT	1/4" SCREEN
345	7S 30E	3		1		RUBBER	UNIDENTIFIED	1/4" SCREEN
345	7S 30E	3		1		PLASTIC	HUB CAP FRAGMENT	1/4" SCREEN
345	7S 30E	3		1		RUBBER	"O"	1/4" SCREEN
347	7S 30E	4		6		GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
347	7S 30E	4		1		GLASS	BROWN BOTTLE GLASS	1/4" SCREEN
347	7S 30E	4		2		PLASTIC	FRAGMENT	1/4" SCREEN
347	7S 30E	4		2		METAL	PULL TABS	1/4" SCREEN
347	7S 30E	4		1		METAL	SPRING	1/4" SCREEN
347	7S 30E	4		4		ALUMINUM	CAN FRAGMENTS	1/4" SCREEN
347	7S 30E	4		4		METAL	UNIDENTIFIED	1/4" SCREEN
347	7S 30E	4		13		CHERT	FLAKES	1/4" SCREEN
347	7S 30E	4		4		CHERT	UTILIZED FLAKES	1/4" SCREEN
348	5.5S 43E	1		21		GLASS	COKE BOTTLE	1/4" SCREEN
348	5.5S 43E	1		82		GLASS	BOTTLE GLASS	1/4" SCREEN
348	5.5S 43E	1		61		GLASS	BROWN BOTTLE	1/4" SCREEN
348	5.5S 43E	1		11		PLASTIC		1/4" SCREEN
348	5.5S 43E	1		2		ALUMINUM	POP CANS	1/4" SCREEN
348	5.5S 43E	1		1		ALUMINUM	PULL TAB	1/4" SCREEN
348	5.5S 43E	1		5		METAL	FRAGMENTS	1/4" SCREEN
348	5.5S 43E	1		1		METAL	WEIGHT	1/4" SCREEN
348	5.5S 43E	1		2		SLAG		1/4" SCREEN
348	5.5S 43E	1		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
348	5.5S 43E	1		79		CHERT	FLAKES	1/4" SCREEN
348	5.5S 43E	1		7		CHERT	UTILIZED FLAKES	1/4" SCREEN
350	7S 20E	FROM PROFILE		2		CHERT	BLOCKY FRAGMENTS	TROWEL
350	7S 20E	FROM PROFILE		7		CHERT	FLAKES	TROWEL
352	7S 30E	5		18		ALUMINUM	CAN FRAGMENTS	1/4" SCREEN
352	7S 30E	5		1		METAL	SHOTGUN SHELL	1/4" SCREEN
352	7S 30E	5		5		METAL	UNIDENTIFIED	1/4" SCREEN
352	7S 30E	5		1		GLASS	FALSTAFF BOTTLE	1/4" SCREEN
352	7S 30E	5		10		GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN
352	7S 30E	5		6		GLASS	BEER BOTTLE FRAGS	1/4" SCREEN
352	7S 30E	5		1		GLASS	AQUA INSULATOR	1/4" SCREEN
352	7S 30E	5		1		PLASTIC	SPOON	1/4" SCREEN
352	7S 30E	5		1		PLASTIC		1/4" SCREEN
352	7S 30E	5		130		CHERT	FLAKES	1/4" SCREEN
352	7S 30E	5		8		CHERT	UTILIZED FLAKES	1/4" SCREEN
354	5.5S 43E	2		2		RUBBER	TIRE FRAGMENTS	1/4" SCREEN
354	5.5S 43E	2	1	10		STEEL	CAN PIECES	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
354	5.5S 43E	2		1		METAL	PULL TAB	1/4" SCREEN
354	5.5S 43E	2		1		METAL	BRAKE SHOE	1/4" SCREEN
354	5.5S 43E	2		3		METAL	HINGE FRAGS	1/4" SCREEN
354	5.5S 43E	2		2		METAL	WIRE FRAGMENTS	1/4" SCREEN
354	5.5S 43E	2		1		ALUMINUM	FRAGMENT	1/4" SCREEN
354	5.5S 43E	2		43		GLASS	GREEN BOTTLE GLASS	1/4" SCREEN
354	5.5S 43E	2		11		GLASS	COKE BOTTLE	1/4" SCREEN
354	5.5S 43E	2		30		GLASS	BUDWEISER BOTTLE FRAGMENTS	1/4" SCREEN
354	5.5S 43E	2		157		GLASS	BOTTLE FRAGMENTS	1/4" SCREEN
354	5.5S 43E	2		1		GLASS	CLEAR BOTTLE	1/4" SCREEN
354	5.5S 43E	2		1		PLASTIC	CAR LIGHT FRAGMENT	1/4" SCREEN
354	5.5S 43E	2		6		BONE		1/4" SCREEN
354	5.5S 43E	2		4	320.3	ROCK	FCR	1/4" SCREEN
354	5.5S 43E	2		198		CHERT	FLAKES	1/4" SCREEN
354	5.5S 43E	2		22		CHERT	UTILIZED FLAKES	1/4" SCREEN
356	7S 30E	6		6	340.9	ROCK	FCR	1/4" SCREEN
356	7S 30E	6		220		CHERT	FLAKES	1/4" SCREEN
356	7S 30E	6		21		CHERT	UTILIZED FLAKES	1/4" SCREEN
356	7S 30E	6		1		GLASS	BEER BOTTLE	1/4" SCREEN
356	7S 30E	6		6		GLASS	CLEAR BOTTLE FRAGMENTS	1/4" SCREEN
356	7S 30E	6		1		ALUMINUM	FRAGMENT	1/4" SCREEN
356	7S 30E	6		2		METAL	WIRE	1/4" SCREEN
356	7S 30E	6		1		IRON	SQUARE NAIL	1/4" SCREEN
356	7S 30E	6		1		METAL	WASHER	1/4" SCREEN
356	7S 30E	6		9		METAL	FRAGMENTS	1/4" SCREEN
358	5.5S 43E	3		1		GLASS	MILK BOTTLE	1/4" SCREEN
358	5.5S 43E	3		5	115.8	ROCK	FCR	1/4" SCREEN
358	5.5S 43E	3		322		CHERT	FLAKES	1/4" SCREEN
358	5.5S 43E	3		1		QUARTZITE	FLAKE	1/4" SCREEN
358	5.5S 43E	3		18		CHERT	UTILIZED FLAKES	1/4" SCREEN
358	5.5S 43E	3	1	1		FOSSIL		1/4" SCREEN
358	5.5S 43E	3		1		METAL	RING	1/4" SCREEN
358	5.5S 43E	3	7	2		IRON	NAILS	1/4" SCREEN
358	5.5S 43E	3		6		GLASS	LIGHT GREEN GLASS FRAGMENTS	1/4" SCREEN
358	5.5S 43E	3		8		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
358	5.5S 43E	3		1		GLASS	GREEN GLASS FRAGMENT	1/4" SCREEN
358	5.5S 43E	3		1		GLASS	OLIVE GREEN GLASS FRAGMENT	1/4" SCREEN
358	5.5S 43E	3			907.2	ROCK	FCR	1/4" SCREEN
360	7S 30E	7		2		CHERT	CORE FRAGMENT	1/4" SCREEN
360	7S 30E	7		1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
360	7S 30E	7		182		CHERT	FLAKES	1/4" SCREEN
360	7S 30E	7		14		CHERT	UTILIZED FLAKES	1/4" SCREEN
360	7S 30E	7			226.8	ROCK	FCR	1/4" SCREEN
360	7S 30E	7		1		GLASS	CLEAR GLASS FRAGMENT	1/4" SCREEN
360	7S 30E	7		1		PLASTIC		1/4" SCREEN
362	7S 30E	8		9		CHERT	UTILIZED FLAKES	1/4" SCREEN
362	7S 30E	8		1		SLATE	FRAGMENT	1/4" SCREEN
362	7S 30E	8		5		CHERT	CORES	1/4" SCREEN
362	7S 30E	8		127		CHERT	FLAKES	1/4" SCREEN
362	7S 30E	8			907.2	ROCK	FCR	1/4" SCREEN
364	5.5S 43E	4		462		CHERT	FLAKES	1/4" SCREEN
364	5.5S 43E	4		25	1440.8	ROCK	FCR	1/4" SCREEN
364	5.5S 43E	4		44		IRON	FRAGMENTS	1/4" SCREEN
364	5.5S 43E	4		2		CINDERS		1/4" SCREEN
364	5.5S 43E	4		4		GLASS	FRAGMENTS	1/4" SCREEN
364	5.5S 43E	4		1		METAL	SNAP	1/4" SCREEN
364	5.5S 43E	4		1		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
364	5.5S 43E	4		5		CHERT	BIFACE/FRAGMENTS	1/4" SCREEN
364	5.5S 43E	4		9		ROCK	CORTEX FRAGMENTS	1/4" SCREEN
364	5.5S 43E	4		7		CHERT	CORES	1/4" SCREEN
364	5.5S 43E	4		1			CHARCOAL SAMPLE	1/4" SCREEN
364	5.5S 43E	4		31		CHERT	UTILIZED FLAKES	1/4" SCREEN
370	5.5S 30E	9		1		CHERT	CORE	1/4" SCREEN
370	5.5S 30E	9		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
370	5.5S 30E	9		31		CHERT	FLAKES	1/4" SCREEN
370	5.5S 30E	9			453.6	ROCK	FCR	1/4" SCREEN
373	5.5S 43E	5		1		GLASS	BROWN BOTTLE FRAGMENTS	1/4" SCREEN
373	5.5S 43E	5		1		METAL	FRAGMENT	1/4" SCREEN
373	5.5S 43E	5		1		SLATE	FRAGMENT	1/4" SCREEN
373	5.5S 43E	5		22		CHERT	UTILIZED FLAKES	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
373	5.5S 43E	5		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
373	5.5S 43E	5		269		CHERT	FLAKES	1/4" SCREEN
373	5.5S 43E	5			2948.4	ROCK	FCR	1/4" SCREEN
373	5.5S 43E	5		1	2.6	ROCK	FCR	1/4" SCREEN
376	26S 27E	1		7		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
376	26S 27E	1		1		GLASS	BROWN GLASS FRAGMENT	1/4" SCREEN
376	26S 27E	1		5		CHERT	FLAKES	1/4" SCREEN
376	26S 27E	1		5		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
376	26S 27E	1		1		BRICK	FRAGMENT	1/4" SCREEN
376	26S 27E	1		12		SLAG	FRAGMENTS	1/4" SCREEN
376	26S 27E	1		1		METAL	ROD	1/4" SCREEN
376	26S 27E	1		2		ROCKS	UNMODIFIED	1/4" SCREEN
376	26S 27E	1		1		SHELL	SNAIL	1/4" SCREEN
376	26S 27E	1		1		CHERT	MODIFIED FLAKE	1/4" SCREEN
377	7S 30E	10		4		CHERT	FLAKES	1/4" SCREEN
377	7S 30E	10		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
380	7S 30E	WALL PROFILE		4		CHERT	FLAKES	1/4" SCREEN
381	26S 21E	TOP OF 1		16		GLASS	FRAGMENTS	1/4" SCREEN
381	26S 21E	TOP OF 1		1		METAL	FRAGMENT	1/4" SCREEN
381	26S 21E	TOP OF 1		3		CINDERS		1/4" SCREEN
381	26S 21E	TOP OF 1		16		PLASTIC	FRAGMENTS	1/4" SCREEN
381	26S 21E	TOP OF 1		2		STYROFOAM		1/4" SCREEN
381	26S 21E	TOP OF 1		4		PAPER		1/4" SCREEN
382	26S 21E	1		4		SHELL		1/4" SCREEN
382	26S 21E	1		7		COAL	FRAGMENTS	1/4" SCREEN
382	26S 21E	1		3		BRICK	FRAGMENTS	1/4" SCREEN
382	26S 21E	1		9	No.	GLASS	GREEN BOTTLE GLASS	1/4" SCREEN
382	26S 21E	1		14		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
382	26S 21E	1		1		METAL	UNIDENTIFIABLE	1/4" SCREEN
383	26S 21E	2		7		SHELL	FRAGMENTS	1/4" SCREEN
383	26S 21E	2		2		BRICK	FRAGMENTS	1/4" SCREEN
383	26S 21E	2		31		GLASS	FRAGMENTS	1/4" SCREEN
383	26S 21E	2		7		METAL	FRAGMENTS	1/4" SCREEN
383	26S 21E	2		3		PLASTIC	FRAGMENTS	1/4" SCREEN
383	26S 21E	2		3		RUBBER	FRAGMENTS	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT WEIGHT	MATERIAL	OBJECT	COLLECTION
385	26S 27E	3		2	CHERT	FLAKES	1/4" SCREEN
385	26S 27E	3		1	METAL	UNIDENTIFIABLE	1/4" SCREEN
385	26S 27E	3		10	COAL	FRAGMENTS	1/4" SCREEN
385	26S 27E	3		2	SLAG	FRAGMENTS	1/4" SCREEN
387	5.5S 43E	6		3	CHARCOAL		1/4" SCREEN
387	5.5S 43E	6		113	CHERT	FLAKES	1/4" SCREEN
387	5.5S 43E	6		1	IRON	NAIL	1/4" SCREEN
387	5.5S 43E	6		1	METAL	WIRE	1/4" SCREEN
387	5.5S 43E	6		9	CHERT	UTILIZED FLAKES	1/4" SCREEN
391	5.5S 43E	7		25	CHERT	FLAKES	1/4" SCREEN
392	26S 21E	3		33	SHELL	FRAGMENTS	1/4" SCREEN
392	26S 21E	3		7	GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
392	26S 21E	3		1	METAL	FRAGMENT	1/4" SCREEN
394	26S 27E	4		2	CHERT	FLAKES	1/4" SCREEN
