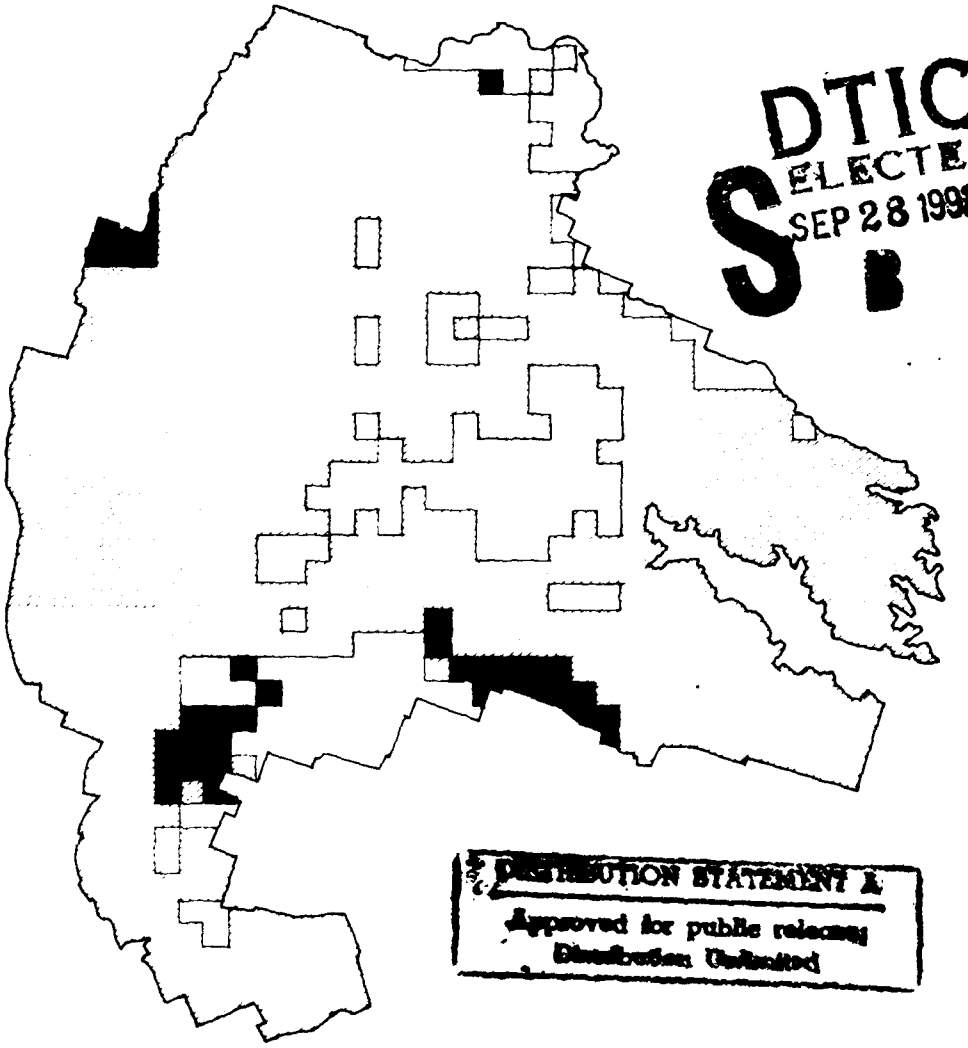
ARCHAEOLOGICAL SURVEY AT FORT HOOD, TEXAS FISCAL YEAR 1987 THE MCA RANGE CONSTRUCTION, PIDCOKE LAND EXCHANGE, AND PHANTOM RANGE PROJECTS



H. Blaine Ensor

With Contributions by

David L. Carlson
Shawn Bonath Carlson
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UNITED STATES ARMY FORT HOOD
ARCHEOLOGICAL RESOURCE MANAGEMENT SERIES
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Archaeological Survey at Fort Hood, Texas
Fiscal Year 1987
The MCA Range Construction, Pidcoke Land Exchange,
and Phantom Range Projects

Submitted in Partial
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An archeological survey was conducted from October of 1987 until November of 1988 at Fort Hood, Texas, by staff members of the Archeological Research Laboratory at Texas A&M University. A total of 26.4 km² (6,442 acres) was surveyed. The survey grid squares for both Delivery Order No. 1 and Delivery Order No. 6 are included in the present report. Survey results indicate that 57 prehistoric and historic sites were recorded under both delivery orders. Fifteen prehistoric sites were recorded during the Delivery Order No. 1 survey, while 20 historic sites were recorded. During the Delivery Order No. 6 survey, 10 prehistoric and 12 historic sites were recorded.

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Of these numbers, one prehistoric site and one historic site (Delivery Order No. 1) are considered eligible for the National Register. Sites deemed potentially eligible to the National Register numbered 11 (seven prehistoric, four historic) for Delivery Order No. 1. Potentially elibible sites for Delivery Order No. 6 included three prehistoric sites and four historic sites. Twenty-two sites for Delivery Order No. 1 are considered not eligible to the National Regster (15 prehistoric, seven historic). For the Delivery Order No. 6 survey, 15 sites are considered not eligible (seven prehistoric and eight historic).

Building on previous work, Ensor presents an update of the projectile point data base at Fort Hood. Intuitive type formations are tested using formal shape criteria and found to be reasonably consistent. Point shape variability, both within and between the Fort Hood and South Bend projectle point samples, is compared using a number of statistical methods. It is concluded that, in terms of shape variability, the disparate types match well, suggesting a similar cultural tradition in each locality; however, based on point size alone, these same types are significantly different. On the whole, Fort Hood points are larger than their South Bend counterparts.

Finally, the results of a statistical comparison of point type proportion between Fort Hood and South Bend indicate that, while the prehistoric inhabitants of both localities belonged to the same cultural traditions throughout most of prehistory, important differences obtain. Differences in point type proportion during the Middle Archaic, Terminal/Transitional Archaic, and Late Prehistoric periods suggest that cultural adaptations were not static; rather, it appears that a dynamic relationship between the natural environment, social and political factors, as well as shifts in productive technology and subsistence patterns may have resulted in changing demographic patterns and cultural content within Central and north-central Texas.

ABSTRACT

An archeological survey was conducted from October of 1987 until November of 1988 at Fort Hood, Texas, by staff members of the Archeological Research Laboratory at Texas A&M University. A total of 26.4 km² (6,442 acres) was surveyed. The survey grid squares for both Delivery Order No. 1 and Delivery Order No. 6 are included in the present report. Survey results indicate that 57 prehistoric and historic sites were recorded under both delivery orders. Fifteen prehistoric sites were recorded during the Delivery Order No. 1 survey, while 20 historic sites were recorded. During the Delivery Order No. 6 survey, 10 prehistoric and 12 historic sites were recorded.

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MANAGEMENT SUMMARY

This report summarizes the results of an archeological survey conducted for the U.S. Army at Fort Hood, Texas, by personnel from the Archeological Research Laboratory, Texas A&M University, during Fiscal Year 1987. The surveyed area totals 26.4 km^2. The goal of the survey was to identify all cultural properties in the survey areas and to make recommendations as to their National Register eligibility status. The survey recorded 57 sites, 25 prehistoric and 32 historic.

Two sites, one prehistoric and the other historic, are considered eligible to the National Register. Some 18 sites are considered potentially eligible, 10 prehistoric and eight prehistoric. Thirty-seven sites are considered eligible to the National Register, of which 22 are prehistoric and 15 are historic. Complete descriptions of each site and site specific recommendations for management purposes are given in the report.

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ACKNOWLEDGMENTS

The successful completion of this survey is due to a number of people. Personnel from the Archeological Research Laboratory are thanked for their contributions to the project. Tom Dureka and Ann Mesrobian are thanked for directing the Delivery Order No. 1 survey, while Frank Winchell and assistant Lisa Rotunno are thanked for directing the Delivery Order No. 6 survey. Crew members who contributed to the project include: Romana Arellono, Jennifer Barnier, Kathleen Callum, Keven Kern, Allen Kirckland, Eric Peterson, Dennis Pry, Debra Sandler, and Marcia Vehling.

In the laboratory, Lisa Niederauer is thanked for her careful handling and processing of artifacts, while Robyn Pearson, Jeff Johnson, and Ben Olive entered basic site data, helped write site descriptions, and generated tables. Tammy McLean analyzed the historic artifacts and conducted all word processing. Dr. Catherine Mueller-Wille handled the day to day management of the field work and preliminary laboratory work.

At Fort Hood, Dr. Frederick Briuer provided access to the Fort Hood archaeology lab and site files and helped with logistical problems.

INTRODUCTION

This report combines the results of two separate surveys conducted at the Fort Hood Military Installation over the period of October 1987 until November of 1988 (Figure 1). The first survey, Delivery Order No. 1, which encompassed the MCA Range Construction and other installations (Figure 2), was conducted in the fall and winter of 1987-1988 (FY 1987). The last survey, Delivery Order No. 6, was conducted during the fall of 1988 and involved the Pidcoke Land Exchange and Phantom Range. All work was performed in compliance with existing federal laws and regulations regarding treatment of historic properties, in particular, the National Historic Preservation Act of 1966, Executive Order 11593 (1971), and the Archaeological and Historic Preservation Act of 1974. All records, artifacts, and other materials generated as a result of the projects are permanently curated at Fort Hood, Texas.

Fifteen prehistoric sites were recorded during the Delivery Order No. 1 survey, while 20 historic sites were recorded. During the Delivery Order No. 6 survey, 10 prehistoric and 12 historic sites were recorded. The first survey covered 13.4 grid squares or 3,230 acres including a 60 x 600 m pipeline. The second survey covered 13 grid squares or approximately 3,212 acres.

The present report summarizes the results of the surveys, describes the artifacts recovered, provides site descriptions, assessments and recommendations for each historic property, and presents a research design and results. Background sections on the environment and culture history are also presented.

All archaeological surveys at Fort Hood since the early 1980s have been carried out using a uniform method of quadrant sweeping and site recording. Even though these procedures have been slightly modified as circumstances warranted, the same basic methods have been adhered to as discussed in the survey procedures and results section; this same set of survey methods and recording techniques was used during these two surveys.

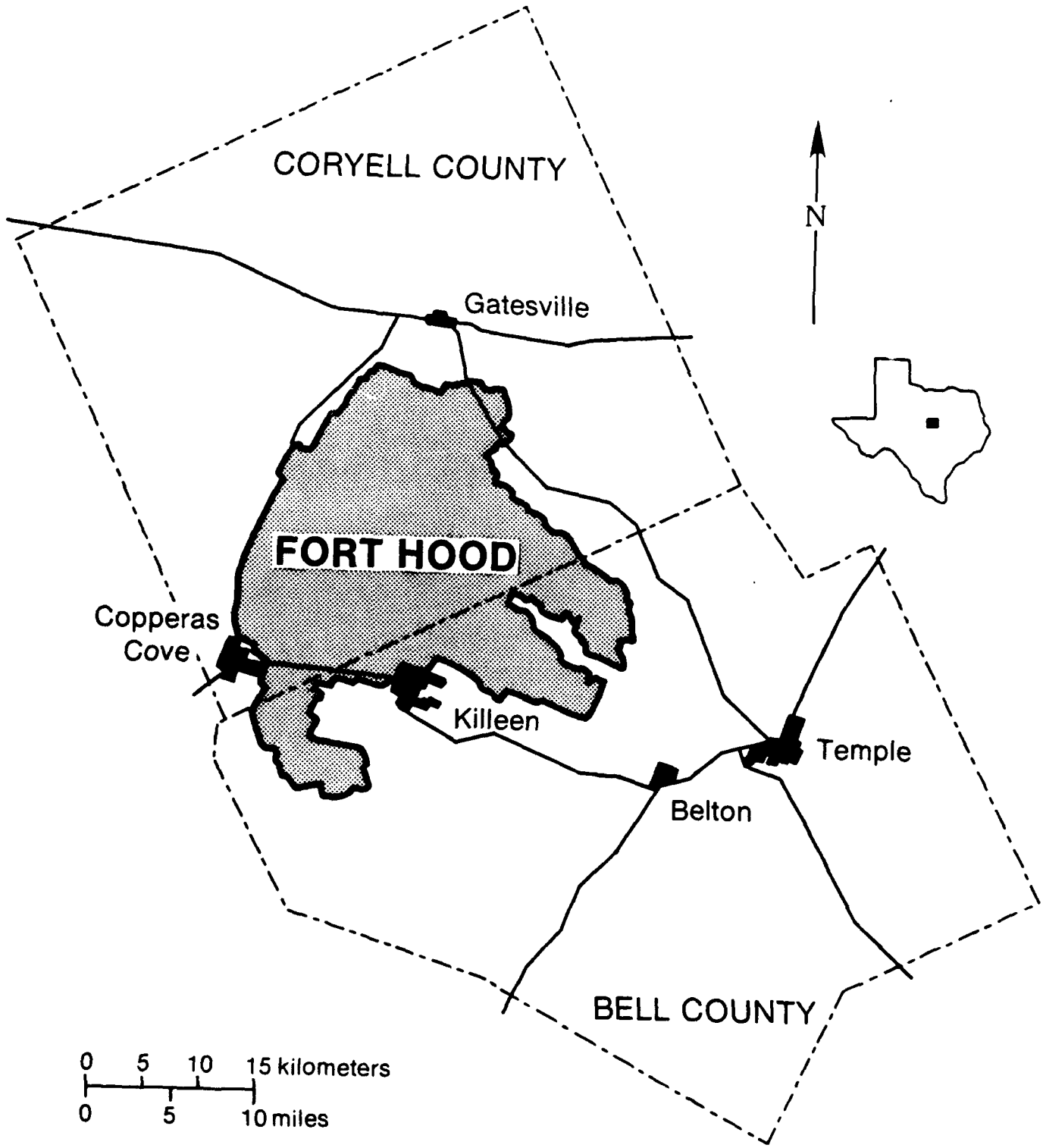


Figure 1. Location of Fort Hood in Bell and Coryell Counties, Texas.

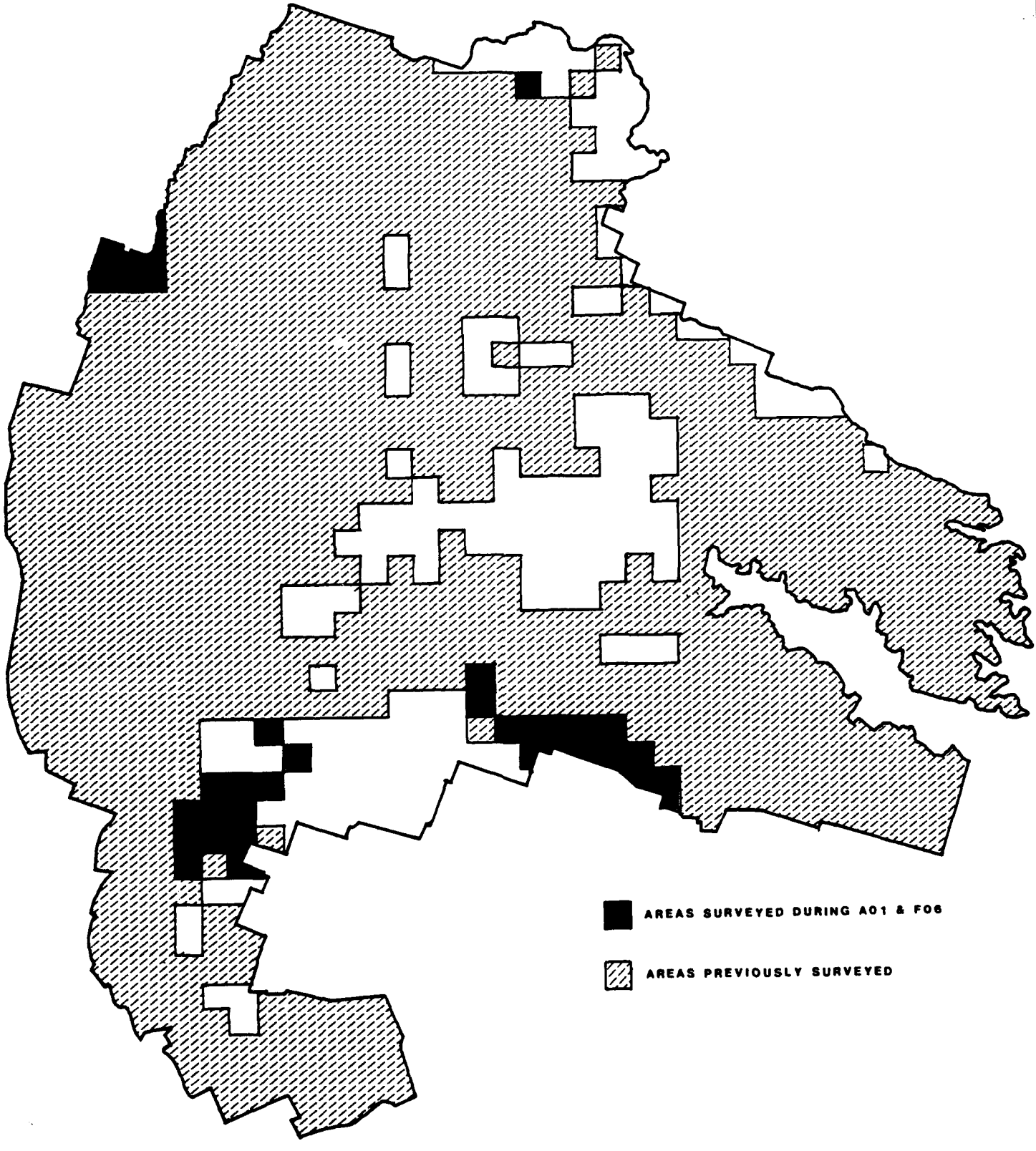


Figure 2. Survey Area for Fiscal Year 1987: Delivery Orders 1 and 6.

ENVIRONMENTAL BACKGROUND

The study of any past culture depends heavily on a working knowledge of the physical environment in which it was set. This applies to both historic and prehistoric sites. For this reason, several environmental studies of the Fort Hood region have been published. A brief summary is presented here. Detailed earlier statements can be found in Guderjan et al. (1980:8-12, 180-210), Skinner et al. (1981:6-11), Skinner et al. (1984:2-1 to 2-4), Carlson et al. (1988), Roemer et al. (1985), United States Department of the Army (1979:5.3-5.4), and Espey, Huston and Associates, Inc. (1979).

GEOLOGY AND GEOMORPHOLOGY

The present topography of Fort Hood consists of incised river canyon topography rejuvenated by late Tertiary faulting and uplift. Associated with these upland areas is an extensive area of gently rolling hills also incised by dendritic stream systems. Over half of the Fort Hood Military Installation consists of intermediate uplands where the Cretaceous sediments are heavily dissected by rivers and streams (Figure 3).

A detailed analysis of the geologic stratigraphy of the Fort Hood area is useful in understanding the archaeology present. Ascending from the lowest elevations, the geological strata are all Cretaceous system, Fredericksburg group, Comanche series.

All Comanche sediments known in Texas are near shore or epicontinental deposits. They belong very generally to three facies: (1) marginal, near shore neritic or partly littoral sands, silty clays, conglomerates, and saline or gypsiferous sediments; (2) neritic marls, clays, shales, and limestones; and (3) reef (zoogenic) limestones, coquina, and shell aggregates or marls.

In the Fort Hood region, it is the Fredericksburg group of the Comanche series that is visible both in outcrop and in the geomorphology present. The Fredericksburg group is distinguished by a great diversity of lithologic facies, corresponding to differences in the sources of its sediments. It is doubtful that the Walnut, Comanche Peak, and Edwards formations can be retained as formations in the usual sense in this area; however, those terms might be used to designate the shelly marl, the soft nodular limestone, and the rudistid reef facies, for in each of the three supposed formations all three types of lithology occur.

It is the southern portion of the Fredericksburg group which forms the Edwards Plateau and the region of incised river canyon topography rejuvenated by late Tertiary faulting and uplift. It also forms the Lampasas cutplain whose top consists of interstream ridges and outliers of limestone (the Edwards and Comanche Peak formations primarily) overlooking clay valleys (Walnut formation) to the west.

The Paluxy formation, the lowest mapped Cretaceous material found at Fort Hood, is laterally continuous with the Upper Glen Rose. There are no clear-cut age indicators present in the stratum.

Above the Paluxy sand lies the Walnut formation, a laterally continuous stratum consisting of yellow clays, flaggy limestone, and shell masses of *Exogyra texana* and *Gryphaea marcoui*. This soft clay formation accounts for the rolling topography above the floodplains in the Fort Hood Military Installation. It grades conformably into the overlying Comanche Peak formation.

The Comanche Peak formation consists of a chalky-limey facies in generally massive beds. Much jointing and flaking is apparent, which gives the limestone a fractured appearance. The Comanche Peak formation forms steep slopes, in contrast to the Walnut (which forms valleys) and the Edwards (which forms massive

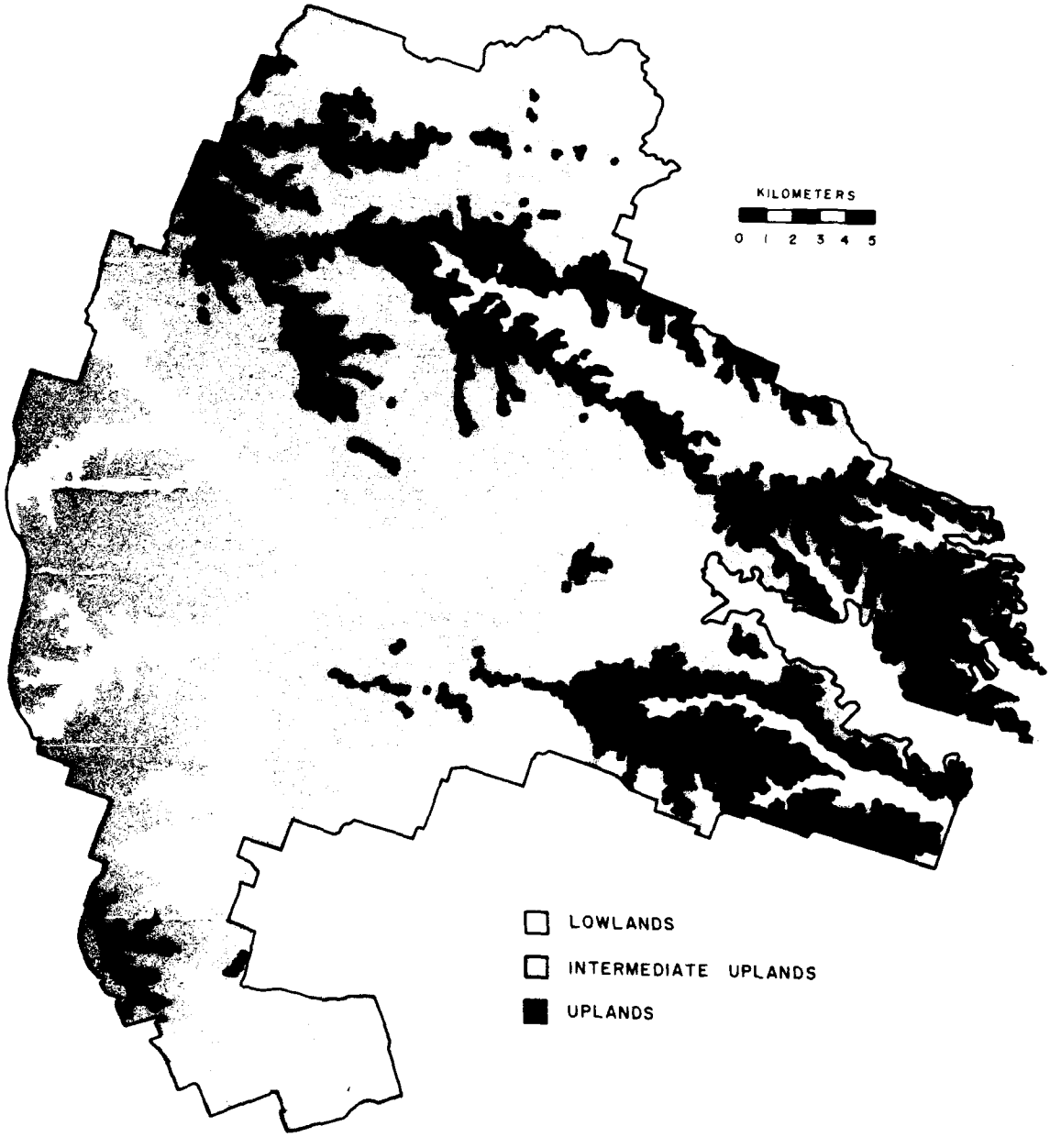


Figure 3. Environmental Zones Present at Fort Hood.

bluffs) formations: it forms numerous round-topped buttes and outliers where the Edwards cap is eroded away.

Overlying the Comanche Peak formation is the Edwards formation. The Edwards formation forms a large upland area deeply cut into the soft Walnut clay in the valleys and streams flowing downhill. These Walnut valley interstream divides, buttes (outliers), and the west-fronting cuesta face of the Edwards/Comanche Peak scarp compose the Lampasas cutplain.

The Edwards formation contains several units which are generally lumped together; these include the undivided Kiamichi clay and Denton clay, Fort Worth limestone, and Duck Creek limestone. This lump is informally referred to as the Edwards limestone.

Also present in the Fort Hood region is a significant amount of Quaternary alluvium and gravel, generally restricted to the major drainages.

With the Paluxy sand formation the only possible exception, the geological formations discussed above are rich in lithic resources for possible prehistoric exploitation. The Edwards caprock is commonly recognized as an important lithic procurement area (Skinner et al. 1984:6-30; Gerstle et al. 1978:25); however, some feel that this may have been overstated in view of prehistoric lithic procurement potential in all of Fort Hood's environmental zones (Briuer in Carlson et al. 1988:9).

Elevations on the Fort Hood Military Installation vary from 1,230 feet (374.9 m) to 590 feet (179.8 m) above sea level. Most of the installation is below 850 feet (259.1 m) (United States Department of the Army 1979:5-8). It is in the eastern portion of the installation where the lowest elevations are found, in the Lake Belton area.

CLIMATE AND WATER RESOURCES

The Fort Hood region averages 84.5 cm of rain per year, which is considered marginal for plant growth. Three major Brazos River tributaries run through the installation, and Fort Hood is bounded by the Leon River to the north and the Lampasas River to the south; it is bisected by Cowhouse Creek. Several aquifers, including the Edwards aquifer, are considered to have been important prehistorically (Briuer 1981:D-14). A further, more detailed discussion of climate and water resources can be found in previous reports, including Guderjan et al. (1980:8-12, 180-210), Skinner et al. (1981:6-11), Skinner et al. (1984:2-1 to 2-4), Carlson et al. (1988), Roemer et al. (1985), United States Department of the Army (1979:5.3-5.4), and Espey, Huston and Associates, Inc. (1979).

FLORA AND FAUNA

Flora

The wood vegetation present in the Fort Hood area is closely related to that of the eastern Edwards Plateau, as evidenced by the predominance of Ashe juniper (*Juniperus ashei*), Live Oak (*Quercus fusiformes*), Texas Oak (*Q. texana*), cedar elm (*Ulmus crassifolia*), Texas ash (*Fraxinus texensis*), and Texas persimmon (*Diospyrus texana*). The two predominant species of the Cross Timbers, post oak (*Quercus stellata*) and blackjack oak (*Q. marilandica*), are of minor importance on the installation.

Grasses present include the tallgrass prairie characteristic of higher rainfall areas of Blackland Prairie to the east, and mid- to shortgrass which are more important to the west. Frequent fires, traffic, and overgrazing have eliminated much of the perennial grass cover over a large percentage of the installation.

The dominant grasses found on the Fort Hood Military Installaton were broomweeds (*Xanthocephalum texanum* and *X. dracunculoides*); short, bushy, yellow-flowered annual forbs which increase in response to overgrazing (Correll and Johnston 1970).

Fire was found to be a very significant ecological factor in shaping the vegetational structure of the installation. Fire on the Fort Hood Military Installation originates mainly from live artillary fire in the 47.6 square mile impact area. Other significant impacts on the vegetational structure are off-road military traffic and grazing by domestic cattle.

The installation is not a source of commercially important crops or wild plant species. Grazing rights are leased to cattle ranchers in the area. Juniper harvesting also occurs; Nolan Valley Cedar Company clears Ashe juniper, a species which invades grazing lands and limits the carrying capacity and therefore the lease value of the land. Removing the juniper does have at least one harmful effect, however. It results in a reduction of available nesting habitat for the Golden-cheeked Warbler, an important bird endemic to the Edwards Plateau.

Fauna

The Fort Hood Military Installation is typical of the Edwards Plateau Biotic Zone as described by Blair (1950). The Edwards Plateau is in the Balconian Biotic Province. The installation contains a mixture of species from the Austroriparian, Tamaulipan, Chihuahuan, and Kansan Biotic Provinces. There are six endemic species of neotenic salamanders that evolved in the subterranean springs of the Edwards Plateau, and one avian species whose breeding range lies almost entirely in the Balconian Biotic Province.

Several major wildlife habitats exist in the Fort Hood region. For ease of discussion, they were divided up into aquatic and terrestrial habitats.

The terrestrial habitats were further divided into upland woodland, deciduous (riparian) woodland, grassland and other open areas, and urban areas.

The upland woodland predominates at Fort Hood. It consists of a scrub forest of mainly juniper and oak, and was discussed earlier. The fauna present include:

Southern Prairie lizard (*Sceloporus u. consobrinus*)
Texas spiny lizard (*Sceloporus olivaceus*)
Broad-banded copperhead (*Agkistrodon contortrix laticinctus*)
Western diamondback rattlesnake (*Crotalus atrox*)
Texas patchnose snake (*Salvadora grahamiae lineata*)
Eastern blackneck garter snake (*Thamnophis marcianus marcianus*)
Gray fox (*Urocyon cinereoargenteus*)
Bobcat (*Lynx rufus*)
Eastern woodrat (*Neotoma floridana*)
Deer mouse (*Peromyscus maniculatus*)
White-tailed deer (*Odocoileus virginianus*)
Nine-banded armadillo (*Dasypus novemcinctus*)
Mourning dove (*Zenaidura macroura*)
Cardinal (*Richmondena cardinalis*)
Bewicks Wren (*Thyromanes bewickii*)
Tufted titmouse (*Parus bicolor*)
Black-capped Vireo (*Vireo atiloquus*)
Golden-cheeked Warbler (*Dendroica chrysoparia*)
Rufous-crowned Sparrow (*Aimophila ruficeps*)
Painted Bunting (*Passerina ciris*)
Ladder-backed Woodpecker (*Dendorcopos scalaris*)
Brown Towhee (*Piplo fuscus*)

Deciduous (riparian) woodland is found primarily along stream bottoms, in canyons, and other mesic areas. The flora present include live oak, elm, and

hackberries; this environment helps extend many Austroriparian species into the Fort Hood region. Species present include:

Gray treefrog (*Hyla versicolor* and *Hyla chrysoscelis*)
Four-lined skunk (*Mephitis mephitis*)
Broad-banded copperhead (*Agkistrodon contortrix laticinctus*)
Virginia opossum (*Didelphis virginiana*)
Raccoon (*Procyon lotor*)
White-tailed deer (*Odocoileus virginianus*)
Fox squirrel (*Sciurus niger*)
Deer mouse (*Peromyscus maniculatus*)
Turkey (*Maleagris gallopavo*)
Downy Woodpecker (*Dendrocopus pubescens*)
Yellow-billed Cuckoo (*Coccyzus americanus*)
White-eyed Vireo (*Vireo griseus*)
Black-and-White Warbler (*Mniotilta varia*)
Summer Tanager (*Piranga rubra*)
Cardinal (*Richmondena cardinalis*)
Eastern Wood Pewee (*Contopus virens*)
Barred Owl (*Strix varia*)
Screech Owl (*Otus asio*)

Grasslands, rangelands, and other open areas where trees are few or absent is another environment present at Fort Hood. Species found here include:

Ornate Box Turtle (*Terrapena ornata*)
Texas horned lizard (*Phrynosoma cornutum*)
Spotted whiptail (*Cnemidophorus gularis*)
Western coachwhip (*Masitcophis flagellum testaceus*)
Great plains narrowmouth toad (*Bufo cognatus*)
Coyote (*Canis latrans*)
Fulvous harvest mouse (*Reithrodontomys fulvescens*)
Hispid cotton rat (*Sigmodon hispidus*)
Black-tailed jackrabbit (*Lepus californicus*)
Eastern cottontail (*Sylvilagus floridanus*)
Nine-banded armadillo (*Dasypus novemcinctus*)
Turkey Vulture (*Cathartes aura*)
Bobwhite (*Colinus virginiana*)
Red-tailed Hawk (*Buteo jamaicensis*)
American Kestrel (*Falco sparverius*)
Mourning Dove (*Zenaidura macroura*)
Common Nighthawk (*Chordeiles minor*)
Scissor-tailed Flycatcher (*Muscivora forfic*)
Mockingbird (*Mimus polyglottus*)
Loggerhead Shrike (*Lanius ludovicianus*)
Eastern Meadowlark (*Sturnella magna*)
Lark Sparrow (*Chondenstes grammacus*)
Field Sparrow (*Spizella pusilla*)

Urban areas are the last terrestrial environments to be discussed. These areas include North Fort Hood, West Fort Hood, and the Main Cantonment Area. Species diversity in these locations is low, however the number of individuals is high.

The aquatic environment at Fort Hood includes streams, springs, ponds, reservoirs, and other water environments. They include Belton Lake, Leon River, Cowhouse Creek, other streams and tributaries, and numerous ponds and springs. The streams are generally intermittent and seasonal; however, some form pools when not actually flowing. The ponds, streams, and other aquatic habitats are important to resident wildlife and also as a source of moisture for species in surrounding habitats. Species present include:

Red-eared turtle (*Chrysemys scripta elegans*)
Diamondback water snake (*Nerodia rhombifera*)
Blotched water snake (*Nerodia erythrogaster transversa*)
Redstripe ribbon snake (*Thamnophis proximus rubrilineatus*)
Red-spotted toad (*Bufo punctatus*)
Eastern green toad (*Bufo debilis debilis*)
Spotted chorus frog (*Pseudacris clarki*)
Cricket frog (*Acris cerpitans*)
Bullfrog (*Rana catesbeiana*)
Plains leopard frog (*Rana blairi*)
Rio Grande leopard frog (*Rana berlandieri*)
Raccoon (*Procyon lotor*)
Nutria (*Myocastor coypus*)
Beaver (*Castor canadensis*)
Pied-billed Grebe (*Podilymbus podiceps*)
Great Blue Heron (*Ardea herodias*)
Great Egret (*Casmerodius albus*)
Green-winged Teal (*Anas carolinensis*)
Blue-winged Teal (*Anas discors*)
Spotted Sandpiper (*Actitis macularia*)
Belted Kingfisher (*Megaceryle alcyon*)
American Widgeon (*Mareca americana*)
Lesser Scaup (*Aythya affinis*)
Northern Shoveler (*Anaa clypeata*)

CULTURAL BACKGROUND

PREHISTORIC SETTING

The prehistoric cultural background for Fort Hood has been previously summarized (Guderjan et al. 1980:13-31; Skinner et al. 1981; Skinner et al. 1984; Thomas 1978) with an update (Roemer et al. 1985) based on Prewitt (1981) (Table 1).

Table 1. Central Texas Prehistoric Chronology (after Prewitt 1981).

Phase	Date (B.P.)	Date (B.C.-A.D.)
Paleoindian	12,500-8500	10,550-6550 B.C.
Early Archaic Circleville San Geronimo Jarrell	8500-5000	6550-3050 B.C.
Middle Archaic Oakalla Clear Fork Marshal Ford Round Rock	5000-2600	3050-650 B.C.
Late Archaic San Marcos Uvalde	2600-1750	650 B.C.-A.D. 200
Terminal Archaic Twin Sisters	1750-1400	A.D. 200-550
Transitional Archaic Driftwood	1400-1250	A.D. 550-700
Austin Phase	1250-650	A.D. 700-1300
Toyah Phase	650-200	A.D. 1300-1700

HISTORIC SETTING

The history of Bell and Coryell counties has previously been addressed by Shawn B. Carlson in Carlson et al. (1988) and Roemer et al. (1985) and is summarized here in Tables 2 and 3.

Table 2. Summary of Bell County History (from Anonymous 1893 and Tyler 1936).

1687	Tonkawa Indians recorded by Henri Joutel in Central Texas.
1801	Phillip Nolan went on hunting expedition in Brazos Falls region.
1825	Robert Leftwich granted an *empresario* contract by the Mexican government.
1830	Leftwich died and authority for colonization turned over to Sterling Robertson; hamlet of Tenoxtitlan became first settlement in Robertson's Colony.
1836	Bell County residents fled eastward in "Runaway Scrape."
1841	Sam Houston became president of the Texas Republic and pacified Indian problems for the settlers in Bell County.
1846	In spite of the Mexican war, growth within Bell County continued.
1850	Bell County officially organized; "Nolandsville" designated as county seat.
1852	County seat name changed to Belton.
1859	Belton the only town of significance in Bell County with a population of 300.
1863	Bell County residents supported secession.
1866	Cattle business developed in Texas and trails to northern markets passed through Bell County.
1880	Gulf, Colorado and Santa Fe railroad passed through Bell County, encouraging immigration.
1882	Missouri, Kansas, and Texas railway passed through Temple; Missouri Pacific ("Katy") branch passed through Belton.
1885	Sheep business increased significantly in Bell County.
1890s	Cotton and wheat prices declined as the availability of manufactured goods increased.
1893	Panic began and lasted until 1899.
1899	Recovery from Panic caused price of cotton to increase.
1901	Textile mill opened in Belton.
1902	County plagued by heavy rains.
1904	Boll weevil reached Bell County and destroyed crops.
1905	National Good Roads Association met in Bell County.
1907	National Good Roads Association met in Bell County.
1913	Bond issue passed in Bell County for construction of better roads.
1914	Farm prices dropped with onset of World War I followed by a war-inflated boom.
1917	United States entered war; drought in central and west Texas.
1919	Rain caused price of cotton to rise again.
1920	Period of deflation in Bell County.
1936	Rural Electrical Association available in Bartlett region of Bell County.
1942	Camp Hood activated as a tank destroyer training center.
1951	Camp Hood renamed Fort Hood.

Table 3. Summary of Coryell County History (from Newcomb 1961 and Scott 1965).