394	26S 27E	4		1	CHERT	CORE FRAGMENT	1/4" SCREEN
395	22S 12E	TOP OF 1		1	PLASTIC	CASSETTE TAPE	1/4" SCREEN
395	22S 12E	TOP OF 1		1	SKELETON	RODENT	1/4" SCREEN
395	22S 12E	TOP OF 1		1	SHINGLE	FRAGMENT	1/4" SCREEN
395	22S 12E	TOP OF 1		1	RUBBER	FRAGMENT	1/4" SCREEN
395	22S 12E	TOP OF 1		1	FOSSIL		1/4" SCREEN
395	22S 12E	TOP OF 1		1	METAL	TIRE CLIP-ON BALANCE	1/4" SCREEN
395	22S 12E	TOP OF 1		2	GLASS	GREEN GLASS FRAGMENTS	1/4" SCREEN
395	22S 12E	TOP OF 1		1	GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN
395	22S 12E	TOP OF 1		2	PLASTIC	FRAGMENT	1/4" SCREEN
395	22S 12E	TOP OF 1		3	ALUMINUM	CAN FRAGMENTS	1/4" SCREEN
397	22S 12E	1		1	GLASS	FLAT GLASS	1/4" SCREEN
397	22S 12E	1		6	GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN
397	22S 12E	1		2	ALUMINUM	FRAGMENT	1/4" SCREEN
397	22S 12E	1		1	COPPER ALLOY	1937 PENNY	1/4" SCREEN
397	22S 12E	1		1	PLASTIC	FRAGMENT	1/4" SCREEN
397	22S 12E	1		1	NUT SHELL		1/4" SCREEN
397	22S 12E	1		1	METAL	UNIDENTIFIED	1/4" SCREEN
397	22S 12E	1		7	CHERT	FLAKES	1/4" SCREEN
397	22S 12E	1		1	CHERT	BLOCKY FRAGMENT	1/4" SCREEN
397	22S 12E	1		2	GLASS	GREEN BOTTLE GLASS	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
398	26S 21E	4		1		CHERT	BIFACE	1/4" SCREEN
398	26S 21E	4		3	275.2	ROCK	FCR	1/4" SCREEN
398	26S 21E	4		2		CHERT	FLAKES	1/4" SCREEN
398	26S 21E	4		1		SHELL		1/4" SCREEN
400	22S 12E	2		71		CHERT	FLAKES	1/4" SCREEN
400	22S 12E	2		8		CHERT	UTILIZED FLAKES	1/4" SCREEN
400	22S 12E	2			1134	ROCK	FCR	1/4" SCREEN
402	6S 54E	2		7		CHERT	FLAKES	1/4" SCREEN
402	6S 54E	2		1		GLASS	CLEAR GLASS FRAGMENT	1/4" SCREEN
402	6S 54E	2		1		IRON	NAIL	1/4" SCREEN
403	26S 27E	4		1		BONE		HAND
404	26S 27E	5		1	80.1	ROCK	FCR	TROWEL
404	26S 27E	5		1		CHERT	UTILIZED FLAKE	TROWEL
404	26S 27E	5		7		CHERT	FLAKES	TROWEL
406	22S 12E	3		3		METAL	FRAGMENTS	1/4" SCREEN
406	22S 12E	3		1		ROCK	HAMMERSTONE	1/4" SCREEN
406	22S 12E	3		23		CHERT	FLAKES	1/4" SCREEN
406	22S 12E	3		4		CHERT	UTILIZED FLAKES	1/4" SCREEN
410	22S 12E	4		1		IRON	NAIL	1/4" SCREEN
412	6S 54E	3		2		GLASS	BROWN GLASS FRAGMENTS	1/4" SCREEN
412	6S 54E	3		1		GLASS	CLEAR GLASS FRAGMENT	1/4" SCREEN
412	6S 54E	3		1		GLASS	AQUA GLASS FRAGMENT	1/4" SCREEN
412	6S 54E	3		47		CHERT	FLAKES	1/4" SCREEN
412	6S 54E	3		1		PLASTIC	FRAGMENT	1/4" SCREEN
412	6S 54E	3		6		METAL	HARDWARE	1/4" SCREEN
412	6S 54E	3		12		METAL	FRAGMENTS	1/4" SCREEN
412	6S 54E	3		2		ALUMINUM	CAN FRAGMENTS	1/4" SCREEN
412	6S 54E	3		2		IRON	NAILS	1/4" SCREEN
414	26S 27E	6		6		CHERT	CORE/CORE FRAGMENTS	1/4" SCREEN
414	26S 27E	6		237		CHERT	FLAKES	1/4" SCREEN
414	26S 27E	6			1587.6	ROCK	FCR	1/4" SCREEN
414	26S 27E	6		16		CHERT	UTILIZED FLAKES	1/4" SCREEN
414	26S 27E	6		2		CHERT	BIFACE FRAGMENTS	1/4" SCREEN
414	26S 27E	6		1		SLAG		1/4" SCREEN
414	26S 27E	6		3	72.1	ROCK	FCR	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
417	6S 54E	4		11		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
417	6S 54E	4		2	141	ROCK	FCR	1/4" SCREEN
417	6S 54E	4		59		CHERT	FLAKES	1/4" SCREEN
417	6S 54E	4		2		CHERT	CORE/CORE FRAGMENTS	1/4" SCREEN
417	6S 54E	4		1		CHERT	PREFORM	1/4" SCREEN
417	6S 54E	4		32		METAL	FRAGMENTS	1/4" SCREEN
417	6S 54E	4		11		CHERT	UTILIZED FLAKES	1/4" SCREEN
418	26S 21E	6		1		CHERT	POINT BASE	TROWEL
420	6S 54E	5		5	350	ROCK	FCR	1/4" SCREEN
420	6S 54E	5		3		BONE		1/4" SCREEN
420	6S 54E	5		5		ASPHALT	FRAGMENTS	1/4" SCREEN
420	6S 54E	5		1		METAL	FRAGMENT	1/4" SCREEN
420	6S 54E	5		1		CHERT	CORE	1/4" SCREEN
420	6S 54E	5		104		CHERT	FLAKES	1/4" SCREEN
420	6S 54E	5		5		CHERT	UTILIZED FLAKES	1/4" SCREEN
422	22S 12E	5	10	8	162.7	ROCK	FCR	1/4" SCREEN
422	22S 12E	5	10	2		CHERT	BIFACE FRAGMENTS	1/4" SCREEN
422	22S 12E	5	10	25		CHERT	UTILIZED FLAKES	1/4" SCREEN
422	22S 12E	5	10	324		CHERT	FLAKES	1/4" SCREEN
424	6S 54E	6		55		CHERT	FLAKES	1/4" SCREEN
424	6S 54E	6		3		CHERT	UTILIZED FLAKES	1/4" SCREEN
424	6S 54E	6		1	30.5	ROCK	FCR	1/4" SCREEN
435	26S 27E	7		1		CHERT	CORE	1/4" SCREEN
435	26S 27E	7		120		CHERT	FLAKES	1/4" SCREEN
435	26S 27E	7		8		CHERT	UTILIZED FLAKES	1/4" SCREEN
438	6S 54E	7		24		CHERT	FLAKES	1/4" SCREEN
438	6S 54E	7		1		ROCK	FCR	1/4" SCREEN
439	22S 12E	5	10	1		WHITE CLAY	PIPE BOWL AND STEM	TROWEL
440	22S 12E	5	10	1		WHITE CLAY	PIPE STEM FRAGMENT	TROWEL
441	22S 12E	5	10	1		WHITE CLAY	PIPE BOWL FRAGMENT	TROWEL
455	5S 58E	2		1		IRON	NAIL	1/4" SCREEN
455	5S 58E	2		1		IRON	BARBED WIRE	1/4" SCREEN
455	5S 58E	2		11		CHERT	FLAKES	1/4" SCREEN
455	5S 58E	2		2		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
457	5S 58E	3		2	208	ROCK	FCR	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
457	5S 58E	3		2		CHERT	CORES	1/4" SCREEN
457	5S 58E	3		62		CHERT	FLAKES	1/4" SCREEN
457	5S 58E	3		6		GLASS	BOTTLE GLASS	1/4" SCREEN
457	5S 58E	3		2		SLAG	FRAGMENTS	1/4" SCREEN
457	5S 58E	3		14		CHERT	UTILIZED FLAKES	1/4" SCREEN
459	5S 58E	4			453.6	ROCK	FCR	1/4" SCREEN
459	5S 58E	4		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
459	5S 58E	4		24		CHERT	UTILIZED FLAKES	1/4" SCREEN
459	5S 58E	4		141		CHERT	FLAKES	1/4" SCREEN
459	5S 58E	4		1	1.5	ROCK	FCR	1/4" SCREEN
467	22S 12E	5	10	2		WHITE CLAY	PIPE BOWL FRAGMENTS	1/4" SCREEN
470	5S 58E	5		65		CHERT	FLAKES	1/4" SCREEN
470	5S 58E	5		10		CHERT	UTILIZED FLAKES	1/4" SCREEN
471	22S 12E	5	10	1		METAL	LOCK	TROWEL
473	22S 12E	6		2	21.6	ROCK	FCR	1/4" SCREEN
473	22S 12E	6		3		CHERT	BIFACES	1/4" SCREEN
473	22S 12E	6		4		CHERT	CORE FRAGMENTS	1/4" SCREEN
473	22S 12E	6		170		CHERT	FLAKES	1/4" SCREEN
473	22S 12E	6		16		CHERT	UTILIZED FLAKES	1/4" SCREEN
473	22S 12E	6			907.2	ROCK	FCR	1/4" SCREEN
475	6S 54E	6		47		CHERT	FLAKES	1/4" SCREEN
475	6S 54E	6		2		CHERT	UTILIZED FLAKES	1/4" SCREEN
477	27S 3E	2		1		CHERT	KNIFE BASE	1/4" SCREEN
477	27S 3E	2		2		CHERT	BIFACES	1/4" SCREEN
477	27S 3E	2		368		CHERT	FLAKES	1/4" SCREEN
477	27S 3E	2		4		CHERT	CORES	1/4" SCREEN
477	27S 3E	2		1		METAL	FRAGMENT	1/4" SCREEN
477	27S 3E	2		20		CHERT	UTILIZED FLAKES	1/4" SCREEN
484	22S 20E	TOP OF F-10	10	1		CHERT	UTILIZED FLAKE	TROWEL
485	22S 20E	WALL PROFILE		1		CHERT	CORE	1/4" SCREEN
485	22S 20E	WALL PROFILE		69		CHERT	FLAKES	1/4" SCREEN
485	22S 20E	WALL PROFILE		5		CHERT	UTILIZED FLAKES	1/4" SCREEN
486	22S 20E	1	10	2		CHERT	CORE FRAGMENTS	1/4" SCREEN
486	22S 20E	1	10	11		CHERT	UTILIZED FLAKES	1/4" SCREEN
486	22S 20E	1	10	476		CHERT	FLAKES	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
486	22S 20E	1	10	1		TOOTH		1/4" SCREEN
486	22S 20E	1	10	1		BRICK	FRAGMENT	1/4" SCREEN
486	22S 20E	1	10		1360.8	ROCK	FCR	1/4" SCREEN
486	22S 20E	1	10	1		ROCK	FCR	1/4" SCREEN
490	22S 12E	7		59		CHERT	FLAKES	1/4" SCREEN
490	22S 12E	7			907.2	ROCK	FCR	1/4" SCREEN
490	22S 12E	7		5		CHERT	UTILIZED FLAKES	1/4" SCREEN
490	22S 12E	7		1	6.9	ROCK	FCR	1/4" SCREEN
493	22S 12E	8		1		CHERT	PROJECTILE POINT	1/4" SCREEN
493	22S12E	8		2		CHERT	UTILIZED FLAKES	1/4" SCREEN
493	22S 12E	8	MI	1		CHERT	CORE FRAGMENT	1/4" SCREEN
493	22S 12E	8		5		CHERT	FLAKES	1/4" SCREEN
496	22S 12E	9		1		CHERT	FLAKE	1/4" SCREEN
498	22S 12E	WALL PROFILE		1		CHERT	FLAKE	1/4" SCREEN
499	27S 3E	2		1		CHERT	POINT FRAGMENT	HAND
500	27S 3E	3		135		CHERT	FLAKES	1/4" SCREEN
500	27S 3E	3		1		CHERT	CRUDE BIFACE	1/4" SCREEN
500	27S 3E	3		10		CHERT	UTILIZED FLAKES	1/4" SCREEN
501	27S 3E	4		33		CHERT	FLAKES	1/4" SCREEN
501	27S 3E	4		4		CHERT	UTILIZED FLAKES	1/4" SCREEN
503	10S 40W	2		14		GLASS	CLEAR GLASS FRAGMENTS	1/4" SCREEN
503	10S 40W	2		2		GLASS	BROWN GLASS FRAGMENTS	1/4" SCREEN
503	10S 40W	2		39		CHERT	FLAKES	1/4" SCREEN
503	10S 40W	2		9		CHERT	UTILIZED FLAKES	1/4" SCREEN
505	22S 28E	LEV. 2 OF F-10	10	547		CHERT	FLAKES	1/4" SCREEN
505	22S 28E	LEV. 2 OF F-10	10	3		CHERT	CRUDE BIFACES	1/4" SCREEN
505	22S 28E	LEV. 2 OF F-10	10	2		CHERT	POINT TIPS	1/4" SCREEN
505	22S 28E	LEV. 2 OF F-10	10	1		CHERT	PROJECTILE POINT	1/4" SCREEN
505	22S 28E	LEV. 2 OF F-10	10	47		CHERT	UTILIZED FLAKES	1/4" SCREEN
505	22S 28E	LEV. 20F F-10	10		113.4	ROCK	FCR	1/4" SCREEN
523	10S 40W	3		1		CHERT	PROJECTILE POINT	1/4" SCREEN
523	10S 40W	3		1		CHERT	CORE FRAGMENT	1/4" SCREEN
523	10S 40W	3		139		CHERT	FLAKES	1/4" SCREEN
523	10S 40W	3		14		CHERT	UTILIZED FLAKES	1/4" SCREEN
524	AREA C	PZ-SUB INTERFACE		123		CHERT	FLAKES	SURFACE

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
524	AREA C	PZ-SUB INTERFACE		6		CHERT	CORE FRAGMENTS	SURFACE
524	AREA C	PZ-SUB INTERFACE		28		CHERT	BLOCKY FRAGMENTS	SURFACE
524	AREA C	PZ-SUB INTERFACE		2		CHERT	UTILIZED FLAKES	SURFACE
524	AREA C	PZ-SUB INTERFACE		3		CHERT	SCRAPERS	SURFACE
524	AREA C	PZ-SUB INTERFACE		4		CHERT	BIFACES	SURFACE
525	AREA A	PZ-SUB INTERFACE		1		SLATE	FRAGMENT	SURFACE
525	AREA A	PZ-SUB INTERFACE		18		CHERT	FLAKES	SURFACE
525	AREA A	PZ-SUB INTERFACE		14		CHERT	UTILIZED FLAKES	SURFACE
525	AREA A	PZ-SUB INTERFACE		1		CHERT	PROJECTILE POINT	SURFACE
538	10S 40W	4		11		CHERT	UTILIZED FLAKES	1/4" SCREEN
538	10S 40W	4		109		CHERT	FLAKES	1/4" SCREEN
538	10S 40W	4		1		CHERT	BIFACE	1/4" SCREEN
538	10S 40W	4		1		BONE		1/4" SCREEN
538	10S 40W	4		1	135.7	ROCK	FCR	1/4" SCREEN
539	22S 28E	2	10	2		SILVER	BROACH FRAGMENTS	1/4" SCREEN
545	22S 28E	3		9		CHERT	CORES	1/4" SCREEN
545	22S 28E	3			453.6	ROCK	FCR	1/4" SCREEN
545	22S 28E	3		421		CHERT	FLAKES	1/4" SCREEN
545	22S 28E	3		22		CHERT	UTILIZED FLAKES	1/4" SCREEN
545	22S 28E	3		1	45.2	ROCK	FCR	1/4" SCREEN
547	22S 20E	1		13	900.6	ROCK	FCR	1/4" SCREEN
547	22S 20E	1		266		CHERT	FLAKES	1/4" SCREEN
547	22S 20E	1		2		CHERT	CRUDE BIFACES	1/4" SCREEN
547	22S 20E	1		2		CHERT	PREFORMS	1/4" SCREEN
547	22S 20E	1		1		CHERT	PROJECTILE POINT	1/4" SCREEN
547	22S 20E	1		2		CHERT	CORES	1/4" SCREEN
547	22S 20E	1		18		CHERT	UTILIZED FLAKES	1/4" SCREEN
548	10S 40W	5		1		CHERT	CORE FRAGMENT	1/4" SCREEN
548	10S 40W	5		16		CHERT	FLAKES	1/4" SCREEN
548	10S 40W	5		3		CHERT	UTILIZED FLAKES	1/4" SCREEN
548	10S 40W	5			680.4	ROCK	FCR	1/4" SCREEN
550	22S 20E	1			2721.6	ROCK	FCR	1/4" SCREEN
553	25S 3E	2	F-11 AREA A	25		CHERT	FLAKES	1/4" SCREEN
553	25S 3E	2	F-11 AREA A	9		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
554	22S 28E	3	POSTMOLD 1	9		CHERT	FLAKES	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
555	22S 28E	3	POSTMOLD 2	15		CHERT	FLAKES	1/4" SCREEN
555	22S 28E	3	POSTMOLD 2	1		CHERT	UTILIZED FLAKE	1/4" SCREEN
556	22S 28E	3	POSTMOLD 3	9		CHERT	FLAKES	1/4" SCREEN
559	25S 3E	2	F-11 AREA B	3	93.8	ROCK	FCR	1/4" SCREEN
559	25S 3E	2	F-11 AREA B	2		CHERT	CORE FRAGMENTS	1/4" SCREEN
559	25S 3E	2	F-11 AREA B	10		CHERT	FLAKES	1/4" SCREEN
563	22S 20E	1	F-12	5		CLAY	PREHISTORIC POTTERY	TROWEL
564	22S 20E	1	F-12	20	6680.7	ROCK	FCR	TROWEL
564	22S 20E	1	F-12		1360.8	ROCK	FCR	TROWEL
566	22S 20E	1	F-12	31		CHERT	FLAKES	1/4" SCREEN
566	22S 20E	1	F-12	4	39.7	ROCK	FCR	1/4" SCREEN
566	22S 20E	1	F-12	1		CHERT	UTILIZED FLAKE	1/4" SCREEN
569	25S 3E	2	F-8	80		CHERT	FLAKES	1/4" SCREEN
569	25S 3E	2	F-8	1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
569	25S 3E	2	F-8	1		CHERT	CORE	1/4" SCREEN
569	25S 3E	2	F-8	1		CHERT	PROJECTILE POINT	1/4" SCREEN
569	25S 3E	2	F-8	9		CHERT	UTILIZED FLAKES	1/4" SCREEN
571	22S 28E	4		230		CHERT	FLAKES	1/4" SCREEN
571	22S 28E	4		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
571	22S 28E	4		1		GLASS	BROWN BOTTLE GLASS	1/4" SCREEN
571	22S 28E	4		9		CHERT	UTILIZED FLAKES	1/4" SCREEN
571	22S 28E	4			907.2	ROCK	FCR	1/4" SCREEN
572	22S 20E	1	12	2		CLAY	PREHISTORIC POTTERY	TROWEL
574	25S 3E	2	10	10		CHERT	FLAKES	1/4" SCREEN
574	25S 3E	2	10	4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
576	25S 3E		STAIN 9 N1/2	5		CHERT	FLAKES	1/4" SCREEN
576	25S 3E		STAIN 9 N1/2	3		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
577	22S 28E	5		1		CHERT	BIFACE	1/4" SCREEN
577	22S 28E	5		3		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
577	22S 28E	5		56		CHERT	FLAKES	1/4" SCREEN
579	25S 3E	2	10	477		CHERT	FLAKES	1/4" SCREEN
579	25S 3E	2	10	2		SLATE	FLAKES	1/4" SCREEN
579	25S 3E	2	10	1	15.1	ROCK	FCR	1/4" SCREEN
579	25S 3E	2	10	2		CHERT	CORE	1/4" SCREEN
579	25S 3E	2	10	1		CHERT	PREFORM	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
579	25S 3E	2	10	1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
579	25S 3E	2	10	1		CHERT	POINT TIP	1/4" SCREEN
579	25S 3E	2	10	22		CHERT	UTILIZED FLAKES	1/4" SCREEN
579	25S 3E	2	10	1		IRON	SQUARE-HEADED NAIL	1/4" SCREEN
582	6S 73E	2		1		GLASS	7-UP BOTTLE	1/4" SCREEN
582	6S 73E	2		16		GLASS	CLEAR BOTTLE GLASS	1/4" SCREEN
582	6S 73E	2		2		CHERT	CORES	1/4" SCREEN
582	6S 73E	2		68		CHERT	FLAKES	1/4" SCREEN
582	6S 73E	2		1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
582	6S 73E	2		9		CHERT	UTILIZED FLAKES	1/4" SCREEN
584	22S 20E	2		1		SLATE	FRAGMENT	1/4" SCREEN
584	22S 20E	2		1		CHERT	CORTEX	1/4" SCREEN
584	22S 20E	2		2		CHERT	CORES	1/4" SCREEN
584	22S 20E	2		1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
584	22S 20E	2		102		CHERT	FLAKES	1/4" SCREEN
584	22S 20E	2		9		CHERT	UTILIZED FLAKES	1/4" SCREEN
584	22S 20E	2			1814.4	ROCK	FCR	1/4" SCREEN
586	6S 73E	3		111		CHERT	FLAKES	1/4" SCREEN
586	6S 73E	3		1		SLATE	FRAGMENT	1/4" SCREEN
586	6S 73E	3		2		CHERT	BIFACE/FRAGMENTS	1/4" SCREEN
586	6S 73E	3		1	15.3	ROCK	FCR	1/4" SCREEN
586	6S 73E	3		9		CHERT	UTILIZED FLAKES	1/4" SCREEN
589	6S 73E	4		15		CHERT	UTILIZED FLAKES	1/4" SCREEN
589	6S 73E	4		138		CHERT	FLAKES	1/4" SCREEN
589	6S 73E	4		2	161.4	ROCK	FCR	1/4" SCREEN
589	6S 73E	4		1		IRON	FRAGMENT	1/4" SCREEN
590	25S 3E	2	10	1		CHERT	PROJECTILE POINT	MAPPED
591	25S 3E	2	10	1		IRON	SQUARE-HEADED NAIL	TROWEL
593	25S 3E	2	10	1		CHERT	UTILIZED FLAKE	TROWEL
594	25S 3E	2	10	1		CHERT	BIFACE FRAGMENT	TROWEL
596	22S 20E	3	SUB F-10	57		CHERT	FLAKES	1/4" SCREEN
596	22S 20E	3	SUB F-10	3		CHERT	UTILIZED FLAKES	1/4" SCREEN
597	25S 3E	3		1		CHERT	POINT TIP	1/4" SCREEN
597	25S 3E	3		1		CHERT	POINT FRAGMENT	1/4" SCREEN
597	25S 3E	3		1		CHERT	PREFORM	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
597	25S 3E	3		4		CHERT	CORE FRAGMENTS	1/4" SCREEN
597	25S 3E	3		1	5.1	ROCK	FCR	1/4" SCREEN
597	25S 3E	3		254		CHERT	FLAKES	1/4" SCREEN
597	25S 3E	3		24		CHERT	UTILIZED FLAKES	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE		84		CHERT	FLAKES	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE		2		SHELL	BURNED MUSSEL	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE		1		CHARCOAL	FRAGMENT	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE			113.4	ROCK	FCR	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE		1		GLASS	CLEAR GLASS FRAGMENT	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE		1		CHERT	CORE	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE		1		CHERT	BIFACE	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE		16		CHERT	UTILIZED FLAKES	1/4" SCREEN
601	5.5S 43E	NE WALL PROFILE		3	49.5	ROCK	FCR	1/4" SCREEN
602	0N 37E N 1/2	TOP OF 1		1		GLASS	BROWN BOTTLE	1/4" SCREEN
602	0N 37E N 1/2	TOP OF 1		1		CERAMIC	BLUE HANDPAINTED CERAMIC	1/4" SCREEN
602	0N 37E N1/2	TOP OF 1		29		CHERT	FLAKES	1/4" SCREEN
602	0N 37E N1/2	TOP OF 1		3		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
603	PR. T. 1E	EAST WALL		1		CHERT	BIFACE	1/4" SCREEN
604	PR. T. 1E	WEST WALL		1		CHERT	PROJECTILE POINT	1/4" SCREEN
604	PR. T. 1E	WEST WALL		1		CHERT	HAFTED SCRAPER	1/4" SCREEN
606	6S 73E	5		37		CHERT	FLAKES	1/4" SCREEN
606	6S 73E	5		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
606	6S 73E	5		1		CHERT	CORE FRAGMENT	1/4" SCREEN
606	6S 73E	5		1		CHERT	SCRAPER	1/4" SCREEN
607	22S 36E	1		2		CHERT	FLAKES	1/4" SCREEN
607	22S 36E	1		13		IRON	NAILS	1/4" SCREEN
608	6S 73E	6		1		CARBON	FRAGMENT	1/4" SCREEN
608	6S 73E	6		1		FOSSIL		1/4" SCREEN
608	6S 73E	6		9		CHERT	FLAKES	1/4" SCREEN
609	22S 36E	2		134		CHERT	FLAKES	1/4" SCREEN
609	22S 36E	2		1		CHERT	PREFORM	1/4" SCREEN
609	22S 36E	2		4		CHERT	UTILIZED FLAKES	1/4" SCREEN
609	22S 36E	2		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
609	22S 36E	2		4	212.6	ROCK	FCR	1/4" SCREEN
610	22S 36E	3		1		CHERT	POINT TIP	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
610	22S 36E	3		1		CHERT	BIFACE	1/4" SCREEN
610	22S 36E	3		79		CHERT	FLAKES	1/4" SCREEN
610	22S 36E	3		5		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
610	22S 36E	3			226.8	ROCK	FCR	1/4" SCREEN
611	25S 3E			39		CHERT	FLAKES	1/4" SCREEN
611	25S 3E			2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
612	25S 3E	4		1		CHERT	POINT FRAGMENT	1/4" SCREEN
612	25S 3E	4		1		CHERT	POINT FRAGMENT	1/4" SCREEN
612	25S 3E	4		1		CHERT	PREFORM	1/4" SCREEN
612	25S 3E	4		6		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
612	25S 3E	4		186		CHERT	FLAKES	1/4" SCREEN
612	25S 3E	4		2		CHERT	SCRAPERS	1/4" SCREEN
615	25S 3E	5		1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
615	25S 3E	5		7		CHERT	FLAKES	1/4" SCREEN
615	25S 3E	5		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
616	23S 12W	1		39		CHERT	FLAKES	1/4" SCREEN
616	23S 12W	1		2		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
619	23S 12W	1		459		CHERT	FLAKES	1/4" SCREEN
619	23S 12W	1		3		SLATE	FLAKES	1/4" SCREEN
619	23S 12W	1		5		CHERT	CORES	1/4" SCREEN
619	23S 12W	1		22		CHERT	UTILIZED FLAKES	1/4" SCREEN
619	23S 12W	1		1		CHERT	CRUDE BIFACE	1/4" SCREEN
619	23S 12W	1			1587.6	ROCK	FCR	1/4" SCREEN
619	23S 12W	1		3		BONE	BURNED BONE FRAGMENTS	1/4" SCREEN
619	23S 12W	1		22		CHERT	UTILIZED FLAKES	1/4" SCREEN
619	23S 12W	1		5	28	ROCK	FCR	1/4" SCREEN
621	22S 22E	1	10	278		CHERT	FLAKES	1/4" SCREEN
621	22S 22E	1	10	3		CHERT	CORE FRAGMENTS	1/4" SCREEN
621	22S 22E	11	10		1360.8	ROCK	FCR	1/4" SCREEN
621	22S 22E	1	10	2		CHERT	CRUDE BIFACES	1/4" SCREEN
621	22S 22E	1	10	11		CHERT	UTILIZED FLAKES	1/4" SCREEN
621	22S 22E	1	10	4		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
623	22S 22E		10	1		CHERT	BIFACE	TROWEL
630	23S 12W		10	1		CHERT	BIFACE FRAGMENT	TROWEL
630	23S 12W		10	1		CHERT	FLAKE	TROWEL