1687	Henri Joutel, one of La Salle's men, was the first to recognize the Mayeye of Central Texas.
1690	Alonso de Leon's expedition reported Tonkawas in Victoria and Lavaca counties.
1698	Missions were established in northeast Mexico for the Ervipiame.
1778	The Mayeyes joined the Karankawan Cocos on the Gulf Coast.
1825	Robert Leftwich, of Nashville, Tennessee, was granted an *empresario* contract by the Mexican government.
1830	Leftwich died on a trip to Texas from Tennessee and Sterling Robertson was subsequently given authority to establish the Nashville Colony (also known as the Robertson Colony); Fort Tenoxtitlan was established at the crossing of the Old San Antonio road with the Nacogdoches road.
1835	Nashville-on-the-Brazos was established; James Coryell received a headright grant in the Nashville Colony in present day Coryell County.
1836	Milam County created out of the Milam Land District; Coryell County was later created out of Milam County.
1849	Fort Gates was established as the last garrison along the frontier line from Fort Duncan, near Eagle's Pass, to Coffee's Station on the Red River.
1852	Fort Gates was abandoned.
1853	Fort Gates was temporarily used as a quartermaster depot.
1854	Coryell County created; post office established at Gatesville.
1855	Methodist and Baptist churches established in Gatesville.
1856	First courthouse erected in Gatesville, the county seat, and First District Court convened.
1857	Baptist church established on Owl Creek.
1858	Presbyterian church established in Gatesville.
1859	Houston defeats Runnels for governorship and gives direct aid to western settlers to combat Indian depradations; first cattle drive out of Coryell County to Shreveport, Louisiana.
1860	Public meetings in Gatesville to vote on slavery and secession; Gatesville Methodist Episcopal Church established.
1861	First stock association formed.
1870s	Wends settle The Grove.
1870	Gatesville *Frontiersman* established.
1872	Gatesville *Sun* established; second courthouse built in Gatesville.
1873	Grange movement reached Bell County.
1875	First banking institution established in Gatesville by J.R. Saunders.
1877	Farmer's Alliance established in Lampasas County.
1882	Texas and St. Louis Railway Company completed tracks to Gatesville; Gulf, Colorado, and Santa Fe Railway Company reached southwestern Coryell County from Galveston.
1884	Central Texas Institute organized at Gatesville; temperance movement reached Coryell County; fire in Gatesville destroyed many businesses.
1885	First artesian well dug in Gatesville.
1886	Texas and St. Louis Railway Company went bankrupt and reorganized as the St. Louis, Arkansas, and Texas Railway Company who standardized the narrow gauge; Gatesville *Sun* consolidated with the Gatesville *Advance* and reestablished as the Waco *Advance*.

(Table continues on the following page.)

Table 3. Continued.

1887	Twentieth Legislature approved House of Correction and Reformatory for Coryell County; Gatesville *Post* established.
1889	St. Louis, Arkansas, and Texas Railway Company went into receivership; Lutheran church established in Gatesville; charter granted to establish the First National Bank of Gatesville; beginning of social and literary clubs in Gatesville.
1890s	Wends settle Copperas Cove.
1890	*People's Voice*, later the *Farmer's Forum*, published in response to agrarian reform.
1891	St. Louis, Arkansas and Texas Railway Company acquired by the St. Louis Southwestern Railway Company and popularly known as the Cotton Belt; first legal execution performed in Coryell County.
1897	Present courthouse constructed.
1905	First wheat milled by Levita Milling and Ginning Company; farmer's union established.
1907	Stephenville North and South Texas Railway Company laid tracks from Stephenville to Hamilton; National Good Road Association met in Temple and Belton.
1911	Telephone service provided to 300 subscribers in Gatesville; Stephenville North and South Texas Railway Company extended lines to both Comanche and Gatesville.
1918	Second flour mill established at Gatesville Roller Mills.
1923	Federal aid for highway construction granted to Coryell County.
1930	Community Natural Gas Company provided service for 500 customers.
1935	Community Public Service provided electricity for 783 customers.
1942	Coryell County Memorial Hospital opened in Gatesville with 34 beds.
1947	Agricultural experiment station established by TAMU at McGregor, Texas.

PREVIOUS RESEARCH

PREHISTORIC SITES

Prehistoric cultural evidence in Central Texas has undergone considerable formal study for over 50 years. The bulk of previous archaeological work at or near Fort Hood is discussed by Guderjan et al. (1980:13-47). This includes a brief history of investigations in the region (Guderjan et al. 1980:14-15) and a culture history description that identifies additional studies (1980:16-1936). Skinner et al. (1981:12-17) also reviews Central Texas investigations. Roemer et al. (1985) and Carlson et al. (1988) contain summaries of previous archaeological research which is relevant to the Fort Hood area. The Texas Historical Commission (Simons 1981, 1983) provides a useful compilation of reports concerning Texas archaeology to circa 1980.

HISTORIC SITES

The literature for 13 counties encompassing the Fort Hood area and lying within the Central Texas Prairies was examined for previously known historic sites. These counties extended from the Colorado River to the Brazos River and slightly north and south of the Fort Hood area. Most of the research was cited in current indices of Texas archaeology (Simons 1981, 1983), with the exception of recent studies at Fort Hood (D. Carlson et al. 1983; S. Carlson 1984; Carlson et al. 1988; Dibble et al. 1984a, 1984b; Guderjan et al. 1980; Jackson 1982; Jackson et al. 1982a, 1982b; Prewitt et al 1983; Roemer et al. 1985; Skinner et al. 1981, 1984). No reports of investigations could be found for Bell, Bosque, Burnet, Coryell, Falls, Hamilton, Lampasas, or Mills counties. For the remaining five counties (Hill, McLennan, Milam, Travis, and Williamson), most of the studies were limited descriptive survey reports dating from the 1970s and offered little in the way of understanding historic site settlement in Central Texas.

RESEARCH DESIGN

INTRODUCTION

In an initial attempt at building a cultural and chronological framework for the Fort Hood study area (Ensor 1987), a system of projectile point classification was used which allowed precise definition of point shape, and correspondingly, an ability to be directly compared with other projectile point collections. In that study, previous approaches to the problem of typology in Texas were discussed along with typological problems in general. Issues related to cultural-historical integration or taxonomic practice were discussed and a tentative taxonomic model devised which integrated the various projectile point forms with cultural traditions, horizons and series. Along the way, a summary of shape attributes by point type, as well as a key to the morphological attributes most representative of the date point types under study was presented.

The archaeological studies at Fort Hood are on-going, and the data base regarding projectile points has been constantly updated at the end of each survey. Since completion of the analysis for the report regarding the Fiscal Year 1984 survey (Ensor 1987), a sizable number of projectile points have been added to the data base.

The present research design focuses on expanding the projectile point data base using Futato's (1983) system of describing shape attributes. Updated tables of projectile point shape attributes, complete through to Fiscal Year 1988 surveys are provided in the results section of this report. Additionally, summary metric data for the same data set are presented in Appendix VII along with individual metric and nominal data for each point by catalog number.

While the initial attempt at building prehistoric chronology at Fort Hood focused necessarily on the Fort Hood data, the present research design also emphasizes comparison of the Fort Hood data base with a similar data base from north-central Texas in an attempt to study a variety of methodological and theoretical problems concerning projectile point typology. This work was initiated as part of the overall research design for the South Bend survey project on the upper Brazos River in Young, Stephens, and Throckmorton counties (Ensor et al. 1988). A portion of that study is repeated here, as it emphasized comparing and contrasting formal characteristics of Fort Hood points with those from the proposed South Bend Reservoir area of northern Texas. A variety of techniques is used in the analysis, including multi-dimensional scaling and discriminant function analysis, in an attempt to identify similarities and differences. The outcome of these analyses is presented in the results section of the report along with the expanded summary of Fort Hood projectile point data mentioned above. At the conclusion of the results section, a statistical comparison is made of individual point type frequency by major chronological period between Fort Hood and South Bend. The purpose of the comparison is to test for significant differences in point type proportions which may be indicative of increased or decreased prehistoric utilization of a locality or environment during a particular period of time. Eventually, when large samples from divergent areas of Texas are available which are comparable with the Fort Hood and South Bend samples, a better understanding of changing prehistoric cultural and demographic patterns as well as responses to changes in the natural and social environments may be possible in Texas. For the present, an objective comparison of these two study localities is made using the projectile point data bases.

The remainder of the research design presents the basic theoretical and methodological premises of the study. It provides a brief overview of typological approaches to the study of projectile points in Texas as well as an in-depth discussion of theoretical matters surrounding typology and classification in general. Taxonomic issues are then discussed, paying particular attention to the criticisms of Johnson (1987) regarding proper phase

definition. These discussions may be viewed as an adjunct to, and evolution of, the author's thinking on these subjects since the initial study (Ensor 1987).

CLASSIFICATORY METHOD

The method and theory behind the classificatory approach taken in the current projectile point analysis has been presented in detail elsewhere (Futato 1977, 1983; Ensor 1981, 1987; Ensor and Carlson 1988; Ensor and Mueller-Wille 1988). Additionally, a general overview of previous attempts at classification is given, both within the discipline of archaeology and in the state of Texas. The interested reader is referred to these sources for a complete review and presentation of this approach and for a general review of typological theory. The present discussion focuses on typological theory coupled with brief recapitulations of projectile point classification in Texas. The aim of this is to familiarize the reader with these approaches and develop a basis for the particular analytical system used herein. By providing a general discussion of recent thinking on these matters, it is hoped that the context or milieu in which this analysis was conducted will be clear. Likewise, the rationale which guided the approach will be contrasted with other approaches, and an argument for the primacy of the current approach over others will be put forth. This will be summarized and the goals of the classification restated prior to venturing into socio-cultural taxonomy or taxonomic practice.

An earlier statement regarding the role of temporal and spatial types in delineating the basic cultural and chronological framework for a research area is followed up here. Thomas (1979:222), regarding the proper use of projectile points as potential temporal markers, noted: "Trial groupings are delimited strictly on the basis of form (morphological types), then these abstract groups are tested for temporal significance against independent, stratified data." Thomas showed a concern that a resurgence in interest of regional level studies has prompted researchers to realize that archaeology at this scale "must face up to the chronological realities" (Thomas 1986:619). The work of previous scholars in the decades preceding Thomas' work, principally Brew (1946), Krieger (1944), Ford (1954), Steward (1954), and Rouse (1960), had laid a solid foundation for archaeologists to build upon. However, with the advent of the "new" archaeology in the 1960s, traditional concerns with chronology, classification, and proper description became almost passé, giving way to other concerns. Perhaps the clear directive of Thomas regarding testability brings to fruition the arguments of the scholars above, who have argued long and hard for the development of a number of classificatory systems, developed for specific purposes, each testable regarding their purpose.

Dunnell (1971) has offered the most cogent rendition of this typological method and theory. As Dunnell (1971) notes, the main source of confusion in artifact lysis has to do with the difference between description and definition, r between *groups* of objects and *classes*. It is clear that only groups of artifacts may be described as part of the phenomenological world, as they are the empirical base of the discipline. Classes on the other hand, are defined, and thus created by the analyst according to the subject matter under study and the particular research question involved. Dunnell (1971) further explicates that groups can only be described, since the addition of new specimens changes the content of the group, makes the composition of the group potentially infinite, and requires a separate description for each object (Dunnell 1971; Ensor and Carlson 1988). Classes by definition are invariant, intentionally defined, and abstract; therefore the criteria, or necessary and sufficient conditions for class membership are known. This paradigmatic order, involving mutually exclusive attributes which intersect to form classes, contrasts with the hierarchical ordering structure of taxonomies or group clustering techniques. This basic distinction, so clearly set forth by Dunnell (1971:26), leads us in a direction whereby our hypotheses concerning the nature and meaning of the archaeological record become evaluable. This evaluation becomes an important and necessary requirement of a classification. The concerns over the proper method and techniques to be used in archaeological classification, going back to the Ford/Spaulding debates, have been answered by Dunnell. The existence of a natural order of types which seem "discoverable" within a body of data by some,

seems to be based on misguided assumptions regarding the nature and structure of classification and their eventual explanatory potential. As pointed out by Dunnell, the assumption of the existence of natural or discoverable types makes the classification untestable while by the assumption of only that order is possible, a classification can be logically constructed or created to best "fit" the phenomena under investigation. This makes it testable in principal and provides a mechanism for evaluation. Dunnell states, "The utility of assuming only that phenomena are capable of order in some unknown but specific manner is obvious. The first assumption permits the possibility of evaluating the procedure, the second does not" (Dunnell 1971:61). Read (1982:60) has recently commented on differences between these two basic approaches to type formation. Purposefully created classifications have generally provided cultural meaning to the attributes used in classification better than those of numerical taxonomy, which reduce groups of objects into subgroups and thus objectively "define" types. Although Read's assessment of the "mental template" approach he assigns to Rouse (1960) and Dunnell (1971) does not seem completely accurate, his distinction between the two philosophical approaches is clear. Read goes on to update and restate a position long advocated by Rouse (1960) and Dunnell (1971), namely that units are classes and are of the ideational realm, and artifacts belong to and are a part of the phenomenological world. The ideational nature of socio-cultural systems thus takes precedence in type formation to provide an indirect measure of behavioral characteristics of that system.

Voorrips (1982:104-105) gives an assessment of how the analytic approach (based on ideas) is operationalized. He indicates that classification belongs in the deductive part of scientific method, or where individuals, based on their prior experience, can adopt particular beliefs about the phenomena under study and generate hypotheses or explanations to account for them. Thus classification is deeply rooted in a particular philosophy of science. As Voorrips observes, classifications are independent of real-world phenomena, thus giving priority to the ideational or analytic method of unit formation. In contrast, the object-oriented or taxonomic structures (Hodson 1982:21-29) based on grouping of real-world phenomena are either "(1) descriptive, (2) restricted to situations where a well-developed theory already exists, or (3) invalid" (Voorrips 1982:112). Voorrips proposes the term *variable construction* to refer to the process by which the archaeologist defines a sample of specimens for a particular purpose of inquiry. This is similar to Dunnell's (1971) specification of the domain or purpose of the classification. Voorrips stresses the close relationship between hypothesis testing, classification, and explanation, and, as noted by Krause, "taxa are created by definition and should be justified by the logical fit between the classes found and the phenomena for whose study the classes were created" (Krause 1977:10). This in effect allows us to derive or define our expectations about how the class frequencies are distributed and predict how their proportions will vary according to the phenomena they seek to identify. Thus, the ultimate test of utility of classification is in the form of probabalistic statements (statistical proofs) about how well "the observed frequencies in the various classes differ significantly from (or do not match well enough with) the frequencies that were expected in light of the explanation being tested" (Voorrips 1982:105). Stated another way, "the purpose of... typology...is to quantify relationships of variables so that we can statistically test our deductively derived hypotheses" (Vierra 1982:16). In this manner the ultimate basis of our knowledge regarding artifacts and their distribution is thoroughly grounded in empirical fact. Our explanations and hypotheses about what the classification means with regard to ordering of the phenomena under study become evaluable and testable. This is a necessary condition if progress is to be made in archaeological method and theory as stated previously (Wilmsen 1972). With this background regarding method and theory in archaeological classification in place, a short discussion of specific attempts at projectile point typology, particularly in Texas, is presented.

Ensor (1987:25-27) has reviewed previous projectile point classifications in Texas. Summarizing from that report, Suhm et al. (1954) and Suhm and Jelks (1962) rormulated the basic projectile point typology for Texas. Their types are the basis for many subsequent works in artifact typology, most notably the work of Johnson (1967), Gunn and Prewitt (1975), and Turner and Hester (1985). Johnson's work involves an attempt to define the more salient characteristics of

"lithomorphic classes" of projectile points in order to segregate temporal markers. He emphasizes basal form as the most critical in sorting these classes. Gunn and Prewitt (1975) advocate the use of discriminant function analysis to reclassify 12 point types based on specified metric variability. Their basic goal was to provide "a means of consistent and repeatable classification" (Gunn and Prewitt 1975). Their procedure parallels that of Luchterhand (1970), who earlier conducted a discriminant function analysis on selected point "types" from the Lower Illinois River Valley. Turner and Hester (1985) build upon and slightly revise the typological work of Suhm et al. (1954) and Suhm and Jelks (1962), including the presentation of distributional data. They provide a short discussion on typological methods, as do their predecessors, and point out the deficiencies and pitfalls of typological constructs.

McGregor (1987:14.1-14.4) conducted a multivariate analysis of arrow points from the Trinity and Brazos River drainages. Ten continuous metric variables were used to develop the classification criteria (discriminant functions), which were subsequently used to reclassify points into their respective groupings. McGregor (1987:14.4) states that his objective was to "establish a mathematical basis for the 'inspectional' typology, and to objectively evaluate the variability exhibited by typologically similar specimens from these three different geographical areas." He conducts the analysis with the observation that "there are interareal stylistic differences" which increased point variability within types when all three samples were combined. The best results occurred when the three samples were analyzed separately (94.4% correctly reclassified), which tended to control the amount of variability within a type. A regional difference in size, probably reflecting differences in local raw material parent size, is thought to contribute to some of the interareal differences in arrow point form.

Although Gunn and Prewitt (1975), at the time of their article on automatic classification, advocated the building of regional card decks for such purposes, no systematic attempt to develop this work on a regional basis is evident. However, concern with the use and misuse of classification has a long history in Texas archaeology (Suhm et al. 1954; Suhm and Jelks 1962; Johnson 1967; Gunn and Prewitt 1975; Fenwick and Collins 1975; Turner and Hester 1985; Hester 1986).

TAXONOMIC UNITS

Johnson (1987:1-21) makes some timely observations concerning the use and abuse of various socio-cultural terms in Texas archaeology, especially the term "phase." As noted by Ensor (1987:29-33) and Prewitt (1981:70), cultural-historical models are useful only if they lead to a better understanding of archaeological remains and the behavior which produced them. The relationships which are obtained between the taxa formed and the phenomena under study must be well-conceived, so that they potentially allow logical integration of cultural phenomena in a regional and/or areal context (Willey and Phillips 1958; Krause 1977; Stoltman 1978; Johnson 1987; Ensor 1987). Thus when Johnson criticizes certain "phases" described by various Texas researchers, his main complaint is the lack of defined content as well as age estimates. Since phases should logically contain a higher level of formal content than regional traditions, horizons, or variants (Krause 1977; Jenkins and Krause 1986; Ensor 1987), they are difficult to define and require in-depth site excavations with primary associations of data for their definition (Johnson 1987:3). Often, stratigraphic data yield only general pictures and age ranges of extinct cultural systems, which can be viewed as general periods of time or regional variants (patterns) of a cultural tradition (Johnson 1987).

Johnson's views regarding proper phase definition are largely agreed with here. The socio-cultural units utilized to initially order the projectile point data from Fort Hood were horizons (Ensor 1987:52-71). Periodization differs qualitatively from any of the content-based taxons since they contain no formal content and serve only to reference artifact distributions in time (Prewitt 1981; Ensor 1987). The recognition of regional variants (Lehmer 1971; Krause 1977), since they are based more on content than horizons, are generally not definable with survey level data. However, different proportions of historically related

types exhibiting non-random distributions within a region may allow early insight or recognition of broad cultural patterns (i.e., Weir's phases [1976] or Johnson's cultural patterns [1987]). Just how these concepts may be useful in building regional chronologies will become more obvious in the results section, where a comparison of Fort Hood and South Bend type proportions indicates that cultural adaptations were dynamic in the two localities.

SURVEY PROCEDURES AND RESULTS

SURVEY PROCEDURES

The procedures for cultural resources surveys at Fort Hood are specified in detail in a "Standard Operating Procedures" manual (Briuer and Thomas 1986) which is revised prior to each survey and distributed to all survey crew members. Survey is conducted within 1 km UTM grid squares by six persons who walk over the quadrat spaced 30 m apart. Each surveyor carries a topographic map or aerial photograph of the quadrat and marks the locations of all artifacts, chert outcrops, fencelines and historic features. Prehistoric sites are defined whenever two or more stone tools (e.g., dart or arrow points, preforms, scrapers, cores) are found within 5 m of one another. Historic sites are defined whenever three or more classes of artifacts (e.g., glass, metal, and ceramics) are observed within a 5 m radius. Historic sites are also defined for isolated features such as cisterns, wells, or corrals.