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
630	23S 12W		10	1		CHERT	THUMBNAIL SCRAPER	TROWEL
632	22S 26E	1	10		453.6	ROCK	FCR	1/4" SCREEN
632	22S 26E	1	10	461		CHERT	FLAKES	1/4" SCREEN
632	22S 26E	1	10	17		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
632	22S 26E	1	10	1		CHERT	CORE FRAGMENT	1/4" SCREEN
632	22S 26E	1	10	1		CHERT	BIFACE	1/4" SCREEN
632	22S 26E	1	10	2		CHERT	UTILIZED FLAKES	1/4" SCREEN
646	23S 3E		11	239		CHERT	FLAKES	1/4" SCREEN
646	23S 3E		11	1		CHERT	CRUDE BIFACE	1/4" SCREEN
646	23S 3E		11	1		CHERT	PROJECTILE POINT	1/4" SCREEN
646	23S 3E		11	2		CHERT	CORES	1/4" SCREEN
646	23S 3E		11	2		IRON	NAIL FRAGMENTS	1/4" SCREEN
646	23S 3E		11	1		CERAMIC	PORCELAIN	1/4" SCREEN
646	23S 3E		11	1		SILVER	TINKLING CONE	1/4" SCREEN
646	23S 3E		11	1		IRON	FRAGMENT	1/4" SCREEN
646	23S 3E		11	14		CHERT	UTILIZED FLAKES	1/4" SCREEN
659	23S 12W	FILL		1		CHERT	SCRAPER	TROWEL
663	23S 12W	2	10		2721.6	ROCK	FCR	1/4" SCREEN
663	23S 12W	2	10	46		CHERT	UTILIZED FLAKES	1/4" SCREEN
663	23S 12W	2	10	5		CHERT	CORE FRAGMENTS	1/4" SCREEN
663	23S 12W	2	10	1035		CHERT	FLAKES	1/4" SCREEN
663	23S 12W	2	10	1		QUARTZITE	FLAKE	1/4" SCREEN
663	23S 12W	2	10	1		SLATE	FLAKE	1/4" SCREEN
663	23S 12W	2	10	15		BONE		1/4" SCREEN
663	23S 12W	2	10	5		CHERT	BIFACE/FRAGMENTS	1/4" SCREEN
663	23S 12W	2	10	8	25.3	ROCK	FCR	1/4" SCREEN
664	22S 22E	1	10	1		CLAY	PREHISTORIC POTTERY	HAND
672	22S 26E	1	10	1		CHERT	POINT BASE	1/4" SCREEN
674	22S 26E	2		306		CHERT	FLAKES	1/4" SCREEN
674	22S 26E	2		1		CHERT	BIFACE/PREFORM	1/4" SCREEN
674	22S 26E	2		1		?	BELL	1/4" SCREEN
674	22S 26E	2		7		CHERT	UTILIZED FLAKES	1/4" SCREEN
674	22S 26E	2			1587.6	ROCK	FCR	1/4" SCREEN
676	22S 22E	1	10	1		CHERT	FLAKE	HAND
678	23S 3E		10	292		CHERT	FLAKES	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
678	23S 3E		10	1		QUARTZITE	FLAKE	1/4" SCREEN
678	23S 3E		10	14		CHERT	UTILIZED FLAKES	1/4" SCREEN
678	23S 3E		10	2		CHERT	CORES	1/4" SCREEN
678	23S 3E		10	1		CERAMIC	UNDECORATED WHITEWARE	1/4" SCREEN
678	23S 3E		10		113.4	ROCK	FCR	1/4" SCREEN
679	22S 22E		12	45		CHERT	FLAKES	1/4" SCREEN
679	22S 22E		12	1		CHERT	CORE	1/4" SCREEN
679	22S 22E		12	2		CHERT	UTILIZED FLAKES	1/4" SCREEN
679	22S 22E		12		1587.6	ROCK	FCR	1/4" SCREEN
683	22E 22S	2		104		CHERT	FLAKES	1/4" SCREEN
683	22E 22S	2		9		CHERT	UTILIZED FLAKES	1/4" SCREEN
683	22E 22S	2		1		CHERT	PREFORM	1/4" SCREEN
683	22E 22S	2		1		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
683	22E 22S	2			3855.6	ROCK	FCR	1/4" SCREEN
683	22E 22S	2		1		CHERT	CORE	1/4" SCREEN
686	22S 22E		12	3		CLAY	PREHISTORIC POTTERY	HAND
687	23S 3E		10	1530		CHERT	FLAKES	1/4" SCREEN
687	23S 3E		10	10		SLATE	FLAKES	1/4" SCREEN
687	23S 3E		10	4		CHERT	CORES	1/4" SCREEN
687	23S 3E		10	7		CHERT	BIFACE/FRAGMENTS	1/4" SCREEN
687	23S 3E		10	1		CHERT	PROJECTILE POINT	1/4" SCREEN
687	23S 3E		10	1		CHERT	POINT FRAGMENT	1/4" SCREEN
687	23S 3E		10	2		BONE	FRAGMENTS	1/4" SCREEN
687	23S 3E		10	52		CHERT	UTILIZED FLAKES	1/4" SCREEN
688	22S 26E	2	POSTMOLD 4	3		CHERT	FLAKES	1/4" SCREEN
688	22S 26E	2	POSTMOLD 4	1		FOSSIL		1/4" SCREEN
689	22S 26E	2	POSTMOLD 5	6		CHERT	FLAKES	1/4" SCREEN
692	23S 3E		10	1		CHERT	POINT FRAGMENT	TROWEL
693	23S 3E		10	1		METAL	FRAGMENT	TROWEL
693	23S 3E		10	1		CHERT	FLAKE	TROWEL
693	23S 3E		10	1		CHERT	BLOCKY FRAGMENT	TROWEL
694	23S 3E		10	1		CHERT	POINT FRAGMENT	TROWEL
695	22S 26E	3		104		CHERT	FLAKES	1/4" SCREEN
695	22S 26E	3		13		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
695	22S 26E	3			226.8	ROCK	FCR	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
695	22S 26E	3		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
695	22S 26E	3		2	20.7	ROCK	FCR	1/4" SCREEN
696	22S 26E	4		22		CHERT	FLAKES	1/4" SCREEN
696	22S 26E	4		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
696	22S 26E	4		3		CHERT	UTILIZED FLAKES	1/4" SCREEN
697	23S 3E		10	5		METAL	UNIDENTIFIED	TROWEL
715	22S 22E	3		1		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
715	22S 22E	3		1		CHERT	PREFORM	1/4" SCREEN
715	22S 22E	3		54		CHERT	FLAKES	1/4" SCREEN
715	22S 22E	3		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
719	22S 22E	3		1		CHERT	BIFACE	TROWEL
722	23S 3E		10	1		CHERT	POINT FRAGMENT	TROWEL
723	22S 22E	4		1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
723	22S 22E	4		8		CHERT	FLAKES	1/4" SCREEN
727	22S 6W	FILL		4		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
727	22S 6W	FILL		33		CHERT	FLAKES	1/4" SCREEN
727	22S 6W	FILL		1		CERAMIC	EARTHENWARE	1/4" SCREEN
732	22S 6W	1	10	182		CHERT	FLAKES	1/4" SCREEN
732	22S 6W	1	10		907.2	ROCK	FCR	1/4" SCREEN
732	22S 6W	1	10	21		CHERT	UTILIZED FLAKES	1/4" SCREEN
732	22S 6W	INTERFACE	FILL & F10	1		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
732	22S 6W	1	10	1	20.6	ROCK	FCR	1/4" SCREEN
733	22S 6W	F10 INTERFACE		1		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
734	23S 3E	5		1		CHERT	CRUDE BIFACE	1/4" SCREEN
734	23S 3E	5		2	159.3	ROCK	FCR	1/4" SCREEN
734	23S 3E	5		2		CHERT	CORES	1/4" SCREEN
734	23S 3E	5		413		CHERT	FLAKES	1/4" SCREEN
734	23S 3E	5		16		CHERT	UTILIZED FLAKES	1/4" SCREEN
737	22S 6W	INTERFACE	FILL & F10	1		CHERT	PROJECTILE POINT	TROWEL
740	23S 3E	5		1		CHERT	PROJECTILE POINT	TROWEL
741	22S 6W	1	10	46		CHERT	UTILIZED FLAKES	1/4" SCREEN
741	22S 6W	1	10	2		CHERT	CORE FRAGMENTS	1/4" SCREEN
741	22S 6W	1	10	931		CHERT	FLAKES	1/4" SCREEN
741	22S 6W	1	10		907.2	ROCK	FCR	1/4" SCREEN
745	23S 3E	6		21		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
745	23S 3E	6		296		CHERT	FLAKES	1/4" SCREEN
745	23S 3E	6		2		CHERT	CORE FRAGMENTS	1/4" SCREEN
759	23S 14W	1	10	574		CHERT	FLAKES	1/4" SCREEN
759	23S 14W	1	10	6		SLATE	FLAKES	1/4" SCREEN
759	23S 14W	1	10		226.8	ROCK	FCR	1/4" SCREEN
759	23S 14W	1	10	1		CHERT	POINT FRAGMENT	1/4" SCREEN
759	23S 14W	1	10	31		CHERT	UTILIZED FLAKES	1/4" SCREEN
759	23S 14W	1	10	1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
759	23S 14W	ì	10	1	12.2	ROCK	FCR	1/4" SCREEN
759	23S 14W	1	10	1		CHERT	CORE	1/4" SCREEN
760	22S 6W	1	10	1		CHERT	HAFTED SCRAPER	TROWEL
760	22S 6W	1	10	1		CHERT	PROJECTILE POINT	TROWEL
762	22S 6W	1	10	6		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
763	22S 6W	1	10	1		CHERT	POINT FRAGMENT	TROWEL
773	23S 14W	1	10	1		CHERT	PREFORM	TROWEL
777	22S 6W	1	10	1		LEAD	DISK (TRADE GOOD?)	TROWEL
790	23S 12W	2 (B-1)		1		CHERT	POINT FRAGMENT	1/4" SCREEN
790	23S 12W	2 (B-1)		1		CHERT	POINT FRAGMENT	1/4" SCREEN
790	23S 12W	2 (B-1)		1		CHERT	POINT FRAGMENT	1/4" SCREEN
790	23S 12W	2 (B-1)		4		CHERT	SCRAPERS	1/4" SCREEN
790	23S 12W	2 (B-1)		6		CHERT	UTILIZED FLAKES	1/4" SCREEN
790	23S 12W	2 (B-1)		1		CHERT	SPOKE SHAVER	1/4" SCREEN
790	23S 12W	2 (B-1)		2		BONE	BURNED BONE	1/4" SCREEN
790	23S 12W	2 (B-1)			1360.8	ROCK	FCR	1/4" SCREEN
790	23S 12W	2 (B-1)		1		CHERT	CORE FRAGMENT	1/4" SCREEN
790	23S 12W	2 (B-1)		16		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
790	23S 12W	2 (B-1)		506		CHERT	FLAKES	1/4" SCREEN
790	23S 12W	2 (B-1)		3	5.6	ROCK	FCR	1/4" SCREEN
798	22S 6W	2	13	45		CHERT	FLAKES	1/4" SCREEN
798	22S 6W	2	13	1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
798	22S 6W	2	13	1	18.8	ROCK	FCR	1/4" SCREEN
799	23S 12W	3		1		CHERT	PROJECTILE POINT	1/4" SCREEN
799	23S 12W	3		1		CHERT	POINT FRAGMENT	1/4" SCREEN
799	22S 12W	3		1		CHERT	PROJECTILE POINT	1/4" SCREEN
799	22S 12W	3		11		CHERT	UTILIZED FLAKES	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
799	22S 12W	3		330		CHERT	FLAKES	1/4" SCREEN
799	22S 12W	3		1		CHERT	CORE	1/4" SCREEN
801	22S 6W	2		3		CHERT	CORES	1/4" SCREEN
801	22S 6W	2		626		CHERT	FLAKES	1/4" SCREEN
801	22S 6W	2		57		CHERT	UTILIZED FLAKES	1/4" SCREEN
801	22S 6W	2			2268	ROCK	FCR	1/4" SCREEN
802	22S 6W	2		29		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
805	22S 6W	2		1		CLAY	PREHISTORIC POTTERY	TROWEL
809	22S 6W	2		1		CLAY	PREHISTORIC POTTERY	TROWEL
820	23S 14W	2	10	1		CARBON	SAMPLE	1/4" SCREEN
820	23S 14W	2	10	1		BONE	FRAGMENT	1/4" SCREEN
820	23S 14W	2	10	21	350.5	ROCK	FCR	1/4" SCREEN
820	23S 14W	2	10	440		CHERT	FLAKES	1/4" SCREEN
820	23S 14W	2	10	11		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
820	23S 14W	2	10	5		CHERT	CORE FRAGMENTS	1/4" SCREEN
822	22S 6W	3		1		SLATE	FLAKE	1/4" SCREEN
822	22S 6W	3		1		CHERT	SCRAPER	1/4" SCREEN
822	22S 6W	3		2		CHERT	UTILIZED FLAKES	1/4" SCREEN
822	22S 6W	3		3		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
822	22S 6W	3		444		CHERT	FLAKES	1/4" SCREEN
822	22S 6W	3			1134	ROCK	FCR	1/4" SCREEN
837	23S 14W	2	10	1		CHERT	PROJECTILE POINT	TROWEL
838	22S 6W	3		5		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
839	22S 6W	4		1	66	ROCK	FCR	1/4" SCREEN
839	22S 6W	4		334		CHERT	FLAKES	1/4" SCREEN
839	22S 6W	4		5		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
85 3	23S 10W	1 INTERAFACE	10	21		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
853	23S 10W	1 INTERFACE	10	415		CHERT	FLAKES	1/4" SCREEN
853	23S 10W	1 INTERFACE	10	1		CHERT	CORE FRAGMENT	1/4" SCREEN
853	23S 10W	1 INTERFACE	10	23	1120.8	ROCK	FCR	1/4" SCREEN
853	23S 10W	1 INTERFACE	10	1		CARBON	SAMPLE	1/4" SCREEN
854	22S 6W	5		1	21.7	ROCK	FCR	1/4" SCREEN
854	22S 6W	5		3		CHERT	UTILIZED FLAKES	1/4" SCREEN
854	22S 6W	5		427		CHERT	FLAKES	1/4" SCREEN
857	22S 6W	5		1		CLAY	PREHISTORIC POTTERY	1/4" SCREEN