Once a quadrat has been covered by the six surveyors, tentative site boundaries are drawn for the sites located within the quadrat using the information on the quadrat maps. Teams of two persons are then sent to each site to draw site maps, make artifact collections, and complete standard Fort Hood site forms.

Site recording consists of preparing a site map, completing a form, and photographing the site. On historic sites, a collection of diagnostic glass, ceramic, and metal items is made to facilitate estimates of the age of each site. On prehistoric sites, temporally diagnostic artifacts are collected, but other artifacts are left in place. In addition, on prehistoric sites, a transect consisting of 1 x 5 m sections is recorded across the long axis of the site. For each 1 x 5 m section a count of the debitage, tools and ecofacts is made. In addition, the quantity of burned rock is estimated and the ground visibility is recorded. Any distinctive surface damage from any combination of a variety of impacts, including manuever training, cedar pushing, etc., is also recorded.

Site boundaries are defined on the basis of the artifact scatter and the topography of the site. Site definitions tend to include a fairly large area within which there are several spots containing a concentration of artifacts or debitage. This is particularly true of areas in which chert outcrops are present at the surface and thousands of square meters contain chert nodules and flakes. Since it is not always readily apparent which flakes are natural and which are the result of human activity, the entire chert field is often designated as a site. These "sites" obviously represent a complex situation in which human use of the chert field has been repeated over long periods of time. Activity areas within these "sites" will only be obtained through detailed surface mapping of these areas. Identifying the entire chert field as a site is an interim strategy to provide the entire area with some protection until a more detailed survey can be conducted. Such a strategy is only possible in situations where sites are not slated for imminent destruction by some construction activity, but will instead be the basis for a site protection program.

While this approach to site boundaries makes sense from a cultural resources protection perspective, it makes the analysis of the data more complicated since nearly all of the sites probably represent multiple occupations. This is particularly true where a burned rock mound, a rockshelter and a bluff top lithic scatter are all recorded as parts of a single site. Clearly, any conclusions derived must be sensitive to the multicomponent nature of the sites recorded at the installation.

SURVEY RESULTS

The surveys of the MCA Range Construction and other proposed installation actions (Delivery Order No.1) including the pipeline survey (Dureka and Mesrobian 1987) were conducted from October of 1987 until January of 1988 (Figure 2). Survey of the Pidcoke Land Exchange and Phantom Range (Delivery Order No. 6) was conducted during October and November of 1988. The survey was conducted with a crew size which varied somewhat, but normally consisted of five to six persons.

Thirty-five sites were recorded for the Delivery Order No. 1 survey, of which 15 were prehistoric and 20 were historic. Portions of 14 quads were surveyed (Table 4). For Delivery Order No. 6, all or a portion of 14 quads were also surveyed (Table 4), with 22 sites recorded (10 prehistoric and 12 historic). A full description of each site along with an assessment and recommendation is given in Appendices I and II. Appendix III discusses the prehistoric material culture from the survey while Appendix IV gives a breakdown of historic site types at Fort Hood as well as an inventory of features and artifacts typical of Fort Hood.

Table 4. Survey Quadrats for Delivery Orders 1 and 6.

D.O. 1		D.O. 6	
Easting	Northing	Easting	Northing
10	41	5	60
11	42	6	60
12	41	23	46
12	42	24	46
12	43	24	47
13	41	26	44
13	44	26	45
13	46	26	46
14	45	27	44
21	47	27	45
21	48	28	43
21	49	28	44
23	69	29	43
23	70		

Note: All quadrats measure 1 km² and are designated by their southwest corners using UTM coordinates.

The computer coding formats are given in Appendices V and VI for the prehistoric and historic sites respectively. A tabulation of all projectile point nominal and metric attributes through the Delivery Order No. 6 survey is given in Appendix VII. Finally, general data on the environment, artifacts, and other cultural data are presented in Appendix VIII.

MCA Range Construction and other Proposed Installation Actions

For the MCA Range Survey, prehistoric site density was 1.12 sites per km². These figures fall within the expected range based on the average site densities from Delivery Order No. 1 through Delivery Order No. 7 surveys (Koch and Mueller-Wille 1989b), although the prehistoric site density falls slightly below the mean for these two surveys.

With regard to environmental zones, prehistoric sites were more often located in the intermediate uplands (18 or 87%) than uplands (2 or 13%). Historic sites were all located in the intermediate uplands.

Prehistoric site size, as depicted in Table 5, indicates that a range of from 1 m^2 in the case of an isolated hearth eroding from a cut bank to 590,99 m^2 for a lithic quarry. Average site size is approximately 92,316 with most falling between 10,000 and 99,999 m^2 (N=8). Historic sites range in size, from 57 m^2 for a cistern to 90,000 m^2 for a farm/ranch complex. Average size for historic sites is 15,269 m^2, much smaller than for prehistoric sites. Eighty percent of the historic sites fall between 1,000 m^2 and 99,999 m^2 (Table 5).

Table 5. Distribution of Size Classes for Delivery Orders 1 and 6 Surveys.

Size Class	Prehistoric				Historic			
	D.O.1		D.O.6		D.O.1		D.O.6	
1 m^2 to 999 m^2	2	(13.3)	1	(10.0)	4	(20.0)	4	(33.3)
1,000 m^2 to 9,999 m^2	4	(26.6)	1	(10.0)	7	(35.0)	0	(0.0)
10,000 m^2 to 99,999 m^2	8	(53.2)	8	(80.0)	9	(45.0)	8	(66.7)
Over 100,000 m^2	1	(6.6)	0	(0.0)	0	(0.0)	0	(0.0)
Total Sites	15	(100.0)	10	(100.0)	20	(100.0)	12	(100.0)

The range of occupation at each prehistoric site is given in Table 6. The majority had no diagnostic artifacts recovered. Only four sites yielded such data, with a single Middle Archaic occupation detected at 41CV1441, a Late Archaic component at 41BC877, and a Transitional Archaic component at both 41BL411 and 41CV1442. Since only four or 27% of the sites contained diagnostic materials, this is well below the 60% of sites which produced such artifacts on the Delivery Order No. 7 survey (Koch and Mueller-Wille 1989b). For the historic sites, the terminus post quem (TPQ) and terminus ante quem (TAQ) were calculated to estimate occupation span (Table 7). The TPQ is the earliest date of manufacture of the oldest artifact type while the TPQ is the earliest date of manufacture for the most recent artifact type. Hence, the TPQ provides a measure of the earliest a site may have been occupied while the TAQ estimates the earliest date the site may have been abandoned. The ages of historic sites range from the mid-nineteenth century until the mid-twentieth century or shortly after Fort Hood was established. By far, most historic sites found during this survey date from 1930-1953, or the early-mid portion of the twentieth century. However, 8 or 33% were occupied between 1880 and 1929, or the latter part of the nineteenth to early portion of the twentieth century. Only a single site, a cemetery, dated to the mid-nineteenth century.

Table 6. Distribution of Prehistoric Chronological Components for Delivery Orders 1 and 6 Surveys.

Period or Phase	Dates	Delivery Order 1 No. of Components	Delivery Order 1 Percent	Delivery Order 6 No. of Components	Delivery Order 6 Percent
Paleoindian\Early Archaic	12,500-8,500 B.P.	0	0.0	0	0.0
Early Archaic	8,500-5,000 B.P.	0	0.0	0	0.0
Middle Archaic	5,000-2,600 B.P.	1	25.0	1	33.0
Late Archaic	2,600-1,750 B.P.	1	25.0	0	0.0
Terminal Archaic	1,750-1,400 B.P.	0	0.0	1	33.0
Transitional Archaic	1,400-1,250 B.P.	2	50.0	1	33.0
Austin	1,250- 650 B.P.	0	0.0	0	0.0
Toyah	650- 200 B.P.	0	0.0	0	0.0
Total		4	100.0	3	100.0
General Archaic		0		3	
General Late Prehistoric		0		0	

Table 7. Distribution of Historic Chronological Components for Delivery Orders 1 and 6 Surveys.

Period	Dates	Number of Components (%) D.O. 1	D.O. 6
I	1850-1879	1 (4.1)	2 (8.3)
II	1880-1929	8 (33.0)	13 (54.2)
III	1930-1953	15 (62.0)	7 (29.2)
IV	1954-Present	0 (0.0)	2 (8.3)
Total		24(100.0)	24(100.0)

The prehistoric sites recorded during the Delivery Order No. 1 survey consisted of the following types:

1. Burned Rock Scatter
2. Burned Rock Mound
3. Lithic Scatter
4. Lithic Quarry

The sites represent a wide variety of activities carried out by hunter-gatherer groups who once inhabited the region. The type "burned rock scatter" was by far the most frequent. Activities potentially occurring at these sites include raw material acquisition, initial reduction of lithic materials, primary and secondary lithic reduction, cooking, hunting, gathering, and other subsistence activities. Variation in site size is both a function of the way sites were recorded and the nature of prehistoric activities which were carried out. It is possible that larger sites exhibiting a wide array of tool forms and heavy burned rock densities may represent longer term occupations where a relatively large number of activities were carried out when compared to smaller sites.

The historic sites fall into the following categories:

1. Farm/Ranch
2. Domestic Dwelling
3. Well
4. Cistern
5. Dump
6. Other Features

The site type "dump" was by far the most frequent type encountered, followed by domestic dwellings. A single mid-nineteenth century cemetery was encountered. A wide variety of historic properties dating primarily after the turn of the century is present at Fort Hood. For a more detailed discussion of historic resources at Fort Hood, see Jackson (1982a, 1982b, 1982c), S. Carlson in Roemer et al. (1985), Carlson et al. (1987), Carlson et al. (1988), Koch et al. (1988), and Koch and Mueller-Wille (1989a, 1989b). The report on the Jarvis Henderson site excavated by Shawn Carlson (Carlson 1984) is also worth reviewing. Basic data on each prehistoric and historic site found during the Delivery Order No. 1 survey may be found in Tables 8 and 9. The data presented includes elevation, drainage system, area of site, site type, and cultural affinity.

The Pidcoke Land Exchange and Phantom Range

Estimating site density for the Delivery Order No. 6 survey we find that prehistoric site density is .77 sites per km^2. Historic site density is .92 sites per km^2, slightly higher. The prehistoric figure falls at the lower limit of site density at Fort Hood, while the historic site density is far below the lowest figure given by Koch and Mueller-Wille (1989b) for prior surveys. One reason for the low densities may be that the area surveyed lies in a highly developed area, where activities may have obliterated many sites. Otherwise, it is hard to assess the meaning of such low site density.

Table 8. Prehistoric Sites Recorded in Delivery Order 1 Survey.

TARL	Field	Environmental Zone	Elev. (feet)	Drainage	Area (m^2)	Type	Chronological Components
41BL0170		Int. upland	950	Cowhouse	9,500	Single burned rock mound	Unknown
41BL0411	637	Int. upland	935	Cowhouse	29,400	Burned rock scatter with lithics	Transitional Archaic
41BL0412	648	Int. upland	945	Cowhouse	6,875	Burned rock scatter with lithics	Unknown
41BL0877	1956	Upland	1,020	Cowhouse	443,000	Multiple burned rock mounds	Late Archaic
41CV0105		Int. upland	850	Cowhouse	54,531	Burned rock scatter with lithics	Unknown
41CV0413	354	Int. upland	805	Cowhouse	71,300	Multiple burned rock mounds	Unknown
41CV0588	653	Int. upland	875	Cowhouse	30,400	Burned rock scatter with lithics	Unknown
41CV0734	1019	Upland	1,020	Cowhouse	590,000	Lithic quarry	Unknown
41CV1369	1936	Int. upland	870	Leon	11,400	Burned rock scatter with lithics	Unknown
41CV1441	2078	Int. upland	860	Cowhouse	9,688	Single burned rock mound	Middle Archaic
41CV1442	2079	Int. upland	960	Cowhouse	1,875	Burned rock scatter with lithics	Transitional Archaic
41CV1443	2081	Int. upland	850	Cowhouse	111,875	Burned rock scatter with lithics	Unknown
41CV1444	2092	Int. upland	860	Cowhouse	14,300	Burned rock scatter with lithics	Unknown
41CV1445	2093	Int. upland	820	Cowhouse	600	Burned rock scatter with lithics	Unknown
41CV1446	2094	Int. upland	800	Cowhouse	1	Burned rock scatter with lithics	Unknown

Table 9. Historic Sites Recorded in Delivery Order 1 Survey.

TARL No.	Field No.	Environmental Zone	Elevation (feet)	Drainage	Area (m^2)	Site Type	Est. Occupation (TPQ) (TAQ)
41BL939	2085	Intermediate upland	945	Cowhouse	9,531	Domestic Dwelling	1899-1899
41BL940	2088	Intermediate upland	923	Cowhouse	400	Well	Unknown
41BL941	2089	Intermediate upland	980	Cowhouse	1,000	Dump	1915-1940
41BL942	2090	Intermediate upland	970	Cowhouse	6,200	Dump	1915-1938
41BL943	2098	Intermediate upland	900	Cowhouse	46,500	Farm/Ranch	Unknown
41CV412	353	Intermediate upland	900	Cowhouse	45,625	Dump	1911-1911
41CV410	636	Intermediate upland	1,005	Cowhouse	15,938	Domestic Dwelling	1953-1953
41CV731	1016	Intermediate upland	880	Cowhouse	9,000	Dump	1915-1941
41CV1370	1937	Intermediate upland	850	Leon	12,000	Dump	Unknown
41CV1447	2080	Intermediate upland	925	Cowhouse	3,438	Cemetery	1869-1869?
41CV1448	2077	Intermediate upland	900	Cowhouse	1,406	Domestic Dwelling	1893-1893?
41CV1449	2082	Intermediate upland	865	Cowhouse	5,928	Dump	1875-1882
41CV1450	2083	Intermediate upland	865	Cowhouse	4,844	Dump	1935-1935?
41CV1451	2086	Intermediate upland	925	Cowhouse	15,000	Domestic Dwelling	1899-1899
41CV1452	2087	Intermediate upland	935	Cowhouse	13,750	Dump	Unknown
41CV1453	2091	Intermediate upland	910	Cowhouse	24,500	Domestic Dwelling	1920-1920
41CV1454	2095	Intermediate upland	900	Cowhouse	180	Dump	1951-1951
41CV1455	2096	Intermediate upland	840	Leon	80	Dump	Unknown
41CV1456	2097	Intermediate upland	860	Leon	57	Cistern	Unknown
41CV1457	2099	Intermediate upland	900	Cowhouse	90,000	Farm/Ranch	Unknown

In terms of environmental zones, prehistoric sites are once again most frequent in the intermediate uplands (8, or 80%), with a single site located in the uplands and another in the lowlands. Historic sites (N=12) were most often associated with the intermediate uplands (6, or 55%), while four or 36% were located in the lowlands and a single site was found in the uplands.

Prehistoric site size as given in Table 5 indicates that sites range from 781 m^2 for a small lithic scatter to 84,688 m^2 for a large lithic scatter. Average prehistoric site size for this survey was 46,934 m^2 with most falling between 10,000 and 99,999 m^2 (Table 5). Average historic site size is 16,761 m^2, with sites ranging from 156 m^2 to 35,600 m^2. Eight or 66.7% of all historic sites falls between 10,000 $m^2$and 999 m^2.

The range of occupation for each prehistoric site is presented in Table 6. Like the Delivery Order No. 1 survey, the majority had no temporally diagnostic artifacts recovered. Of those which have such artifacts, one has a Middle Archaic component and a Transitional Archaic component. In addition, three sites had General Archaic components, as some points found could not be assigned to a type.

As with the MCA Range survey discussed above, the percentage of sites from which diagnostic artifacts were recovered is less than the 60% of sites which had such artifacts on the Delivery Order No. 7 survey (Koch and Mueller-Wille 1989b).

For the historic sites, a terminus post quem (TPQ) and terminus ante quem (TAQ) were calculated to estimate site occupation span. The ages of historic sites differ from those found during the MCA Range Survey in that the majority (6, or 50%) date to the period from 1880-1929 (Table 7). Two or 16.7% date to the period from 1930 until 1953. Four sites cannot be assigned an occupation range.

The prehistoric and historic site types recorded during the survey are encompassed in those presented above for the Delivery Order No. 1 survey. The "lithic scatter" was the most common type as with that survey (Table 10); a broad range of activities is inferred which may be reflected in variation in site size.

The site type farm/ranch was most frequently encountered during this survey (Table 11), followed closely by domestic dwelling. Only a single dump was recorded. This stands in contrast to the results of the Delivery Order No. 1 survey, where the majority of sites were dumps. The reader is referred to the references cited above under the MCA Range survey for a detailed account of Fort Hood historic site resources.

The basic data on each prehistoric and historic site recorded during this survey is presented in Tables 10 and 11. Variability includes elevation, drainage, area, site type, and cultural affinity.

All sites are evaluated for significance, including assessments and recommendations, in the last chapter. Individual site descriptions and assessments are given in Appendices I and II.

Table 10. Prehistoric Sites Recorded in Delivery Order 6 Survey.

TARL	Field	Environmental Zone	Elev. (feet)	Drainage	Area (m^2)	Type	Chronological Components
41BL177		Int. Upland	970	Owl	27,343	Lithic Scatter	Unknown
41BL796	1437	Int. Upland	875	Owl	69,375	Lithic Scatter	General Archaic
41BL866	1748	Int. Upland	250	Owl	84,688	Lithic Scatter	General Archaic
41BL944	2114	Upland	944	Cowhouse	1,718	Lithic Quarry	Unknown
41BL945	2115	Int. Upland	835	Owl	12,188	Burned Rock Scatter w/Lithics	Unknown
41BL946	2116	Int. Upland	845	Owl	10,781	Lithic Scatter	Terminal to Transitional Archaic
41BL947	2118	Int. Upland	875	Owl	31,718	Lithic Scatter	Middle Archaic
41BL948	2120	Int. Upland	850	Owl	3,400	Lithic Scatter	Unknown
41BL949	2121	Lowland	820	Leon	781	Lithic Scatter	Unknown
41BL950	2123	Int. Upland	915	Owl	59,375	Lithic Scatter	General Archaic

Table 11. Historic Sites Recorded in Delivery Order 6 Survey.

TARL No.	Field No.	Environmental Zone	Elevation (feet)	Drainage (m^2)	Area	Site Type	Est. Occupation (TPQ) (TAQ)
41BL881	1960	Intermediate upland	895	Nolan	19,688	Domestic Dwelling	Unknown
41BL883	1980	Intermediate upland	905	Nolan	400	Farm/Ranch	Unknown
41BL951	2117	Intermediate upland	855	Nolan	34,375	Domestic Dwelling	1907-1907?
41BL952	2119	Intermediate upland	865	Nolan	11,000	Farm/Ranch	1915-1920
41BL953	2122	Lowland	900	Nolan	17,344	Farm/Ranch	Unknown
41BL954	2124	Lowland	860	Nolan	35,600	Other Features	1955-1955?
41BL955	2125	Lowland	920	Nolan	12,656	Farm/Ranch	1918-1938
41BL956	2126	Intermediate upland	975	Nolan	156	Farm/Ranch	Unknown
41BL957	2127	Lowland	880	Nolan	30,000	Domestic Dwelling	1909-1909?
41BL958	2128	Intermediate upland	260	Nolan	22,969	Domestic Dwelling	1918-1918
41BL959	2129	Upland	950	Nolan	180	Dump	1915-1915?
41BL960	2130	Intermediate upland	900	Nolan	527	Dump	1918-1930

RESEARCH RESULTS

UPDATE OF FORT HOOD PROJECTILE POINT DATA BASE

The classification of projectile points by the methods outlined in the research design has resulted in the formulation of numerous classes of form, all defined and representative of a particular point type. Type designations were made following the terminology of Suhm and Jelks (1962). The following summarizes the typological procedure used.