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
864	23S 14W	2	10	1		CHERT	PROJECTILE POINT	TROWEL
868	23S 14W	2	10	1		SILVER	EARBOB	1/4" SCREEN
869	23S 14W	2	10	1		CLAY	PREHISTORIC POTTERY	1/4" SCREEN
870	23S 14W	2	10	1		CHERT	POINT FRAGMENT	TROWEL
872	23S 10W	2	10	17	761.8	ROCK	FCR	1/4" SCREEN
872	23S 10W	2	10	3		CHERT	BIFACE FRAGMENTS	1/4" SCREEN
872	23S 10W	2	10	1077		CHERT	FLAKES	1/4" SCREEN
872	23S 10W	2	10	5		CHERT	CORES	1/4" SCREEN
872	23S 10W	2	10	29		CHERT	UTILIZED FLAKES	1/4" SCREEN
880	23S 14W	2		418		CHERT	FLAKES	1/4" SCREEN
880	23S 14W	2		1		SLATE	FLAKE	1/4" SCREEN
880	23S 14W	2		1		SLATE	FRAGMENT	1/4" SCREEN
880	23S 14W	2		25	4080.2	ROCK	FCR	1/4" SCREEN
880	23S 14W	2		1		CHERT	BIFACE	1/4" SCREEN
880	23S 14W	2		1		CHERT	CORE	1/4" SCREEN
880	23S 14W	2		11		CHERT	UTILIZED FLAKES	1/4" SCREEN
884	23S 14W	3		1		CHERT	CORE FRAGMENT	1/4" SCREEN
884	23S 14W	3		9	1339.6	ROCK	FCR	1/4" SCREEN
884	23S 14W	3		515		CHERT	FLAKES	1/4" SCREEN
884	23S 14W	3		5		CHERT	UTILIZED FLAKES	1/4" SCREEN
888	23S 14W	4		1	225.2	ROCK	FCR	1/4" SCREEN
888	23S 14W	4		96		CHERT	FLAKES	1/4" SCREEN
888	23S 14W	4		1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
891	23S 10W	3 SUB F10		10	702.5	ROCK	FCR	1/4" SCREEN
891	23S 10W	3 SUB F10		7		CHERT	CORES	1/4" SCREEN
891	23S 10W	3 SUB F10		13		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
891	23S 10W	3 SUB F10		300		CHERT	FLAKES	1/4" SCREEN
891	23S 10W	3 SUB F10		1		CHERT	BIFACE FRAGMENT	1/4" SCREEN
893	23S 10W	4		6	665.2	ROCK	FCR	1/4" SCREEN
893	23S 10W	4		349		CHERT	FLAKES	1/4" SCREEN
893	23S 10W	4		3		CHERT	BLOCKY FRAGMENTS	1/4" SCREEN
893	23S 10W	4		2		CHERT	BIFACE FRAGMENTS	1/4" SCREEN
893	23S 10W	4		1		CHERT	UTILIZED FLAKE	1/4" SCREEN
893	23S 10W	4		1		CHERT	SCRAPER	1/4" SCREEN
894	23S 10W	4		1		CHERT	POINT BASE	1/4" SCREEN