All dart points were initially separated based on their overall formal characteristics, published type descriptions, and personal experience. Type designations were made and each point assigned to a particular type was described using Futato's (1983) formal account.

Table 12 summarizes each type by giving the class definitions (shape classes) for each type, their frequency, and percentage. Tables 13-20 break down the summary data by giving the count and percent of each nominal attribute by type. Finally, metric summary data as well as individual metric and nominal data by type are presented in Appendix VII. A total of 806 points is now classed using the formal account at Fort Hood, while measurement data are summarized for 1,192 points (excluding weight).

The results of these tabulations indicate that a great deal of variability exists within many types in terms of shape. For instance, *Pedernales* has 49 classes, *Darl* 43, and *Ensor* 40. Others have less, such as *Martindale* 9, *Montell* 9, *Bulverde* 17, *Angostura* 7, etc., and in general the number of classes generally correlates with the number of points within a given type. However, this has not been confirmed statistically. On the other hand, the amount or degree of variability between the types in terms of shape is not defined. The same shape classes occur in different types, and a means for defining permissible variability within a type and/or creation of a different scaled system for measuring such variability on a consistent basis has not been formulated in Texas archaeology (cf. Johnson 1989). The reader is referred to Ensor (1987) and the research design of this report for a discussion of typology and taxonomic practice as it relates to these issues. For now, as stated in the research design, a comparison of Fort Hood points with a similar sample from South Bend will be undertaken (Figure 4). In addition to serving as a means for evaluating how well our intuitive classifications hold up when compared statistically using the objective criteria of the formal account, the comparison will measure how closely the same types from two divergent areas match in terms of these same attributes. It should be made clear that the following analyses are based on the Fort Hood point sample at the time of the analysis and do not include the points added during the current update. However, it is felt these additions would not have significantly altered the outcome of the analysis. The composition of the samples from each area are presented under their respective sections for clarification.

First, Fort Hood points are assessed with regard to their overall dissimilarity in terms of nominal shape attributes, then South Bend points are treated the same; finally the same types are assessed in terms of these attributes from both areas simultaneously. Multidimensional scaling is used in these analyses. In addition to shape, the size dimension is controlled by using a discriminant function analysis.

FORMAL COMPARISONS OF FORT HOOD AND SOUTH BEND PROJECTILE POINTS

Shape Variability within Fort Hood Dart Point Types

Table 21 presents the frequency of nominal attributes by type for the Fort Hood dart points. In order to assess overall dissimilarity between selected Fort

Table 12. Summary of Shape Classes by Type.

Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		Alba		
Undefined	1	20.0	1	20.0
7DSINSBSP	1	20.0	2	40.0
7DSSNSBEV	1	20.0	3	60.0
7DSSNSBSP	2	40.0	5	100.0
		Angostura		
Undefined	2	11.8	2	11.8
3XEENXXXX	1	5.9	3	17.6
3XEINXXXX	4	23.5	7	41.2
3XESNXXXX	2	11.8	9	52.9
3XRINXXXX	4	23.5	13	76.5
3XRSNXXXX	1	5.9	14	82.4
5DIRNXXST	1	5.9	15	88.2
5DSSNXXST	2	11.8	17	100.0
		Bulverde		
Undefined	11	30.6	11	30.6
7DEINSHSP	1	2.8	12	33.3
7DESNIBST	3	8.3	15	41.7
7DESNIHIC	1	2.8	16	44.4
7DESNIHSP	1	2.8	17	47.2
7DESNSHST	1	2.8	18	50.0
7DESNSTST	1	2.8	19	52.8
7DRINITSP	1	2.8	20	55.6
7DRSNIBSP	1	2.8	21	58.3
7DSINIBSP	1	2.8	22	61.1
7DSINSHSP	1	2.8	23	63.9
7DSINSHST	1	2.8	24	66.7
7DSSNIBSP	2	5.6	26	72.2
7DSSNIHSP	5	13.9	31	86.1
7DSSNITST	1	2.8	32	88.9
7DSSNSBIP	1	2.8	33	91.7
7DSSNSBSP	1	2.8	34	94.4
7DSSNSTSP	2	5.6	36	100.0
		Castroville		
Undefined	26	44.8	26	44.8
7DIENIBSE	1	1.7	27	46.6
7DIENSHSE	1	1.7	28	48.3
7DSENIBIE	3	5.2	31	53.4
7DSENIBSE	10	17.2	41	70.7
7DSENRBIC	1	1.7	42	72.4
7DSENSBSE	1	1.7	43	74.1
7DSINIBSE	1	1.7	44	75.9
7DSSNIBIE	3	5.2	47	81.0
7DSSNIBSE	6	10.3	53	91.4
7DSSNSBRE	1	1.7	54	93.1
7DSSNSBSE	3	5.2	57	98.3
7DSSNSTSE	1	1.7	58	100.0
		Darl		
Undefined	20	17.7	20	17.7
5DSINXXSP	1	0.9	21	18.6
5DSRNSTSP	1	0.9	22	19.5
5LEINXXIC	1	0.9	23	20.4
5LERNITIC	1	0.9	24	21.2
7DEENITRE	2	1.8	26	23.0
7DEINITIE	6	5.3	32	28.3
7DEINITSE	2	1.8	34	30.1
7DEINSTEV	2	1.8	36	31.9

(Table continues on the following page.)

Table 12. Continued.

Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		Darl (continued)		
7DEINSTSP	5	4.4	41	36.3
7DESNIHSE	1	0.9	42	37.2
7DESNITIC	1	0.9	43	38.1
7DESNITIE	3	2.7	46	40.7
7DESNSTIE	1	0.9	47	41.6
7DESNSTSE	7	6.2	54	47.8
7DESNSTSP	1	0.9	55	48.7
7DIINSTIE	1	0.9	56	49.6
7DISNSTIE	1	0.9	57	50.4
7DRINITIE	2	1.8	59	52.2
7DRINITSP	1	0.9	60	53.1
7DRSNITSE	1	0.9	61	54.0
7DSENITIC	1	0.9	62	54.9
7DSENITSE	1	0.9	63	55.8
7DSENSTRE	2	1.8	65	57.5
7DSENSTSE	1	0.9	66	58.4
7DSINIHIE	2	1.8	68	60.2
7DSINITIE	4	3.5	72	63.7
7DSINITSE	2	1.8	74	65.5
7DSINSTIE	2	1.8	76	67.3
7DSINSTRV	1	0.9	77	68.1
7DSINSTSE	16	14.2	93	82.3
7DSINSTSP	2	1.8	95	84.1
7DSRNITIE	1	0.9	96	85.0
7DSSNIHIE	1	0.9	97	85.8
7DSSNIHSE	1	0.9	98	86.7
7DSSNITIC	1	0.9	99	87.6
7DSSNITIE	5	4.4	104	92.0
7DSSNITSP	1	0.9	105	92.9
7DSSNSTIC	1	0.9	106	93.8
7DSSNSTRE	1	0.9	107	94.7
7DSSNSTSE	3	2.7	110	97.3
7DSSNSTSP	1	0.9	111	98.2
7LEINSTEE	2	1.8	113	100.0
		Dawson		
7DSENSTSP	1	100.0	1	100.0
		Ellis		
Undefined	11	37.9	11	37.9
7DEENIBSE	1	3.4	12	41.4
7DRENSTIE	1	3.4	13	44.8
7DSENIBIE	1	3.4	14	48.3
7DSENITIE	1	3.4	15	51.7
7DSENSTSE	2	6.9	17	58.6
7DSSNIBIE	1	3.4	18	62.1
7DSSNIBSE	2	6.9	20	69.0
7DSSNIBSP	1	3.4	21	72.4
7DSSNIHEV	1	3.4	22	75.9
7DSSNIHIE	2	6.9	24	82.8
7DSSNIHSE	2	6.9	26	89.7
7DSSNITSE	1	3.4	27	93.1
7DSSNSTSE	2	6.9	29	100.0
		Ensor		
Undefined	37	28.9	37	28.9
7DESNIBAE	1	0.8	38	29.7
7DESNITAE	1	0.8	39	30.5
7DISNIBSE	2	1.6	41	32.0
7DSENEBSE	1	0.8	42	32.8
7DSENIBIE	3	2.3	45	35.2
7DSENIBSE	1	0.8	46	35.9

(Table continues on the following page.)

Table 12. Continued.

Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		Ensor (continued)		
7DSENSBSE	1	0.8	47	36.7
7DSENSHIE	1	0.8	48	37.5
7DSINIBIE	1	0.8	49	38.3
7DSINIBSE	4	3.1	53	41.4
7DSINIHSE	1	0.8	54	42.2
7DSINITSE	1	0.8	55	43.0
7DSRNIBIE	3	2.3	58	45.3
7DSRNIBSE	1	0.8	59	46.1
7DSRNIHSE	4	3.1	63	49.2
7DSSNIBIE	6	4.7	69	53.9
7DSSNIBSE	19	14.8	88	68.7
7DSSNIHIE	2	1.6	90	70.3
7DSSNITAE	1	0.8	91	71.1
7DSSNITIE	2	1.6	93	72.7
7DSSNSBIE	2	1.6	95	74.2
7LEINIHIE	1	0.8	96	75.0
7LIENITEE	1	0.8	97	75.8
7LIINITAE	1	0.8	98	76.6
7LIRNIHIE	1	0.8	99	77.3
7LIRNIHSE	1	0.8	100	78.1
7LIRNITRE	1	0.8	101	78.9
7LSENIBIE	1	0.8	102	79.7
7LSENIHIE	1	0.8	103	80.5
7LSENIHSE	1	0.8	104	81.2
7LSENITIE	1	0.8	105	82.0
7LSENSTSE	2	1.6	107	83.6
7LSRNIHSE	1	0.8	108	84.4
7LSRNITIE	2	1.6	110	85.9
7LSSNIBAE	1	0.8	111	86.7
7LSSNITIE	1	0.8	112	87.5
7LSSNITSE	4	3.1	116	90.6
7LSSNSHIE	2	1.6	118	92.2
7LSSNSTIE	1	0.8	119	93.0
7LSSNSTSE	9	7.0	128	100.0
		Fresno		
3XSINXXXX	1	33.3	1	33.3
3XSSNXXXX	2	66.7	3	100.0
		Frio		
Undefined	4	20.0	4	20.0
7DIRNIBIE	1	5.0	5	25.0
7DSRNIBIE	1	5.0	6	30.0
7LIRNIHSE	6	30.0	12	60.0
7LSINIHAV	1	5.0	13	65.0
7LSRNITIE	1	5.0	14	70.0
7LSRNSTIE	3	15.0	17	85.0
9LSINIBAE	3	15.0	20	100.0
		Godley		
7DEENITIE	5	31.3	5	31.3
7DEENSTIC	1	6.2	6	37.5
7DEENSTSE	1	6.2	7	43.7
7DSENIHIE	1	6.2	8	50.0
7DSENITIE	5	31.3	13	81.2
7DSENITSE	1	6.2	14	87.5
7DSENSHIE	1	6.2	15	93.7
7DSSNITIC	1	6.2	16	100.0
		Golondrina		
3XERNXXXX	2	66.7	2	66.7
3XRRNXXXX	1	33.3	3	100.0

(Table continues on the following page.)

Table 12. Continued.

Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		Gower		
Undefined	2	9.1	2	9.1
5DEINXXEP	1	4.5	3	13.6
5DSINXXEV	1	4.5	4	18.2
5DSINXXRP	1	4.5	5	22.7
5LSRNXXEP	1	4.5	6	27.3
7DEANETSE	1	4.5	7	31.8
7DEINSTSP	2	9.1	9	40.9
7DERNIHSP	1	4.5	10	45.5
7DERNITSE	1	4.5	11	50.0
7DERNSTRE	1	4.5	12	54.5
7DSINSHEV	2	9.1	14	63.6
7DSRNITSE	1	4.5	15	68.2
7DSRNSTEV	3	13.6	18	81.8
7DSRNSTSE	2	9.1	20	90.9
7LEINITRE	1	4.5	21	95.5
7LEINITSE	1	4.5	22	100.0
		Lange		
Undefined	1	6.2	1	6.2
7DESNIBSE	5	31.3	6	37.5
7DSENIBIE	1	6.2	7	43.7
7DSINIHRE	1	6.2	8	50.0
7DSRNIBAE	1	6.2	9	56.2
7DSSNIBSE	6	37.5	15	93.7
7DSSNIHSE	1	6.2	16	100.0
		Marcos		
7DESNIBIE	2	28.6	2	28.6
7DIINSBIE	1	14.3	3	42.9
7DSENIBIE	1	14.3	4	57.1
7DSINIBSE	1	14.3	5	71.4
7DSRNRBSE	1	14.3	6	85.7
7DSSNIBIE	1	14.3	7	100.0
		Marshall		
Undefined	11	21.6	11	21.6
7BISNSBSE	1	2.0	12	23.5
7DEENIBSE	1	2.0	13	25.5
7DEENSBIC	1	2.0	14	27.5
7DEINIBRE	1	2.0	15	29.4
7DESNIBIE	5	9.8	20	39.2
7DESNIBSE	1	2.0	21	41.2
7DESNIBSP	2	3.9	23	45.1
7DIRNSBIE	1	2.0	24	47.1
7DRENIBSE	1	2.0	25	49.0
7DRSNIBIE	1	2.0	26	51.0
7DSINIBIE	1	2.0	27	52.9
7DSINIBSE	2	3.9	29	56.9
7DSINSBIE	3	5.9	32	62.7
7DSINSBRE	1	2.0	33	64.7
7DSINSHIE	1	2.0	34	66.7
7DSSNIBEE	2	3.9	36	70.6
7DSSNIBIE	4	7.8	40	78.4
7DSSNIBSE	4	7.8	44	86.3
7DSSNIBSP	1	2.0	45	88.2
7DSSNRBSE	1	2.0	46	90.2
7DSSNSBIE	5	9.8	51	100.0
		Martindale		
Undefined	6	20.0	6	20.0
7DERNIBIE	1	3.3	7	23.3
7DERNIBSE	1	3.3	8	26.7

(Table continues on the following page.)

Table 12. Continued.

Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		Martindale (continued)		
7DIRNIBSE	1	3.3	9	30.0
7DSRNIBEE	1	3.3	10	33.3
7DSRNIBIE	3	10.0	13	43.3
7DSRNIBSE	7	23.3	20	66.7
7DSRNSBEE	1	3.3	21	70.0
7DSRNSBIE	6	20.0	27	90.0
7DSRNSBSE	3	10.0	30	100.0
		Montell		
Undefined	11	39.3	11	39.3
9DEAIIBIE	1	3.6	12	42.9
9DIAIIBIE	1	3.6	13	46.4
9DSAIIBIE	8	28.6	21	75.0
9DSAIIBSE	2	7.1	23	82.1
9DSAIIHEE	1	3.6	24	85.7
9DSAIRBSE	1	3.6	25	89.3
9DSAISHSP	1	3.6	26	92.9
9DSAISTIE	1	3.6	27	96.4
9DSAISTSE	1	3.6	28	100.0
		Morrill		
Undefined	5	41.7	5	41.7
5LSENXXIE	1	8.3	6	50.0
7DEINSTSP	1	8.3	7	58.3
7DSSNSTSP	4	33.3	11	91.7
7DSSNSTST	1	8.3	12	100.0
		Nolan		
Undefined	1	20.0	1	20.0
7DEENITIE	2	40.0	3	60.0
7DESNITIE	1	20.0	4	80.0
7DESNITSP	1	20.0	5	100.0
		Palmillas		
Undefined	6	42.9	6	42.9
7DEENITIE	1	7.1	7	50.0
7DESNIHEV	1	7.1	8	57.1
7DSENIBIE	1	7.1	9	64.3
7DSENIHIE	1	7.1	10	71.4
7DSENITRP	1	7.1	11	78.6
7DSENSTEV	3	21.4	14	100.0
		Pedernales		
Undefined	34	21.9	34	21.9
5USINXXSP	1	0.6	35	22.6
7DEINEBST	1	0.6	36	23.2
7DEINETEV	1	0.6	37	23.9
7DEINIBST	1	0.6	38	24.5
7DEINIHRP	1	0.6	39	25.2
7DEINIHSP	4	2.6	43	27.7
7DEINIHST	1	0.6	44	28.4
7DEINITIC	3	1.9	47	30.3
7DEINITIE	2	1.3	49	31.6
7DEINITSP	8	5.2	57	36.8
7DEINSHRP	2	1.3	59	38.1
7DEINSHSP	1	0.6	60	38.7
7DEINSTEV	6	3.9	66	42.6
7DEINSTIC	1	0.6	67	43.2
7DEINSTRE	2	1.3	69	44.5
7DEINSTSE	2	1.3	71	45.8
7DEINSTSP	7	4.5	78	50.3

(Table continues on the following page.)

Table 12. Continued.

Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		Pedernales (continued)		
7DEINSTST	2	1.3	80	51.6
7DERNSTSP	1	0.6	81	52.3
7DIINIBRC	1	0.6	82	52.9
7DIINIBSP	1	0.6	83	53.5
7DIINSTST	2	1.3	85	54.8
7DRINIBSP	1	0.6	86	55.5
7DRINIHEV	2	1.3	88	56.8
7DRINIHSP	1	0.6	89	57.4
7DRINITST	1	0.6	90	58.1
7DRINSTSP	1	0.6	91	58.7
7DSINIBEV	4	2.6	95	61.3
7DSINIBSP	1	0.6	96	61.9
7DSINIBST	1	0.6	97	62.6
7DSINIHEE	1	0.6	98	63.2
7DSINIHSC	1	0.6	99	63.9
7DSINIHSE	2	1.3	101	65.2
7DSINIHSP	8	5.2	109	70.3
7DSINIHST	1	0.6	110	71.0
7DSINITET	1	0.6	111	71.6
7DSINITSP	3	1.9	114	73.5
7DSINRBSE	1	0.6	115	74.2
7DSINSBIC	1	0.6	116	74.8
7DSINSBSP	3	1.9	119	76.8
7DSINSBST	2	1.3	121	78.1
7DSINSHRP	1	0.6	122	78.7
7DSINSTEE	1	0.6	123	79.4
7DSINSTEV	4	2.6	127	81.9
7DSINSTIE	1	0.6	128	82.6
7DSINSTRT	1	0.6	129	83.2
7DSINSTSE	1	0.6	130	83.9
7DSINSTSP	19	12.3	149	96.1
7DSINSTST	6	3.9	155	100.0
		Perdiz		
Undefined	3	42.9	3	42.9
5USENIBXX	1	14.3	4	57.1
7DIENSBSC	1	14.3	5	71.4
7DSSNIBST	1	14.3	6	85.7
7DSSNSBET	1	14.3	7	100.0
		Plainview		
Undefined	5	29.4	5	29.4
3XEINXXXX	9	52.9	14	82.4
3XSINXXXX	1	5.9	15	88.2
3XSRNXXXX	1	5.9	16	94.1
5XIINXXIC	1	5.9	17	100.0
		Scallorn		
Undefined	14	40.0	14	40.0
7DEINIBIE	1	2.9	15	42.9
7DESNIBIE	1	2.9	16	45.7
7DESNIBSE	1	2.9	17	48.6
7DIRNIBSE	1	2.9	18	51.4
7DSENITRE	1	2.9	19	54.3
7DSENSBIE	5	14.3	24	68.6
7DSINSBIE	1	2.9	25	71.4
7DSSNIBIE	3	8.6	28	80.0
7DSSNIBSE	4	11.4	32	91.4
7DSSNIHIE	1	2.9	33	94.3
7DSSNSBSE	1	2.9	34	97.1
7DSSNSTSE	1	2.9	35	100.0

(Table continues on the following page.)

Table 12. Continued.

Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		Tortugas		
3XSSNXXXX	1	100.0	1	100.0
		Travis		
Undefined	2	6.1	2	6.1
3XEENXXXX	1	3.0	3	9.1
5DEENXXIC	1	3.0	4	12.1
5DESNXXIC	5	15.2	9	27.3
5DSINXXIC	1	3.0	10	30.3
5LSSNITIE	1	3.0	11	33.3
5LSSNXXSP	1	3.0	12	36.4
7DEENITIC	1	3.0	13	39.4
7DEENITIE	5	15.2	18	54.5
7DEENXXIC	1	3.0	19	57.6
7DEINITSE	1	3.0	20	60.6
7DEINSTSP	1	3.0	21	63.6
7DESNETSP	2	6.1	23	69.7
7DESNITIC	1	3.0	24	72.7
7DESNSTIE	1	3.0	25	75.8
7DESNSTSP	1	3.0	26	78.8
7DRSNSTST	1	3.0	27	81.8
7DSSNSTSE	2	6.1	29	87.9
7DSSNSTSP	3	9.1	32	97.0
7LSSNSTIC	1	3.0	33	100.0
		Untyped arrow point		
Undefined	40	100.0	40	100.0
		Untyped dart point		
Undefined	463	81.7	463	81.7
3XEAIXXXX	1	0.2	464	81.8
3XEINXXXX	1	0.2	465	82.0
3XRINXXXX	1	0.2	466	82.2
3XSRNXXXX	1	0.2	467	82.4
5LSENXXIE	1	0.2	468	82.5
7DEINETRP	1	0.2	469	82.7
7DEINIHSP	1	0.2	470	82.9
7DEINSBEV	1	0.2	471	83.1
7DEINSTEV	1	0.2	472	83.2
7DEINSTRE	1	0.2	473	83.4
7DEINSTSE	1	0.2	474	83.6
7DEINSTSP	3	0.5	477	84.1
7DERNIHIE	1	0.2	478	84.3
7DESNIBSE	1	0.2	479	84.5
7DESNIHIE	1	0.2	480	84.7
7DESNIHSE	1	0.2	481	84.8
7DESNIHSP	5	0.9	486	85.7
7DESNITSE	2	0.4	488	86.1
7DESNITSP	3	0.5	491	86.6
7DESNSTIC	2	0.4	493	86.9
7DESNSTIE	1	0.2	494	87.1
7DESNSTRE	1	0.2	495	87.3
7DESNSTSP	7	1.2	502	88.5
7DESNSTST	1	0.2	503	88.7
7DIINSTSP	1	0.2	504	88.9
7DISNSHIE	1	0.2	505	89.1
7DRRNIBIE	2	0.4	507	89.4
7DRRNITIE	1	0.2	508	89.6
7DRSNSTSE	1	0.2	509	89.8
7DRSNSTSP	1	0.2	510	89.9
7DSENETSP	1	0.2	511	90.1
7DSENIHSE	2	0.4	513	90.5

(Table continues on the following page.)

Table 12. Continued.

Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		Untyped dart point (continued)		
7DSENITEV	1	0.2	514	90.7
7DSENITIC	1	0.2	515	90.8
7DSENITIE	1	0.2	516	91.0
7DSENITSP	1	0.2	517	91.2
7DSENSTEV	1	0.2	518	91.4
7DSENSTSE	1	0.2	519	91.5
7DSINIBIE	2	0.4	521	91.9
7DSINIBSE	1	0.2	522	92.1
7DSINIBSP	1	0.2	523	92.2
7DSINIHIE	1	0.2	524	92.4
7DSINIHSE	1	0.2	525	92.6
7DSINITIC	3	0.5	528	93.1
7DSINITIE	2	0.4	530	93.5
7DSINITSP	2	0.4	532	93.8
7DSINSBSE	3	0.5	535	94.4
7DSINSTEV	1	0.2	536	94.5
7DSRNIHSE	2	0.4	538	94.9
7DSRNSTIE	1	0.2	539	95.1
7DSSNETIE	1	0.2	540	95.2
7DSSNIBIE	1	0.2	541	95.4
7DSSNIBSE	1	0.2	542	95.6
7DSSNIBSP	1	0.2	543	95.8
7DSSNITAE	1	0.2	544	95.9
7DSSNITIC	1	0.2	545	96.1
7DSSNITIE	5	0.9	550	97.0
7DSSNITSE	1	0.2	551	97.2
7DSSNITSP	3	0.5	554	97.7
7DSSNSHIE	1	0.2	555	97.9
7DSSNSTSE	3	0.5	558	98.4
7DSSNSTSP	6	1.1	564	99.5
7DSSNSTST	1	0.2	565	99.6
7LSENITIE	1	0.2	566	99.8
7LSSNITRE	1	0.2	567	100.0
		Uvalde		
Undefined	9	36.0	9	36.0
7DEINIHSE	1	4.0	10	40.0
7DSINIBIE	3	12.0	13	52.0
7DSINIBRE	2	8.0	15	60.0
7DSINIBSE	5	20.0	20	80.0
7DSINITIE	1	4.0	21	84.0
7DSINSBSE	1	4.0	22	88.0
7DSRNIBIE	1	4.0	23	92.0
7DSRNIHIE	1	4.0	24	96.0
7DSRNITSE	1	4.0	25	100.0
		Wells		
Undefined	7	15.9	7	15.9
5DESNXXST	1	2.3	8	18.2
7DEENSTET	1	2.3	9	20.5
7DEENSTSP	2	4.5	11	25.0
7DEINITET	1	2.3	12	27.3
7DEINITST	1	2.3	13	29.5
7DESNIHST	2	4.5	15	34.1
7DESNITST	1	2.3	16	36.4
7DESNSTSP	1	2.3	17	38.6
7DSENSTSP	3	6.8	20	45.5
7DSENSTST	2	4.5	22	50.0
7DSINSTEV	1	2.3	23	52.3
7DSSNITSP	2	4.5	25	56.8
7DSSNSTSP	6	13.6	31	70.5
7DSSNSTST	13	29.5	44	100.0

Table 13. Summary of Vertex Class by Type.

Frequency Row Pct	Class 3	Class 5	Class 7	Class 9	Total
Alba	0 0.00	0 0.00	4 100.00	0 0.00	4
Angostura	12 80.00	3 20.00	0 0.00	0 0.00	15
Bulverde	0 0.00	0 0.00	25 100.00	0 0.00	25
Castroville	0 0.00	0 0.00	32 100.00	0 0.00	32
Darl	0 0.00	4 4.30	89 95.70	0 0.00	93
Dawson	0 0.00	0 0.00	1 100.00	0 0.00	1
Ellis	0 0.00	0 0.00	18 100.00	0 0.00	18
Ensor	0 0.00	0 0.00	91 100.00	0 0.00	91
Fresno	3 100.00	0 0.00	0 0.00	0 0.00	3
Frio	0 0.00	0 0.00	13 81.25	3 18.75	16
Godley	0 0.00	0 0.00	16 100.00	0 0.00	16
Golondrina	3 100.00	0 0.00	0 0.00	0 0.00	3
Gower	0 0.00	4 20.00	16 80.00	0 0.00	20
Lange	0 0.00	0 0.00	15 100.00	0 0.00	15
Marcos	0 0.00	0 0.00	7 100.00	0 0.00	7
Marshall	0 0.00	0 0.00	40 100.00	0 0.00	40
Martindale	0 0.00	0 0.00	24 100.00	0 0.00	24
Montell	0 0.00	0 0.00	0 0.00	17 100.00	17
Morrill	0 0.00	1 14.29	6 85.71	0 0.00	7
Nolan	0 0.00	0 0.00	4 100.00	0 0.00	4
Palmillas	0 0.00	0 0.00	8 100.00	0 0.00	8

(Table continues on the following page.)

Table 13. Continued.

Frequency Row Pct	Class 3	Class 5	Class 7	Class 9	Total
Pedernales	0 0.00	1 0.83	120 99.17	0 0.00	121
Perdiz	0 0.00	1 25.00	3 75.00	0 0.00	4
Plainview	11 91.67	1 8.33	0 0.00	0 0.00	12
Scallorn	0 0.00	0 0.00	21 100.00	0 0.00	21
Tortugas	1 100.00	0 0.00	0 0.00	0 0.00	1
Travis	1 3.23	9 29.03	21 67.74	0 0.00	31
Untyped dart point	4 3.85	1 0.96	99 95.19	0 0.00	104
Uvalde	0 0.00	0 0.00	16 100.00	0 0.00	16
Wells	0 0.00	1 2.70	36 97.30	0 0.00	37
Total	35	26	725	20	806

Table 14. Summary of Haft Element Modification Attributes by Type.

Frequency Row Pct	Basal	Diagonal	Lateral	Unmodified	No Modification	Total
Alba	0 0.00	4 100.00	0 0.00	0 0.00	0 0.00	4
Angostura	0 0.00	3 20.00	0 0.00	0 0.00	12 80.00	15
Bulverde	0 0.00	25 100.00	0 0.00	0 0.00	0 0.00	25
Castroville	0 0.00	32 100.00	0 0.00	0 0.00	0 0.00	32
Darl	0 0.00	89 95.70	4 4.30	0 0.00	0 0.00	93
Dawson	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1
Ellis	0 0.00	18 100.00	0 0.00	0 0.00	0 0.00	18
Ensor	0 0.00	58 63.74	33 36.26	0 0.00	0 0.00	91
Fresno	0 0.00	0 0.00	0 0.00	0 0.00	3 100.00	3
Frio	0 0.00	2 12.50	14 87.50	0 0.00	0 0.00	16

(Table continues on the following page.)

Table 14. Continued.

Frequency Row Pct	Basal	Diagonal	Lateral	Unmodified	No Modification	Total
Godley	0 0.00	16 100.00	0 0.00	0 0.00	0 0.00	16
Golondrina	0 0.00	0 0.00	0 0.00	0 0.00	3 100.00	3
Gower	0 0.00	17 85.00	3 15.00	0 0.00	0 0.00	20
Lange	0 0.00	15 100.00	0 0.00	0 0.00	0 0.00	15
Marcos	0 0.00	7 100.00	0 0.00	0 0.00	0 0.00	7
Marshall	1 2.50	39 97.50	0 0.00	0 0.00	0 0.00	40
Martindale	0 0.00	24 100.00	0 0.00	0 0.00	0 0.00	24
Montell	0 0.00	17 100.00	0 0.00	0 0.00	0 0.00	17
Morrill	0 0.00	6 85.71	1 14.29	0 0.00	0 0.00	7
Nolan	0 0.00	4 100.00	0 0.00	0 0.00	0 0.00	4
Palmillas	0 0.00	8 100.00	0 0.00	0 0.00	0 0.00	8
Pedernales	0 0.00	120 99.17	0 0.00	1 0.83	0 0.00	121
Perdiz	0 0.00	3 75.00	0 0.00	1 25.00	0 0.00	4
Plainview	0 0.00	0 0.00	0 0.00	0 0.00	12 100.00	12
Scallorn	0 0.00	21 100.00	0 0.00	0 0.00	0 0.00	21
Tortugas	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1
Travis	0 0.00	27 87.10	3 9.68	0 0.00	1 3.23	31
Untyped arrow point	0 .	0 .	0 .	0 .	0 .	0
Untyped dart point	0 0.00	97 93.27	3 2.88	0 0.00	4 3.85	104
Uvalde	0 0.00	16 100.00	0 0.00	0 0.00	0 0.00	16
Wells	0 0.00	37 100.00	0 0.00	0 0.00	0 0.00	37
Total	1	706	61	2	36	806

Table 15. Summary of Blade Shape Attributes by Type.

Frequency Row Pct	Excurvate	Incurvate	Recurvate	Straight	Total
Alba	0 0.00	0 0.00	0 0.00	4 100.00	4
Angostura	7 46.67	1 6.67	5 33.33	2 13.33	15
Bulverde	8 32.00	0 0.00	2 8.00	15 60.00	25
Castroville	0 0.00	2 6.25	0 0.00	30 93.75	32
Darl	35 37.63	2 2.15	4 4.30	52 55.91	93
Dawson	0 0.00	0 0.00	0 0.00	1 100.00	1
Ellis	1 5.56	0 0.00	1 5.56	16 88.89	18
Ensor	3 3.30	7 7.69	0 0.00	81 89.01	91
Fresno	0 0.00	0 0.00	0 0.00	3 100.00	3
Frio	0 0.00	7 43.75	0 0.00	9 56.25	16
Godley	7 43.75	0 0.00	0 0.00	9 56.25	16
Golondrina	2 66.67	0 0.00	1 33.33	0 0.00	3
Gower	9 45.00	0 0.00	0 0.00	11 55.00	20
Lange	5 33.33	0 0.00	0 0.00	10 66.67	15
Marcos	2 28.57	1 14.29	0 0.00	4 57.14	7
Marshall	11 27.50	2 5.00	2 5.00	25 62.50	40
Martindale	2 8.33	1 4.17	0 0.00	21 87.50	24
Montell	1 5.88	1 5.88	0 0.00	15 88.24	17
Morrill	1 14.29	0 0.00	0 0.00	6 85.71	7
Nolan	4 100.00	0 0.00	0 0.00	0 0.00	4
Palmillas	2 25.00	0 0.00	0 0.00	6 75.00	8
Pedernales	46 38.02	4 3.31	6 4.96	65 53.72	121
Perdiz	0 0.00	1 25.00	0 0.00	3 75.00	4
Plainview	9 75.00	1 8.33	0 0.00	2 16.67	12

(Table continues on the following page.)

Table 15. Continued.

Frequency Row Pct	Excurvate	Incurvate	Recurvate	Straight	Total
Scallorn	3 14.29	1 4.76	0 0.00	17 80.95	21
Tortugas	0 0.00	0 0.00	0 0.00	1 100.00	1
Travis	21 67.74	0 0.00	1 3.23	9 29.03	31
Untyped arrow point	0 .	0 .	0 .	0 .	0
Untyped dart point	37 35.58	2 1.92	6 5.77	59 56.73	104
Uvalde	1 6.25	0 0.00	0 0.00	15 93.75	16
Wells	10 27.03	0 0.00	0 0.00	27 72.97	37
Total	227	33	28	518	806

Table 16. Summary of Base Shape Attributes by Type.

Frequency Row Pct	Angular	Excurvate	Incurvate	Recurvate	Straight	Total
Alba	0 0.00	0 0.00	1 25.00	0 0.00	3 75.00	4
Angostura	0 0.00	1 6.67	8 53.33	1 6.67	5 33.33	15
Bulverde	0 0.00	0 0.00	5 20.00	0 0.00	20 80.00	25
Castroville	0 0.00	17 53.13	1 3.12	0 0.00	14 43.75	32
Darl	0 0.00	7 7.53	52 55.91	3 3.23	31 33.33	93
Dawson	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1
Ellis	0 0.00	6 33.33	0 0.00	0 0.00	12 66.67	18
Ensor	0 0.00	14 15.38	9 9.89	14 15.38	54 59.34	91
Fresno	0 0.00	0 0.00	1 33.33	0 0.00	2 66.67	3
Frio	0 0.00	0 0.00	4 25.00	12 75.00	0 0.00	16
Godley	0 0.00	15 93.75	0 0.00	0 0.00	1 6.25	16
Golondrina	0 0.00	0 0.00	0 0.00	3 100.00	0 0.00	3
Gower	1 5.00	0 0.00	9 45.00	10 50.00	0 0.00	20

(Table continues on the following page.)

Table 16. Continued.

Frequency Row Pct	Angular	Excurvate	Incurvate	Recurvate	Straight	Total
Lange	0 0.00	1 6.67	1 6.67	1 6.67	12 80.00	15
Marcos	0 0.00	1 14.29	2 28.57	1 14.29	3 42.86	7
Marshall	0 0.00	3 7.50	9 22.50	1 2.50	27 67.50	40
Martindale	0 0.00	0 0.00	0 0.00	24 100.00	0 0.00	24
Montell	17 100.00	0 0.00	0 0.00	0 0.00	0 0.00	17
Morrill	0 0.00	1 14.29	1 14.29	0 0.00	5 71.43	7
Nolan	0 0.00	2 50.00	0 0.00	0 0.00	2 50.00	4
Palmillas	0 0.00	7 87.50	0 0.00	0 0.00	1 12.50	8
Pedernales	0 0.00	0 0.00	120 99.17	1 0.83	0 0.00	121
Perdiz	0 0.00	2 50.00	0 0.00	0 0.00	2 50.00	4
Plainview	0 0.00	0 0.00	11 91.67	1 8.33	0 0.00	12
Scallorn	0 0.00	6 28.57	2 9.52	1 4.76	12 57.14	21
Tortugas	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1
Travis	0 0.00	9 29.03	3 9.68	0 0.00	19 61.29	31
Untyped arrow point	0 .	0 .	0 .	0 .	0 .	0
Untyped dart point	1 0.96	11 10.58	29 27.88	8 7.69	55 52.88	104
Uvalde	0 0.00	0 0.00	13 81.25	3 18.75	0 0.00	16
Wells	0 0.00	8 21.62	3 8.11	0 0.00	26 70.27	37
Total	19	112	284	84	307	806

Table 17. Summary of Shoulder Shape Attributes by Type.

Frequency Row Pct	Excurvate	Incurvate	Recurvate	Straight	None	Total
Alba	0 0.00	0 0.00	0 0.00	4 100.00	0 0.00	4
Angostura	0 0.00	0 0.00	0 0.00	0 0.00	15 100.00	15

(Table continues on the following page.)

Table 17. Continued.

Frequency Row Pct	Excurvate	Incurvate	Recurvate	Straight	None	Total
Bulverde	0 0.00	16 64.00	0 0.00	9 36.00	0 0.00	25
Castroville	0 0.00	24 75.00	1 3.12	7 21.87	0 0.00	32
Darl	0 0.00	40 43.01	0 0.00	51 54.84	2 2.15	93
Dawson	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	1
Ellis	0 0.00	13 72.22	0 0.00	5 27.78	0 0.00	18
Ensor	1 1.10	72 79.12	0 0.00	18 19.78	0 0.00	91
Fresno	0 0.00	0 0.00	0 0.00	0 0.00	3 100.00	3
Frio	0 0.00	13 81.25	0 0.00	3 18.75	0 0.00	16
Godley	0 0.00	13 81.25	0 0.00	3 18.75	0 0.00	16
Golondrina	0 0.00	0 0.00	0 0.00	0 0.00	3 100.00	3
Gower	1 5.00	5 25.00	0 0.00	10 50.00	4 20.00	20
Lange	0 0.00	15 100.00	0 0.00	0 0.00	0 0.00	15
Marcos	0 0.00	5 71.43	1 14.29	1 14.29	0 0.00	7
Marshall	0 0.00	26 65.00	1 2.50	13 32.50	0 0.00	40
Martindale	0 0.00	14 58.33	0 0.00	10 41.67	0 0.00	24
Montell	0 0.00	13 76.47	1 5.88	3 17.65	0 0.00	17
Morrill	0 0.00	0 0.00	0 0.00	6 85.71	1 14.29	7
Nolan	0 0.00	4 100.00	0 0.00	0 0.00	0 0.00	4
Palmillas	0 0.00	5 62.50	0 0.00	3 37.50	0 0.00	8
Pedernales	2 1.65	50 41.32	1 0.83	67 55.37	1 0.83	121
Perdiz	0 0.00	2 50.00	0 0.00	2 50.00	0 0.00	4

(Table continues on the following page.)