12-Hu-935 Artifact Inventory

CAT#	UNIT	LEVEL	FEATURE	COUNT	WEIGHT	MATERIAL	OBJECT	COLLECTION
896	23S 10W	5		1	103.2	ROCK	FCR	1/4" SCREEN
896	23S 10W	5		1		CHERT	MODIFIED FLAKE	1/4" SCREEN
896	23S 10W	5		1		CHERT	BLOCKY FRAGMENT	1/4" SCREEN
896	23S 10W	5		79		CHERT	FLAKES	1/4" SCREEN
899	TRENCH 1E	PROFILE		2		GLASS	FRAGMENTS	1/4" SCREEN
899	TRENCH 1E	PROFILE		1		IRON	SQUARE NAIL FRAGMENT	1/4" SCREEN
899	TRENCH 1E	PROFILE		1		SLATE	FLAKE	1/4" SCREEN
899	TRENCH 1E	PROFILE		597		CHERT	FLAKES	1/4" SCREEN
899	TRENCH 1E	PROFILE		3	4.6	ROCK	FCR	1/4" SCREEN
899	TRENCH 1E	PROFILE		1		CHERT	PROJECTILE POINT	1/4" SCREEN
899	TRENCH 1E	PROFILE		1		CHERT	PROJECTILE POINT	1/4" SCREEN
899	TRENCH 1E	PROFILE		4		CHERT	CORES	1/4" SCREEN
899	TRENCH 1E	PROFILE		5		CHERT	BIFACES	1/4" SCREEN
899	TRENCH 1E	PROFILE		37		CHERT	UTILIZED FLAKES	1/4" SCREEN
В	AREA B	SCATTER		1		CHERT	PROJECTILE POINT	SURFACE
В	AREA B	SCATTER		22		CHERT	UTILIZED FLAKES	SURFACE
В	AREA B	SCATTER		8		CHERT	CORES	SURFACE
В	AREA B	SCATTER		14		CHERT	BLOCKY FRAGMENTS	SURFACE
В	AREA B	SCATTER		80		CHERT	FLAKES	SURFACE
В	AREA B	SCATTER		1		METAL	FARM EQUIP. ITEM	SURFACE
В	AREA B	SCATTER		1		CERAMIC	STONEWARE FRAGMENT	SURFACE
В	AREA B	SCATTER		2		GLASS	CLEAR BOTTLE BASES	SURFACE

Note: Weights of artifacts are in grams

Appendix B: Artifacts from Flotation

CAT#	UNIT	LEVEL	FEATURE	SCREEN	COUNT	ARTIFACT	WEIGHT
004	16N 8E		F-2	.072"	63	LITHICS	7.6 g
004	16N 8E		F-2	.072"	2	FCR	15.7 g
004	16N 8E		F-2	.030"	33	LITHICS	0.1 g
008	14N 6E		STAIN 1	.072"	38	LITHICS	12.4 g
008	14N 6E		STAIN 1	.072"	5	FLORAL	0.4 g
008	14N 6E		STAIN 1	.030"	28	LITHICS	0.1 g
012	16N 6E		STAIN 1	.072"	23	LITHICS	1.2 g
012	16N 6E		STAIN 1	.030"		LITHICS	0.1 g
013	16N 6E		STAIN 2	.072"	24	LITHICS	0.7 g
013	16N 6E		STAIN 2	.030"	54	LITHICS	0.3 g
013	16N 6E		STAIN 2	.030"		FLORAL	0.2 g
014	16N 6W		W STAIN	.072"	5	LITHICS	0.5 g
015	6N 6E		F-2 W 1/2	.072"	90	LITHICS	27.5 g
015	6N 6E		F-2 W 1/2	.072"		FCR	505.6 g
015	6N 6E		F-2 W 1/2	.030"	98	LITHICS	0.4 g
015	6N 6E		F-2 W 1/2	.030"		FLORAL	0.1 g
025	0N 37E	1	F-5 N 1/2	.072"	17	LITHICS	23.4 g
025	0N 37E	1	F-5 N 1/2	.072"		SLAG	0.2 g
025	0N 37E	1	F-5 N 1/2	.030"	20	LITHICS	0.1 g
028	0N 34E	l	F-3 S 1/2	.072"	109	LITHICS	36.7 g
028	0N 34E	1	F-3 S 1/2	.072"	2	FCR	44.9 g
028	0N 34E	1	F-3 S 1/2	.030"	41	LITHICS	0.2 g
028	0N 34E	1	F-3 S 1/2	.030"	1	FLORAL	
031	2N 37E	1	F-5	.072"	20	LITHICS	3.1 g
031	2N 37E	1	F-5	.030"	21	LITHICS	0.1 g
033	2N 34E	1	F-6	.072"	19	LITHICS	32.5 g
033	2N 34E	1	F-6	.030"	14	LITHICS	0.3 g
034	2N 37E	1	F-4 S 1/2	.072"	37	LITHICS	2.1 g
034	2N 37E	1	F-4 S 1/2	.072"		FCR	1.1 g
034	2N 37E	1	F-4 S 1/2	.030"	38	LITHICS	0.3 g
038	2N 37E	1	S-3 W 1/2	.072"	14	LITHICS	0.3 g
038	2N 37E	1	S-3 W 1/2	.030"	32	LITHICS	0.2 g
040	2N 37E		S-4 S 1/2	.072"	5	LITHICS	0.1 g
040	2N 37E		S-4 S 1/2	.030"	9	LITHICS	0.1 g
077	4S 64E	1		.072"	19	LITHICS	3.6 g
077	4S 64E	1		.072"	4	PLASTIC	0.1 g
077	4S 64E	1		.072"	2	GLASS	0.6 g
077	4S 64E	1		.072"	1	FAUNAL	0.4 g
077	4S 64E	1		.030"		LITHICS	0.1 g
077	4S 64E	1		.030"	3	GLASS	<0.1 g
077	4S 64E	1		.030"	1	FAUNAL	<0.1 g
079	4S 64E	2		.072"	30	LITHICS	5.2 g
079	4S 64E	2		.072"	5	GLASS	0.6 g
079	4S 64E	2		.072"	3	METAL	<0.1 g
079	4S 64E	2		.072"	2	PLASTIC	<0.1 g
079	4S 64E	2		.030"	10	LITHICS	0.1 g
087	2N 19E		STAIN 6	.072"	34	LITHICS	2,9 g
087	2N 19E		STAIN 6	.072"	19	LITHICS	0.1 g
088	4S 64E	4		.072"	1	CHERT CORE	53.9 g

12-Hu-935 Artifacts from Flotation

CAT#	UNIT	LEVEL	FEATURE	SCREEN	COUNT	ARTIFACT	WEIGHT
088	4S 64E	4		.072"	68	FLAKES	53.9 g
088	4S 64E	4		.072"	1	FCR	14.1 g
088	4S 64E	4		.072"	5	METAL	2.2 g
088	4S 64E	4		.030"	30	LITHICS	0.5 g
091	2N 19E	1		.072"	51	LITHICS	6.0 g
091	2N 19E	1		.072"	1	FCR	264 g
091	2N 19E	1		.030"	30	LITHICS	0.4 g
091	2N 19E	1		.072"	1	METAL	<0.1 g
091	2N 19E	1		.030"	5	METAL	<0.1 g
130	10N 92E	1	STAIN 7	.072"	42	LITHICS	23.6 g
130	10N 92E	1	STAIN 7	.030"	199	LITHICS	0.7 g
130	10N 92E	1	STAIN 7	.030"	3	GLASS	<0.1 g
144	6N 100E	1		.072"	22	LITHICS	33.1 g
144	6N 100E	1		.030"	19	LITHICS	0.4 g
145	10N 92E	2	STAIN 7	.072"	42	LITHICS	6.2 g
145	10N 92E	2	STAIN 7	.072"		FLORAL	0.2 g
145	10N 92E	2	STAIN 7	.030"	68	LITHICS	0.3 g
145	10N 92E	2	STAIN 7	.030"		FLORAL	0.2 g
146	10N 92E	3	STAIN 7	.072"	57	LITHICS	33.2 g
146	10N 92E	3	STAIN 7	.030"	131	LITHICS	0.5 g
146	10N 92E	3	STAIN 7	.072"		FLORAL	0.1 g
146	10N 92E	3	STAIN 7	.030"		FLORAL	0.1 g
157	10N 92E	4		.072"	10	LITHICS	9.5 g
157	10N 92E	4		.030"	35	LITHICS	0.1 g
213	10N 100E		STAIN 9	.072"	9	LITHICS	22.5 g
213	10N 100E		STAIN 9	.030"	9	LITHICS	<0.1 g
217	10N 100E		STAIN 9	.072"	33	LITHICS	15.5 g
217	10N 100E		STAIN 9	.030"	91	LITHICS	0.4 g
234	5S 84E	6		.072"		LITHICS	3.9 g
234	5S 84E	6		.072"		FCR	3.1 g
234	5S 84E	6		.072"		ASPHALT?	8.7 g
234	5S 84E	6		.030"		LITHICS	0.6 g
243	5S 74E	8		.072"	48	LITHICS	10.8 g
243	5S 74E	8		.072"	1	FLORAL	
243	5S 74E	8		.072"	1	FAUNAL	
243	5S 74E	8		.072"	2	FCR	56.4 g
243	5S 74E	8		.072"	2	COAL	
243	5S 74E	8		.030"	108	LITHICS	0.4 g
243	5S 74E	8		.030"	1	GLASS	
243	5S 74E	8		.030"	1	FAUNAL	
264	6S 10E	4		.072"	180	LITHICS	71.8 g
264	6S 10E	4		.072"		FCR	96.4 g
264	6S 10E	4		.072"	4	GLASS	0.1 g
264	6S 10E	4		.030"	156	LITHICS	0.5 g
264	6S 10E	4		.030"	6	GLASS	<0.1g
273	5.5S 40E	3		.072"	172	LITHICS	54.6 g
273	5.5S 40E	3		.072"		ASPHALT	38.5 g
273	5.5S 40E	3		.072"		FCR	65.1 g
273	5.5S 40E	3		.072"		FOIL	0.1 g