Table 17. Continued.

Frequency Row Pct	Excurvate	Incurvate	Recurvate	Straight	None	Total
Plainview	0 0.00	0 0.00	0 0.00	0 0.00	12 100.00	12
Scallorn	0 0.00	13 61.90	0 0.00	8 38.10	0 0.00	21
Tortugas	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1
Travis	2 6.45	9 29.03	0 0.00	10 32.26	10 32.26	31
Untyped arrow point	0 .	0 .	0 .	0 .	0 .	0
Untyped dart point	3 2.88	55 52.88	0 0.00	41 39.42	5 4.81	104
Uvalde	0 0.00	15 93.75	0 0.00	1 6.25	0 0.00	16
Wells	0 0.00	7 18.92	0 0.00	29 78.38	1 2.70	37
Total	9	429	5	305	58	806

Table 18. Summary of Shoulder Orientation Attributes by Type.

Frequency Row Pct	Barbed	Horizontal	Tapered	None	Total
Alba	4 100.00	0 0.00	0 0.00	0 0.00	4
Angostura	0 0.00	0 0.00	0 0.00	15 100.00	15
Bulverde	9 36.00	11 44.00	5 20.00	0 0.00	25
Castroville	30 93.75	1 3.12	1 3.12	0 0.00	32
Darl	0 0.00	5 5.38	86 92.47	2 2.15	93
Dawson	0 0.00	0 0.00	1 100.00	0 0.00	1
Ellis	6 33.33	5 27.78	7 38.89	0 0.00	18
Ensor	47 51.65	16 17.58	28 30.77	0 0.00	91
Fresno	0 0.00	0 0.00	0 0.00	3 100.00	3
Frio	5 31.25	7 43.75	4 25.00	0 0.00	16
Godley	0 0.00	2 12.50	14 87.50	0 0.00	16

(Table continues on the following page.)

Table 18. Continued.

Frequency Row Pct	Barbed	Horizontal	Tapered	None	Total
Golondrina	0 0.00	0 0.00	0 0.00	3 100.00	3
Gower	0 0.00	3 15.00	13 65.00	4 20.00	20
Lange	13 86.67	2 13.33	0 0.00	0 0.00	15
Marcos	7 100.00	0 0.00	0 0.00	0 0.00	7
Marshall	39 97.50	1 2.50	0 0.00	0 0.00	40
Martindale	24 100.00	0 0.00	0 0.00	0 0.00	24
Montell	13 76.47	2 11.76	2 11.76	0 0.00	17
Morrill	0 0.00	0 0.00	6 85.71	1 14.29	7
Nolan	0 0.00	0 0.00	4 100.00	0 0.00	4
Palmillas	1 12.50	2 25.00	5 62.50	0 0.00	8
Pedernales	18 14.88	26 21.49	76 62.81	1 0.83	121
Perdiz	4 100.00	0 0.00	0 0.00	0 0.00	4
Plainview	0 0.00	0 0.00	0 0.00	12 100.00	12
Scallorn	18 85.71	1 4.76	2 9.52	0 0.00	21
Tortugas	0 0.00	0 0.00	0 0.00	1 100.00	1
Travis	0 0.00	0 0.00	21 67.74	10 32.26	31
Untyped arrow point	0 .	0 .	0 .	0 .	0
Untyped dart point	14 13.46	17 16.35	68 65.38	5 4.81	104
Uvalde	12 75.00	2 12.50	2 12.50	0 0.00	16
Wells	0 0.00	2 5.41	34 91.89	1 2.70	37
Total	264	105	379	58	806

Table 19. Summary of Lateral Haft Element Shape Attributes by Type.

Frequency Row Pct	Angular	Excurvate	Incurvate	Recurvate	Straight	None	Total
Alba	0 0.00	1 25.00	0 0.00	0 0.00	3 75.00	0 0.00	4
Angostura	0 0.00	0 0.00	0 0.00	0 0.00	3 20.00	12 80.00	15
Bulverde	0 0.00	0 0.00	2 8.00	0 0.00	23 92.00	0 0.00	25
Castroville	0 0.00	0 0.00	7 21.87	1 3.12	24 75.00	0 0.00	32
Darl	0 0.00	4 4.30	35 37.63	6 6.45	48 51.61	0 0.00	93
Dawson	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	1
Ellis	0 0.00	1 5.56	6 33.33	0 0.00	11 61.11	0 0.00	18
Ensor	5 5.49	1 1.10	31 34.07	1 1.10	53 58.24	0 0.00	91
Fresno	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	3 100.00	3
Frio	4 25.00	0 0.00	6 37.50	0 0.00	6 37.50	0 0.00	16
Godley	0 0.00	0 0.00	14 87.50	0 0.00	2 12.50	0 0.00	16
Golondrina	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	3 100.00	3
Gower	0 0.00	8 40.00	0 0.00	3 15.00	9 45.00	0 0.00	20
Lange	1 6.67	0 0.00	1 6.67	1 6.67	12 80.00	0 0.00	15
Marcos	0 0.00	0 0.00	5 71.43	0 0.00	2 28.57	0 0.00	7
Marshall	0 0.00	2 5.00	22 55.00	2 5.00	14 35.00	0 0.00	40
Martindale	0 0.00	2 8.33	10 41.67	0 0.00	12 50.00	0 0.00	24
Montell	0 0.00	1 5.88	11 64.71	0 0.00	5 29.41	0 0.00	17
Morrill	0 0.00	0 0.00	1 14.29	0 0.00	6 85.71	0 0.00	7
Nolan	0 0.00	0 0.00	3 75.00	0 0.00	1 25.00	0 0.00	4
Palmillas	0 0.00	4 50.00	3 37.50	1 12.50	0 0.00	0 0.00	8
Pedernales	0 0.00	20 16.53	8 6.61	8 6.61	85 70.25	0 0.00	121
Perdiz	0 0.00	1 25.00	0 0.00	0 0.00	2 50.00	1 25.00	4
Plainview	0 0.00	0 0.00	1 8.33	0 0.00	0 0.00	11 91.67	12

(Table continues on the following page.)

Table 19. Continued.

Frequency Row Pct	Angular	Excurvate	Incurvate	Recurvate	Straight	None	Total
Scallorn	0 0.00	0 0.00	12 57.14	1 4.76	8 38.10	0 0.00	21
Tortugas	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1
Travis	0 0.00	0 0.00	18 58.06	0 0.00	12 38.71	1 3.23	31
Untyped arrow pt	0 .	0 .	0 .	0 .	0 .	0 .	0
Untyped dart pt	1 0.96	5 4.81	31 29.81	4 3.85	59 56.73	4 3.85	104
Uvalde	0 0.00	0 0.00	6 37.50	2 12.50	8 50.00	0 0.00	16
Wells	0 0.00	3 8.11	0 0.00	0 0.00	34 91.89	0 0.00	37
Total	11	53	233	30	443	36	806

Table 20. Summary of Lateral Haft Element Orientation Attributes by Type.

Frequency Row Pct	Concave	Expanding	Parallel	Contracting	Convex	None	Total
Alba	0 0.00	0 0.00	3 75.00	0 0.00	1 25.00	0 0.00	4
Angostura	0 0.00	0 0.00	0 0.00	3 20.00	0 0.00	12 80.00	15
Bulverde	1 4.00	0 0.00	17 68.00	7 28.00	0 0.00	0 0.00	25
Castroville	1 3.12	31 96.87	0 0.00	0 0.00	0 0.00	0 0.00	32
Darl	6 6.45	71 76.34	13 13.98	0 0.00	3 3.23	0 0.00	93
Dawson	0 0.00	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1
Ellis	0 0.00	16 88.89	1 5.56	0 0.00	1 5.56	0 0.00	18
Ensor	0 0.00	91 100.00	0 0.00	0 0.00	0 0.00	0 0.00	91
Fresno	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	3 100.00	3
Frio	0 0.00	15 93.75	0 0.00	0 0.00	1 6.25	0 0.00	16
Godley	2 12.50	14 87.50	0 0.00	0 0.00	0 0.00	0 0.00	16
Golondrina	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	3 100.00	3
Gower	0 0.00	8 40.00	6 30.00	0 0.00	6 30.00	0 0.00	20

(Table continues on the following page.)

Table 20. Continued.

Frequency Row Pct	Concave	Expanding	Parallel	Contracting	Convex	None	Total
Lange	0 0.00	14 93.33	0 0.00	0 0.00	0 0.00	0 0.00	15
Marcos	0 0.00	7 100.00	0 0.00	0 0.00	0 0.00	0 0.00	7
Marshall	1 2.50	36 90.00	3 7.50	0 0.00	0 0.00	0 0.00	40
Martindale	0 0.00	24 100.00	0 0.00	0 0.00	0 0.00	0 0.00	24
Montell	0 0.00	16 94.12	1 5.88	0 0.00	0 0.00	0 0.00	17
Morrill	0 0.00	1 14.29	5 71.43	1 14.29	0 0.00	0 0.00	7
Nolan	0 0.00	3 75.00	1 25.00	0 0.00	0 0.00	0 0.00	4
Palmillas	0 0.00	3 37.50	1 12.50	0 0.00	4 50.00	0 0.00	8
Pedernales	7 5.79	13 10.74	64 52.89	20 16.53	17 14.05	0 0.00	121
Perdiz	1 25.00	0 0.00	0 0.00	2 50.00	0 0.00	1 25.00	4
Plainview	1 8.33	0 0.00	0 0.00	0 0.00	0 0.00	11 91.67	12
Scallorn	0 0.00	21 100.00	0 0.00	0 0.00	0 0.00	0 0.00	21
Tortugas	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1
Travis	11 35.48	10 32.26	8 25.81	1 3.23	0 0.00	1 3.23	31
Untyped arrow point	0 .	0 .	0 .	0 .	0 .	0 .	0
Untyped dart point	7 6.73	49 47.12	37 35.58	2 1.92	5 4.81	4 3.85	104
Uvalde	0 0.00	16 100.00	0 0.00	0 0.00	0 0.00	0 0.00	16
Wells	0 0.00	0 0.00	14 37.84	22 59.46	1 2.70	0 0.00	37
Total	38	459	175	58	39	36	806

Hood dart point types in terms of the nominal shape attributes, multidimensional scaling was used (Kruskall and Wish 1978). A matrix was created with the SPSS-X routine *Proximities* using ordinal level data (frequencies of nominal attributes by type) was used (SPSS-X 1988), which computed measures of dissimilarity or distance using the Chi^2 statistic. The output from this matrix is used by the multidimensional scaling program ALSCAL (SPSS-X 1988) to determine Euclidean distances or how the various nominal attributes relate in space. Using a proximities matrix (Table 22), multidimensional scaling measures how similar or different two objects/types are or are perceived to be (Schiffman et al. 1981). The larger the dissimilarity (or smaller the similarity) between two types, in terms of their proximity value, the further apart they should be on the spatial plot. Thus this technique can aid in detecting patterns while objectively and simultaneously describing the relationships which exist between the dart point types

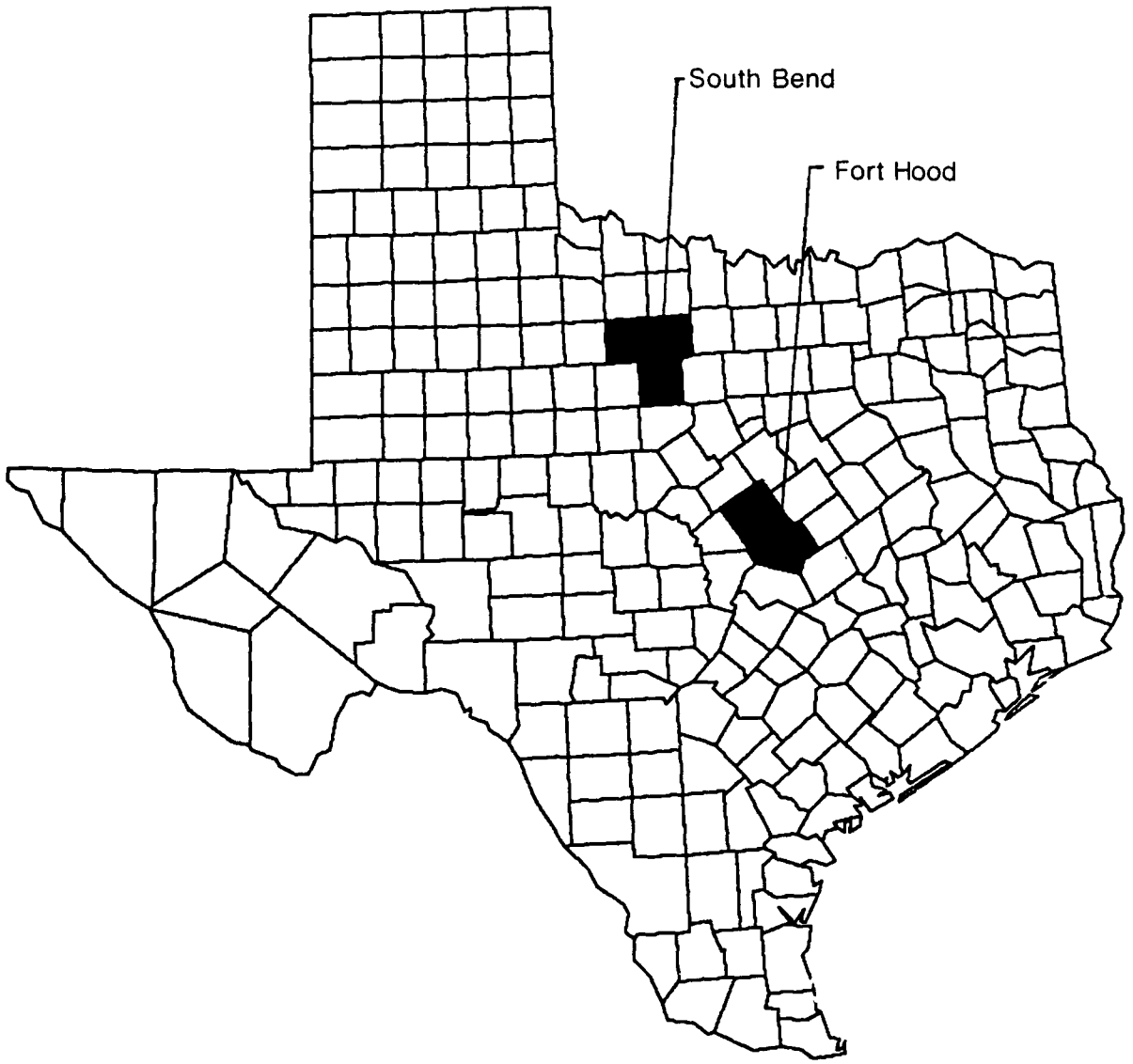


Figure 4. Map Showing Fort Hood and South Bend Study Areas.

Table 21. Summary of Fort Hood Projectile Point Nominal Attributes by Type.

POINT TYPES:	VERTEX CLASS:						HAFT ELEMENT MODIFICATION:					BLADE SHAPE:					BASE SHAPE:					BASE ORIENTATION:			SHOULDER SHAPE:						SHOULDER ORIENTATION:				LATERAL HAFT ELEMENT SHAPE:						LATERAL HAFT ELMT ORIENTATION:					
	1	3	4	5	7	9	X	U	L	D	B	E	S	I	R	A	E	S	I	R	A	N	E	I	X	E	S	I	R	A	X	B	H	T	X	E	S	I	R	A	X	P	E	T	C	V
Alba	0	0	0	0	4	0	0	0	0	4	0	0	4	0	0	0	0	3	1	0	0	4	0	0	0	0	4	0	0	0	0	4	0	0	0	1	3	0	0	0	0	3	0	0	0	1
Angostura	0	12	0	3	0	0	12	0	0	3	0	7	2	1	5	0	1	5	8	1	0	15	0	0	15	0	0	0	0	0	15	0	0	0	12	0	3	0	0	0	12	0	0	3	0	0
Basal tang knife	0	0	0	0	2	0	0	0	0	2	0	2	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	1	0	1	0	2	0	0	0	0	1	1	0	0	0	1	1	0	0	0
Bulverde	0	0	0	0	24	0	0	0	0	24	0	7	15	0	2	0	0	19	5	0	0	24	0	0	0	0	8	16	0	0	0	9	10	5	0	0	22	2	0	0	0	17	0	6	1	0
Castroville	0	0	0	0	31	0	0	0	0	31	0	0	29	2	0	0	16	14	1	0	0	31	0	0	0	0	6	24	1	0	0	29	1	1	0	0	23	7	1	0	0	0	30	0	1	0
Corner tang knife	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0
Darl	0	0	0	3	87	0	0	0	4	86	0	35	49	2	4	0	7	30	51	2	0	90	0	0	2	0	50	38	0	0	2	0	5	83	0	4	47	33	6	0	0	12	69	0	6	3
Dawson	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0
Ellis	0	0	0	0	15	0	0	0	0	15	0	1	13	0	1	0	5	10	0	0	0	15	0	0	0	0	5	10	0	0	0	3	5	7	0	1	9	5	0	0	0	0	14	0	0	1
Ensor	0	0	0	0	87	0	0	0	29	58	0	3	78	6	0	0	11	53	9	14	0	87	0	0	0	1	17	69	0	0	0	46	15	26	0	0	53	28	1	5	0	0	87	0	0	0
Fresno	0	3	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	2	1	0	0	3	0	0	3	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0
Frio	0	0	0	0	12	3	0	0	13	2	0	0	8	7	0	0	0	0	4	11	0	15	0	0	0	0	3	12	0	0	0	5	7	3	0	0	6	5	0	4	0	0	14	0	0	1
Godley	0	0	0	0	15	0	0	0	0	15	0	7	8	0	0	0	14	1	0	0	0	15	0	0	0	0	2	13	0	0	0	0	1	14	0	0	2	13	0	0	0	0	13	0	2	0
Golondrina	0	3	0	0	0	0	3	0	0	0	0	2	0	0	1	0	0	0	0	3	0	3	0	0	3	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0
Gower	0	0	0	4	16	0	0	0	3	17	0	9	11	0	0	0	0	0	9	10	1	20	0	0	4	1	10	5	0	0	4	0	3	13	0	8	9	0	3	0	0	6	8	0	0	6
Lange	0	0	0	0	13	0	0	0	0	13	0	5	8	0	0	0	1	10	1	1	0	13	0	0	0	0	0	13	0	0	0	11	2	0	0	0	10	1	1	1	0	0	13	0	0	0
Marcos	0	0	0	0	7	0	0	0	0	7	0	2	4	1	0	0	1	3	2	1	0	7	0	0	0	0	1	5	1	0	0	7	0	0	0	0	2	5	0	0	0	0	7	0	0	0
Marshall	0	0	0	0	37	0	0	0	0	36	1	11	23	2	1	0	3	25	8	1	0	37	0	0	0	0	13	24	0	0	0	36	1	0	0	2	13	20	2	0	0	3	33	0	1	0
Martindale	0	0	0	0	22	0	0	0	0	22	0	2	19	1	0	0	0	0	0	22	0	22	0	0	0	0	10	12	0	0	0	22	0	0	0	2	12	8	0	0	0	0	22	0	0	0
Montell	0	0	0	0	0	17	0	0	0	17	0	1	15	1	0	0	0	0	0	0	17	0	0	17	0	0	3	13	1	0	0	13	2	2	0	1	5	11	0	0	0	1	16	0	0	0
Morrill	0	0	0	1	6	0	0	0	1	6	0	1	6	0	0	0	1	5	1	0	0	7	0	0	1	0	6	0	0	0	1	0	0	6	0	0	6	1	0	0	0	5	1	1	0	0
Nolan	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0
Palmillas	0	0	0	0	8	0	0	0	0	8	0	2	6	0	0	0	7	1	0	0	0	8	0	0	0	0	3	5	0	0	0	1	2	5	0	4	0	3	1	0	0	1	3	0	0	4
Pedernales	0	0	0	1	111	0	0	1	0	111	0	44	59	3	6	0	0	0	111	1	0	112	0	0	1	2	64	44	1	0	1	16	25	70	0	16	81	7	8	0	0	62	11	17	7	15
Perdiz	0	0	0	1	3	0	0	1	0	3	0	0	3	1	0	0	2	2	0	0	0	4	0	0	0	0	2	2	0	0	0	4	0	0	1	1	2	0	0	0	1	0	0	2	1	0
Plainview	0	11	0	1	0	0	12	0	0	0	0	9	2	1	0	0	0	0	11	1	0	12	0	0	12	0	0	0	0	0	12	0	0	0	11	0	0	1	0	0	11	0	0	0	1	0
Scallorn	0	0	0	0	20	0	0	0	0	20	0	2	17	1	0	0	6	11	2	1	0	20	0	0	0	0	8	12	0	0	0	17	1	2	0	0	7	12	1	0	0	0	20	0	0	0
Tortugas	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Travis	0	1	0	9	21	0	1	0	3	27	0	21	9	0	1	0	9	19	[illegible]	0	0	31	0	0	10	2	10	9	0	0	10	0	0	21	1	0	12	18	0	0	1	8	10	1	11	0
Untyped dart point	0	2	0	1	93	0	2	0	3	91	0	35	54	2	5	0	11	52	25	7	1	95	0	1	3	3	39	51	0	0	3	13	16	64	2	4	57	28	4	1	2	35	46	2	7	4
Uvalde	0	0	0	0	16	0	0	0	0	16	0	1	15	0	0	0	0	0	13	3	0	16	0	0	0	0	1	15	0	0	0	12	2	2	0	0	8	6	2	0	0	0	16	0	0	0
Wells	0	0	0	1	33	0	0	0	0	34	0	9	25	0	0	0	8	23	3	0	0	34	0	0	1	0	28	5	0	0	1	0	2	31	0	3	31	0	0	0	0	11	0	22	0	1