CAT#	UNIT	LEVEL	FEATURE	SCREEN	COUNT	ARTIFACT	WEIGHT
273	5.5S 40E	3		.072"	3	GLASS	0.1 g
273	5.5S 40E	3		.072"		FLORAL	0.8 g
273	5.5S 40E	3		.072"		FAUNAL	0.2 g
273	5.5S 40E	3		.030"	214	LITHICS	1.3 g
273	5.5S 40E	3		.030"		ASPHALT	0.3 g
273	5.5S 40E	3		.030"		FLORAL	0.2 g
279	5.5S 40E	4		.072"	118	LITHICS	24.0 g
279	5.5S 40E	4		.072"		ASHPALT	6.7 g
279	5.5S 40E	4		.072"		FLORAL	0.2 g
279	5.5S 40E	4		.072"		FAUNAL	0.3 g
279	5.5S 40E	4		.030"	155	LITHICS	0.9 g
279	5.5S 40E	4		.030"		ASPHALT	0.3 g
279	5.5S 40E	4		.030"		FLORAL	0.2 g
285	5.5S 40E	5		.072"	59	LITHICS	13.3 g
285	5.5S 40E	5		.072"		FLORAL	0.1 g
285	5.5S 40E	5		.072"		FAUNAL	0.1 g
285	5.5S 40E	5		.030"	75	LITHICS	0.4 g
285	5.5S 40E	5		.030"		FLORAL	0.1 g
289	5.5S 40E	6		.072"	24	LITHICS	6.1 g
289	5.5S 40E	6		.072"		FAUNAL	0.1 g
289	5.5S 40E	6		.072"		FLORAL	0.1 g
289	5.5S 40E	6		.030"	79	LITHICS	0.4 g
289	5.5S 40E	6		.030"		FLORAL	0.1 g
297	6S 75E	7		.072"	84	LITHICS	23.4 g
297	6S 75E	7		.030"	31	LITHICS	0.1 g
305	6S 75E	8		.072"	42	LITHICS	73.2 g
305	6S 75E	8		.030"	17	LITHICS	0.1 g
317	7S 20E	3		.072"	10	LITHICS	1.2 g
317	7S 20E	3		.072"	1	FAUNAL	<0.1 g
317	7S 20E	3		.072"	3	GLASS	0.5 g
317	7S 20E	3		.072"	4	METAL	<0.1 g
317	7S 20E	3		.072"		ASPHALT	331.2 g
317	7S 20E	3		.030"	5	GLASS	<0.1 g
317	7S 20E	3		.030"	2	PLASTIC	<0.1 g
317	7S 20E	3		.030"	3	LITHICS	<0.1 g
321	7S 120E	4		.072"	128	LITHICS	15.5 g
321	7S 120E	4		.072"	13	GLASS	0.6 g
321	7S 120E	4		.072"		SLAG	9.5 g
321	7S 120E	4		.072"	1	RIVET	2.4 g
321	7S 120E	4		.030"	482	LITHICS	1.6 g
321	7S 120E	4		.072"		FAUNAL	<0.1 g
321	7S 120E	4		.030"		FAUNAL	0.1 g
321	7S 120E	4		.030"	28	GLASS	0.1 g
325	6S 75E	11		.072"	31	LITHICS	20.3 g
325	6S 75E	11		.072"		FAUNAL	0.1 g
325	6S 75E	11		.030"		LITHICS	0.4 g
329	7S 20E	6		.072"	41	LITHICS	5.1 g
329	7S 20E	6		.030"	29	LTIHICS	0.1 g
340	7S 20E	8		.072"	40	LITHICS	49.0 g

CAT#	UNIT	LEVEL	FEATURE	SCREEN	COUNT	ARTIFACT	WEIGHT
340	7S 20E	8		.072"		FCR	24.2 g
340	7S 20E	8		.072"		FLORAL	0.2 g
340	7S 20E	8		.030"	36	LITHICS	0.2 g
340	7S 20E	8		.030"		FLORAL	0.4 g
346	7S 30E	4		.072"	118	LITHICS	69.5 g
346	7S 30E	4		.072"		FCR	29.3 g
346	7S 30E	4		.072"		ASPHALT	74.5 g
346	7S 30E	4		.072"		METAL	15.0 g
346	7S 30E	4		.072"		GLASS	0.2 g
346	7S 30E	4		.030"	253	LITHIC	1.2 g
346	7S 30E	4		.030"		FLORAL	0.1 g
351	7S 30E	5		.072"	132	LITHICS	37.5 g
351	7S 30E	5		.072"		SLAG	4.1 g
351	7S 30E	5		.072"	6	GLASS	4.5 g
351	7S 30E	5		.072"		FLORAL	0.1 g
351	7S 30E	5		.072"		FAUNAL	0.2 g
351	7S 30E	5		.030"	277	LITHICS	1.7 g
351	7S 30E	5		.030"		SLAG	0.7 g
351	7S 30E	5		.030"		FLORAL	0.2 g
359	7S 30E	7		.072"	106	LITHICS	23.6 g
359	7S 30E	7		.072"		FAUNAL	0.1 g
359	7S 30E	7		.030"	113	LITHICS	0.6 g
359	7S 30E	7		.030"		FLORAL	0.2 g
361	7S 30E	8		.072"	20	LITHICS	20 g
361	7S 30E	8		.072"		ASPHALT	1.9 g
361	7S 30E	8		.030"	22	LITHICS	0.1 g
361	7S 30E	8		.030"		FLORAL	0.1 g
363	5.5S 43E	4		.072"	101	LITHICS	11.3 g
363	5.5S 43E	4		.072"	1	FOIL	<0.1 g
363	5.5S 43E	4		.072"	3	FAUNAL	0.1 g
363	5.5S 43E	4		.072"		YELLOWWARE	<0.1g
363	5.5S 43E	4		.030"		LITHICS	0.1 g
363	5.5S 43E	4		.030"		FAUNAL	<0.1 g
363	5.5S 43E	4		.030"		GLASS	<0.1 g
371	7S 20E	9		.072"	79	LITHICS	18.4 g
371	7S 20E	9		.072"		FCR	4.0 g
371	7S 20E	9		.030"	153	LITHICS	0.6 g
371	7S 20E	9		.030"		FLORAL	0.2 g
372	5.5S 43E	5		.072"	56	LITHICS	4.7 g
372	5.5S 43E	5		.072"	1	FLORAL	1.5 g
372	5.5S 43E	5		.030"	26	LITHICS	0.2 g
386	5.5S 43E	6		.072"	70	LITHICS	22.4 g
386	5.5S 43E	6		.072"		FCR	32.3 g
386	5.5S 43E	6		.072"		FLORAL	0.2 g
386	5.5S 43E	6		.030"	168	LITHICS	0.8 g
386	5.5S 43E	6		.030"		FLORAL	0.3 g
390	5.5S 43E	7		.072"	23	LITHICS	0.8 g
390	5.5S 43E	7		.030"	28	LITHICS	<0.1 g
408	26S 21E	6		.072"	1	PROJ. POINT	1.8 g

CAT#	UNIT	LEVEL	FEATURE	SCREEN	COUNT	ARTIFACT	WEIGHT
408	26S 21E	6		.072"	93	LITHICS	27.6 g
408	26S 21E	6		.072"		FCR	96.5 g
408	26S 21E	6		.072"		FLORAL	<0.1 g
408	26S 21E	6		.030"	51	LITHICS	0.3 g
408	26S 21E	6		.030"		FAUNAL	<0.1 g
411	6S 54E	3		.072"	19	LITHICS	2.8 g
411	6S 54E	3		.072"	7	METAL	8.2 g
411	6S 54E	3		.072"	5	GLASS	0.2 g
411	6S 54E	3		.072"	3	FAUNAL	0.1g
411	6S 54E	3		.030"	19	LITHICS	<0.1 g
411	6S 54E	3		.030"	9	GLASS	<0.1 g
413	26S 27E	6	F-8	.072"	70	LITHICS	13.3 g
413	26S 27E	6	F-8	.030"	41	LITHICS	0.2 g
416	6S 54E	4		.072"	65	LITHICS	7.4g
416	6S 54E	4		.072"	1	GLASS	<0.1 g
416	6S 54E	4		.072"	1	METAL	0.2 g
416	6S 54E	4		.030"	44	LITHICS	0.3 g
416	6S 54E	4		.030"	3	GLASS	<0.1 g
419	6S 54E	5		.072"	90	LITHICS	22.4 g
419	6S 54E	5		.072"	1	IRON	0.4 g
419	6S 54E	5		.072"		ASPHALT	5.8 g
419	6S 54E	5		.030"	139	LITHICS	0.7 g
419	6S 54E	5		.030"		FAUNAL	<0.1 g
419	6S 54E	5		.030"		FLORAL	0.1 g
423	6S 54E	6		.072"	58	LITHICS	4.8 g
423	6S 54E	6		.072"		FCR	109.2 g
423	6S 54E	6		.030"	61	LITHICS	0.5 g
425	26S 27E	7	F-9 W 1/2	.072"	45	LITHICS	15.8 g
425	26S 27E	7	F-9 W 1/2	.072"		FAUNAL	0.7 g
425	26S 27E	7	F-9 W 1/2	.072"		FCR	0.9 g
425	26S 27E	7	F-9 W 1/2	.030"	15	LITHICS	0.1 g
425	26S 27E	7	F-9 W 1/2	.030"	1	SEED BEAD	<0.1 g
436	22S 12E		F-10	.072"	41	LITHICS	55.7 g
436	22S 12E		F-10	.072"		FCR	37.0 g
436	22S 12E		F-10	.072"		FLORAL	0.2 g
436	22S 12E		F-10	.072"		FAUNAL	4.3g
436	22S 12E		F-10	.030"	19	LITHICS	0.1 g
436	22S 12E		F-10	.030"		FLORAL	0.3 g
436	22S 12E		F-10	.030"		FAUNAL	0.1 g
456	5S 58E	3		.072"	115	LITHICS	45.1 g
456	5S 58E	3		.072"		ASPHALT	4.4 g
456	5S 58E	3		.072"	19	IRON	0.6 g
456	5S 58E	3		.072"	9	GLASS	2.0 g
456	5S 58E	3		.072"		FLORAL	0.1 g
456	5S 58E	3		.030"	125	LITHICS	0.8 g
456	5S 58E	3		.030"		GLASS	0.2 g
458	5S 58E	4		.072"	1	CHERT CORE	68.2 g
458	5S 58E	4		.072"	92	LITHICS	54.5 g
458	5S 58E	4		.072"	4	FCR	276 g

12-Hu-935 Artifacts from Flotation

CAT#	UNIT	LEVEL	FEATURE	SCREEN	COUNT	ARTIFACT	WEIGHT
458	5S 58E	4		.030"	56	LITHICS	0.5 g
469	5S 58E	5		.072"	93	LITHICS	10.4 g
469	5S 58E	5		.030"	55	LITHICS	2.5 g
472	22S 12E	6		.072"	41	LITHICS	6 g
472	22S 12E	6		.030"	24	LITHICS	0.1 g
476	27S 3E		F-8	.072"	73	LITHICS	23.4 g
476	27S 3E		F-8	.072"		FCR	162.2 g
476	27S 3E		F-8	.030"	1	BEAD	<0.1 g
476	27S 3E		F-8	.030"	30	LITHICS	0.4 g
476	27S 3E		F-8	.030"	1	GLASS	<0.1 g
476	27S 3E		F-8	.030"		SLAG	0.3 g
487	22S 20E	1	F-10	.072"	167	LITHICS	66 g
487	22S 20E	1	F-10	.072"		FCR	128.1 g
487	22S 20E	1	F-10	.072"	8	PREHISTORIC POTTERY	1.5 g
487	22S 20E	1	F-10	.072"		FLORAL	0.2 g
487	22S 20E	1	F-10	.072"		FAUNAL	0.1 g
487	22S 20E	1	F-10	.030"	150	LITHICS	0.7 g
487	22S 20E	1	F-10	.030"		FLORAL	0.3 g
489	22S 12E	7	1	.072"	22	LITHICS	16 g
489	22S 12E	7		.072"		FCR	396 g
489	22S 12E	7	***************************************	.030"	17	LITHICS	<0.1 g
502	10S 40W	2		.072"	40	LITHICS	18.6 g
502	10S 40W	2		.072"		FCR	40.9 g
502	10S 40W	2		.072"	2	GLASS	0.2 g
502	10S 40W	2		.030"	29	LITHICS	0.1 g
502	10S 40W	2		.030"	2	GLASS	<0.1 g
504	22S 28E		F-10	.072"	86	LITHICS	18.5 g
504	22S 28E		F-10	.072"	5	FAUNAL	0.4 g
504	22S 28E		F-10	.072"		FCR	138.4 g
504	22S 28E		F-10	.030"		LITHICS	0.6 g
522	10S 40W	3		.072"	45	LITHICS	9.2 g
522	10S 40W	3		.072"	2	GLASS	<0.1 g
522	10S 40W	3		.072"	1	FAUNAL	<0.1 g
522	10S 40W	3		.030"	30	LITHICS	.05 g
522	10S 40W	3		.030"	7	GLASS	.05 g
522	10S 40W	3		.030"	1	LEAD SHOT	<0.1 g
537	10S 40W	4		.072"	52	LITHICS	34.6 g
537	10S 40W	4		.072"		FCR	101.8 g
537	10S 40W	4		.072"		FLORAL	0.1 g
537	10S 40W	4		.030"	86	LITHICS	0.4 g
537	10S 40W	4		.030"		FLORAL	0.1 g
544	22S 28E	3		.072"	147	LITHICS	104 g
544	22S 28E	3		.072"		FCR	2.8 g
544	22S 28E	3		.072"		FLORAL	0.2 g
544	22S 28E	3		.030"	206	LITHICS	1.1 g
544	22S 28E	3		.030"		FLORAL	0.4 g
546	22S 20E	2		.072"	133	LITHICS	68.5 g
546	22S 20E	2		.072"		FCR	56.9 g
546	22S 20E	2		.072"	5	PREHISTORIC POTTERY	13.9 g

12-Hu-935 Artifacts from Flotation

CAT#	UNIT	LEVEL	FEATURE	SCREEN	COUNT	ARTIFACT	WEIGHT
546	22S 20E	2		.072"		FLORAL	0.3 g
546	22S 20E	2	1/4	.030"	146	LITHICS	0.7 g
546	22S 20E	2		.030"		FLORAL	0.5 g
558	25S 3E		F-11 AREA B	.072"	78	LITHICS	37.8 g
558	25S 3E		F-11 AREA B	.072"		FCR	2.5 g
558	25S 3E		F-11 AREA B	.072"	1	GLASS	0.1 g
558	25S 3E		F-11 AREA B	.072"		FAUNAL	0.2 g
558	25S 3E		F-11 AREA B	.072"		FLORAL	0.1 g
558	25S 3E		F-11 AREA B	.030"	267	LITHICS	1.3 g
558	25S 3E		F-11 AREA B	.030"		FLORAL	0.2 g
558	25S 3E		F-11 AREA B	.030"		FAUNAL	0.1 g
565	22S 20E	1	F-12	.072"	117	LITHICS	28.5 g
565	22S 20E	1	F-12	.072"		FCR	65.5 g
565	22S 20E	1	F-12	.072"	13	PREHISTORIC POTTERY	4.4 g
565	22S 20E	1	F-12	.072"		FLORAL	0.4 g
565	22S 20E	1	F-12	.030"		LITHICS	0.9 g
565	22S 20E	1	F-12	.030"		FLORAL	0.4 g
568	25S 3E		F-8	.072"	140	LITHICS	29.2 g
568	25S 3E		F-8	.072"		SLAG	3.4 g
568	25S 3E		F-8	.072"		FLORAL	0.3 g
568	25S 3E		F-8	.072"		FAUNAL	0.2 g
568	25S 3E		F-8	.030"	199	LITHICS	1.1 g
568	25S 3E		F-8	.030"		SLAG	0.1 g
568	25S 3E		F-8	.030"		FLORAL	0.5 g
570	22S 28E	4		.072"	49	LITHICS	6.9 g
570	22S 28E	4		.030"	36	LITHICS	0.1 g
575	25S 3E		STAIN 9	.072"	22	LITHICS	4.8 g
575	25S 3E		STAIN 9	.072"		FAUNAL	<0.1 g
575	25S 3E		STAIN 9	.030"	24	LITHICS	0.3 g
578	22S 3E	2	F-10	.072"	139	LITHICS	56.6 g
578	22S 3E	2	F-10	.072"		FCR	21.9 g
578	22S 3E	2	F-10	.072"		FLORAL	0.3 g
578	22S 3E	2	F-10	.072"		FAUNAL	0.3 g
578	22S 3E	2	F-10	.072"		SLAG	1.4 g
578	22S 3E	2	F-10	.030"	151	LITHICS	0.8 g
578	22S 3E	2	F-10	.030"		SLAG	0.3 g
578	22S 3E	2	F-10	.030"		FLORAL	0.4 g
581	6S 73E	2		.072"	145	LITHICS	30.4 g
581	6S 73E	2		.072"		FCR	44.2 g
581	6S 73E	2		.072"		ASPHALT	2.7 g
581	6S 73E	2		.072"	ı İ	IRON	4.9 g
581	6S 73E	2		.072"		FLORAL	0.1 g
581	6S 73E	2		.030"	181	LITHICS	0.9 g
581	6S 73E	2		.030"		FLORAL	0.1 g
585	6S 73E	3		.072"	75	LITHICS	59.1 g
585	6S 73E	3		.072"		FCR	7.6 g
585	6S 73E	3		.030"	148	LITHICS	0.6 g
585	6S 73E	3		.030"		FLORAL	0.1 g
587	22S 20E	2		.072"	44	LITHICS	9.6 g

12-Hu-935 Artifacts from Flotation

CAT#	UNIT	LEVEL	FEATURE	SCREEN	COUNT	ARTIFACT	WEIGHT
873	23S 10W	2	F-10	.030"	3	FAUNAL	0.1 g
879	23S 14W	2	F-10	.072"	106	LITHICS	23.5 g
879	23S 14W	2	F-10	.072"	3	FCR	31 g
879	23S 14W	2	F-10	.072"	15	FAUNAL	0.8 g
879	23S 14W	2	F-10	.030"	61	LITHICS	0.1 g
879	23S 14W	2	F-10	.030"	6	FAUNAL	<0.1 g
891	23S 14W	2	F-10	.072"	104	FAUNAL	5.6 g
891	23S 14W	2	F-10	.072"	1	WHITE SEED BEAD	<0.1 g
891	23S 14W	2	F-10	.072"	1	PREHISTORIC POTTERY	1.3 g
891	23S 14W	2	F-10	.030"	67	FAUNAL	0.2 g
891	23S 14W	2	F-10	.030"	57	LITHICS	0.15 g

Appendix C: Representative Biface Sample

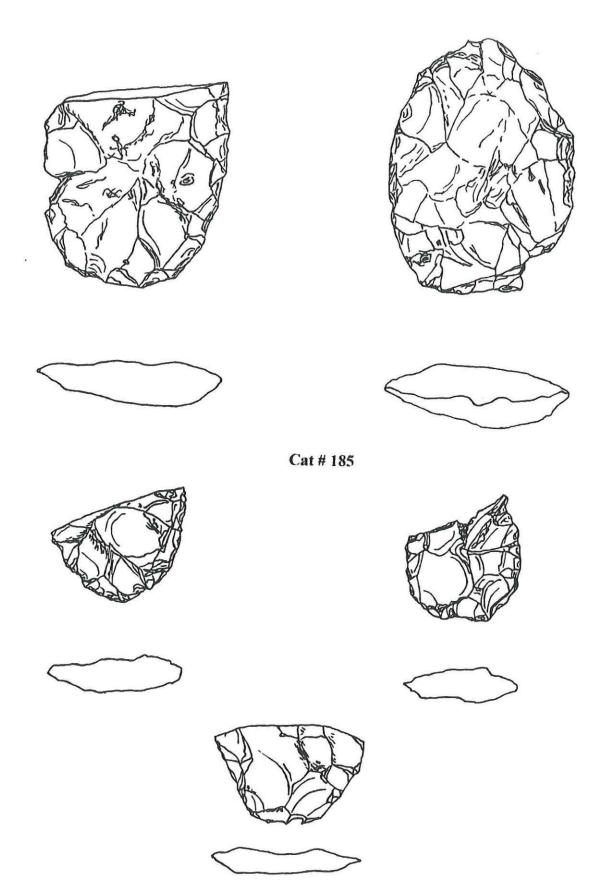
Cat # 185







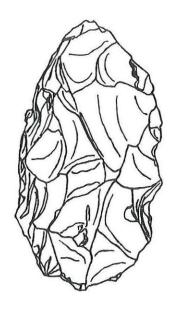




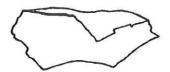


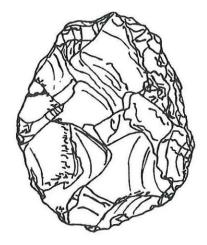
Cat # 773





Cat # 623





Cat # 603





Cat # 719









Cat # 612







Cat # 579

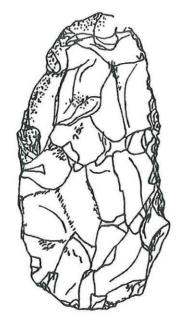




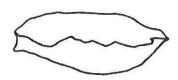


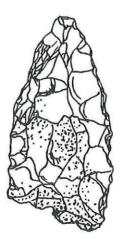
Cat # 185

Archaic Preforms



Cat # 610





Cat # 186





Cat # 610





Cat # 185

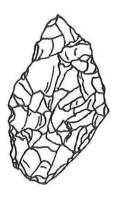


Archaic Preforms

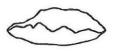


Cat # 597





Cat # 185





Cat # 529





Cat # 505