NOTE: HAFT ELEMENT MODIFICATION: X=None; U=Unmodified; L=Lateral; D=Diagonal; B=Basal; BLADE SHAPE: E=Excurvate; S=Straight; I=Incurvate; R=Recurvate; A=Angular; BASE SHAPE: E=Excurvate; S=Straight; I=Incurvate; R=Recurvate; A=Angular; BASE ORIENTATION: N=None; E=Angular External; I=Angular Internal; SHOULDER SHAPE: X=None; E=Excurvate; S=Straight; I=Incurvate; R=Recurvate; A=Angular; SHOULDER ORIENTATION: X=None; B=Barbed; H=Horizontal; T=Tapered; LATERAL HAFT ELEMENT SHAPE: X=None; E=Excurvate; S=Straight; I=Incurvate; R=Recurvate; A=Angular; LATERAL HAFT ELEMENT ORIENTATION: X=None; P=Parallel; E=Expanding; T=Contracting; C=Concave; V=Convex.

Table 22. Proximities Matrix for Selected Fort Hood Dart Points Based on X^2 Statistic.

CHI-SQUARE SIMILARITY COEFFICIENT MATRIX

CASE	CASTROVI	ELLIS	ENSOR	LANGE	MARSHALL	MARTINDA	MORRILL/	NOLAN/TR
ELLIS	6.3600							
ENSOR	7.9625	6.4531						
LANGE	5.7662	5.8176	6.4150					
MARSHALL	8.2512	8.4704	12.1678	5.5349				
MARTINDA	12.1839	10.1197	14.3638	10.5740	13.2629			
MORRILL/	14.1911	10.3323	17.2297	12.1836	15.6832	14.7634		
NOLAN/TR	13.1542	9.0131	17.1152	10.4366	12.9728	15.0923	11.6623	
PALMILLA	9.0816	5.3354	12.4556	7.6656	10.6428	10.4735	10.0254	9.1151
PEDERNAL	18.6630	14.5374	22.7841	15.3147	19.1134	17.1366	14.6329	18.6815
PLAINVIE	17.8884	14.2113	26.0811	13.1542	19.0125	16.8156	18.5821	4.5674
DARL	14.2097	8.2458	16.1166	11.6114	13.3535	14.7089	12.7757	12.2336
GODLEY	9.1727	6.3278	11.3864	8.2099	10.5050	12.3438	12.3550	8.1798

CASE	PALMILLA	PEDERNAL	PLAINVIE	DARL
PEDERNAL	12.6434			
PLAINVIE	11.9919	26.6219		
DARL	10.2732	15.1102	23.8883	
GODLEY	5.6011	16.3063	13.6789	9.4090

in terms of shape variability. This in turn serves as a measure of how well the types are differentiated. Each case represents a type. The proximities matrix for the Fort Hood data is presented in Table 22. Figure 5 plots the results of the scaling in two dimensions (Dimension 1 versus Dimension 3). The relatively high stress value (.110) and RSQ value (.926) indicates that the "fit" is not as good here as for the South Bend points. Like the South Bend data below, estimates of parameters may have been affected by the low number of observations and relatively large number of cases. In general, however, the points are fairly well separated in space although exceptions (*Ellis, Lange,* and *Godley*) reflect the higher stress value. Many of the differences and similarities noted below with regard to South Bend point shapes are also present on the Fort Hood specimens.

Shape Variability within South Bend Dart Point Types

Table 23 presents the occurrence and frequency of each nominal variable and attribute state for the dart point types at South Bend. These include (1) vertex class, (2) haft element modification, (3) blade shape, (4) base shape, (5) base orientation, (6) shoulder shape, (7) shoulder orientation, (8) lateral haft element shape, and (9) lateral haft element orientation. Thirty dart point types were recognized in the South Bend sample; however, only 15 dart point types were well enough represented to allow detailed comparisons and evaluation. These included *Plainview, Martindale, Uvalde, Wells, Morrill, Nolan, Travis, Pedernales, Marshall, Lange, Ellis, Palmillas, Ensor, Godley,* and *Darl*. The arrow point forms *Scallorn, Young, Fresno, Harrell,* and *Perdiz* were all sufficiently distinct in their overall form, and so they are not included in the detailed analysis and comparisons presented below.

Table 24 presents the proximities matrix, and Figure 6 plots the results of the scaling of South Bend point attributes in two dimensions (Dimension 2 [horizontal] versus Dimension 3 [vertical]). The stress value of .081 and the high RSQ value of .955 indicate a relatively good fit between the distances (as computed via *Proximities*) and the disparities, or "fitted" distances, which produced the plot. Due to the sample size of some types and the number of cases used, it is possible that there were insufficient data to accurately determine the parameters. However, it is felt, as noted below, that a reasonable breakdown by shape has been achieved. The result is segregation of the selected dart points in space as computed by the ALSCAL program. The plot tends to support separate type status for most point types, although some forms cluster closer together than others (*Ensor/Frio, Castroville/Ellis, Nolan/Travis, Wells/Morrill,* etc.). It is noteworthy that, in instances where points fall closest in space, they are suspected to be from approximately the same time period. The close position evident for *Plainview* is deceptive, since a three-dimensional plot (discussed below) places it a large distance away from any other point type.

Dart Point Variability between the Fort Hood and South Bend Samples—An Evaluation of the Classification

After examining the variation in dart point forms within the Fort Hood and South Bend localities, the next step is to evaluate the typology in a regional setting. One of the major research goals at Fort Hood is to build a reliable cultural chronology based on projectile point typology. Comparison of the Fort Hood points with those from South Bend serves as a basic test or evaluation of the classification and indirectly as a chronological measure. Such evaluation is possible in this instance since the same classificatory method was used on both samples. The nominal attributes used in the following cluster and multidimensional scaling analyses are independent of the types they define. Creation of the formal account, which accurately models projectile point shape (Futato 1977; 1983), allows definition of within-type shape variability. This can be used to look at between-group variability and the degree to which our disparate types match or do not match in formal shape dimension. Thus, the validity of our types can be evaluated along a single dimension (shape) which is independent of the type assessments made at the outset.

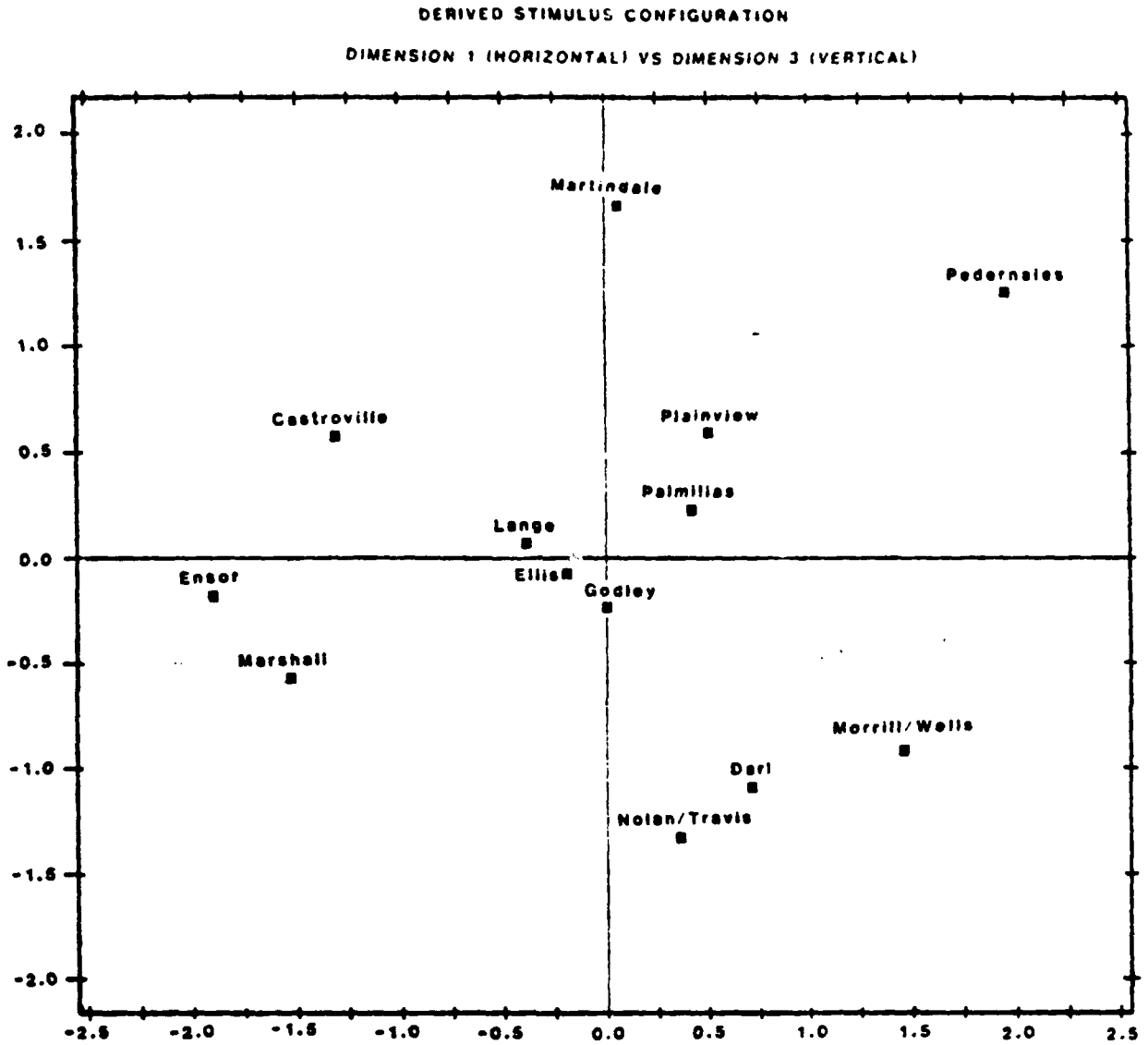


Figure 5. Two-dimensional Plot of the Morphological Relationships between Dart Point Types at Fort Hood.

Table 23. Summary of South Bend Projectile Point Nominal Attributes by Type.

POINT TYPES:	VERTEX CLASS:						HAFT ELEMENT MODIFICATION:					BLADE SHAPE:					BASE SHAPE:					BASE ORIENTATION:			SHOULDER SHAPE:						SHOULDER ORIENTATION:				LATERAL HAFT ELEMENT SHAPE:						LATERAL HAFT ELMT ORIENTATION:					
	1	3	4	5	7	9	X	U	L	D	B	E	S	I	R	A	E	S	I	R	A	N	E	I	X	E	S	I	R	A	X	B	H	T	X	E	S	I	R	A	X	P	E	T	C	V
Angostura	0	3	0	2	0	0	4	1	0	0	0	2	2	0	1	0	0	3	2	0	0	5	0	0	5	0	0	0	0	0	5	0	0	0	3	0	2	0	0	0	3	0	0	2	0	0
Bonham	0	0	0	0	5	0	0	0	0	5	0	0	3	2	0	0	4	1	0	0	0	5	0	0	0	0	1	4	0	0	0	3	1	1	0	1	4	0	0	0	0	4	1	0	0	0
Bulverde	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0
Castroville	0	0	0	0	31	0	0	0	0	31	0	6	24	1	0	0	20	11	0	0	0	31	0	0	0	0	4	27	0	0	0	21	5	5	0	0	22	8	1	0	0	0	31	0	0	0
Cliffton	0	0	1	15	3	0	0	5	0	14	0	1	13	4	1	0	1	4	0	0	14	5	14	0	1	0	15	3	0	0	1	0	8	10	13	0	6	0	0	0	13	0	0	6	0	0
Clovis	0	2	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	2	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0
Cuney	0	0	0	0	2	0	0	0	0	2	0	0	1	1	0	0	0	0	2	0	0	2	0	0	0	0	0	2	0	0	0	2	0	0	0	0	1	1	0	0	0	0	2	0	0	0
Darl	0	0	0	30	99	0	0	14	8	107	0	22	75	21	11	0	34	72	21	2	0	129	0	0	23	2	46	58	0	0	23	3	9	94	0	0	85	44	0	0	0	35	89	1	4	0
Early Stemmed	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0
Ellis	0	0	0	0	32	0	0	0	1	31	0	7	23	2	0	0	21	11	0	0	0	32	0	0	0	0	8	24	0	0	0	15	13	4	0	0	18	14	0	0	0	2	30	0	0	0
Ensor	0	0	0	0	52	0	0	0	13	39	0	8	35	7	2	0	20	29	2	1	0	51	1	0	0	1	9	42	0	0	0	22	9	21	0	0	14	34	0	4	0	0	52	0	0	0
Fresno	0	35	0	0	0	0	35	0	0	0	0	3	30	1	1	0	0	30	5	0	0	35	0	0	35	0	0	0	0	0	35	0	0	0	35	0	0	0	0	0	35	0	0	0	0	0
Frio	0	0	0	0	3	0	0	0	1	2	0	0	3	0	0	0	0	0	0	3	0	3	0	0	0	1	1	1	0	0	0	1	0	2	0	0	0	1	0	2	0	0	3	0	0	0
Gary	0	0	0	0	6	0	0	1	0	5	0	3	3	0	0	0	1	5	0	0	0	6	0	0	1	0	2	3	0	0	1	0	2	3	0	0	6	0	0	0	0	0	0	6	0	0
Godley	0	0	0	0	64	0	0	0	2	62	0	16	36	9	3	0	58	6	0	0	0	64	0	0	0	1	11	52	0	0	0	0	9	55	0	1	2	61	0	0	0	1	61	0	2	0
Golondrina	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Gower	0	0	0	0	3	0	0	0	0	3	0	2	0	1	0	0	0	0	2	1	0	3	0	0	0	0	1	2	0	0	0	0	0	3	0	2	1	0	0	0	0	1	2	0	0	0
Harrell	0	0	0	0	71	13	0	0	84	0	0	11	71	2	0	0	2	25	42	7	8	76	1	7	0	0	25	59	0	0	0	0	10	74	1	0	0	1	0	82	1	0	83	0	0	0
Lange	0	0	0	0	13	0	0	0	0	13	0	5	7	1	0	0	3	8	2	0	0	13	0	0	0	0	1	12	0	0	0	4	7	2	0	0	3	10	0	0	0	0	13	0	0	0
Marcos	0	0	0	0	9	0	0	0	0	9	0	2	7	0	0	0	4	5	0	0	0	9	0	0	0	0	0	9	0	0	0	9	0	0	0	0	2	7	0	0	0	0	9	0	0	0
Marshall	0	0	0	0	26	0	0	0	0	26	0	2	22	2	0	0	2	12	11	1	0	26	0	0	0	2	5	19	0	0	0	24	2	0	0	0	14	11	1	0	0	6	20	0	0	0
Martindale	0	0	0	0	19	0	0	0	0	19	0	6	13	0	0	0	0	0	1	18	0	19	0	0	0	0	3	16	0	0	0	15	3	1	0	0	10	8	0	1	0	0	19	0	0	0
Morrill	0	0	0	3	1	0	0	1	2	1	0	0	4	0	0	0	0	2	2	0	0	4	0	0	3	0	1	0	0	0	3	0	0	1	0	0	2	2	0	0	0	2	0	0	2	0
Nolan	0	0	0	9	6	0	0	4	2	9	0	11	4	0	0	0	2	5	7	1	0	15	0	0	5	1	4	5	0	0	5	0	0	10	0	1	6	8	0	0	0	6	0	0	8	1
Palmillas	0	0	0	0	9	0	0	0	0	9	0	7	2	0	0	0	8	1	0	0	0	9	0	0	0	1	1	7	0	0	0	0	2	7	0	1	0	7	1	0	0	0	8	0	0	1
Pedernales	0	0	0	1	6	0	1	0	0	6	0	2	5	0	0	0	0	2	2	3	0	7	0	0	1	0	4	2	0	0	1	1	2	3	0	2	5	0	0	0	0	4	1	0	0	2
Perdiz	0	0	0	13	19	0	0	4	0	28	0	1	26	5	0	0	13	10	0	0	9	23	9	0	0	0	18	14	0	0	0	25	4	3	13	3	16	0	0	0	13	8	0	9	0	2
Plainview	0	8	0	0	0	0	8	0	0	0	0	3	4	0	1	0	0	0	7	1	0	8	0	0	8	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	8	0	0	0	0	0
Scallorn	0	0	0	0	129	0	0	0	39	90	0	20	96	12	1	0	39	71	11	8	0	129	0	0	0	1	37	90	1	0	0	69	16	44	0	1	40	63	4	21	0	7	122	0	0	0
Scottsbluff	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0
Travis	0	0	0	5	2	0	0	3	1	3	0	6	1	0	0	0	3	4	0	0	0	7	0	0	2	1	1	3	0	0	2	0	0	5	0	1	3	3	0	0	0	3	3	0	1	0
Trinity	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0
Untyped arrow	0	5	0	1	1	0	5	0	1	1	0	1	6	0	0	0	2	3	2	0	0	7	0	0	5	0	0	2	0	0	5	0	0	2	5	0	0	2	0	0	5	0	1	1	0	0
Untyped dart	0	0	0	1	8	0	0	1	0	8	0	4	5	0	0	0	1	5	1	2	0	9	0	0	1	0	2	6	0	0	1	1	2	5	0	0	1	8	0	0	0	1	7	0	1	0
Uvalde	0	0	0	0	10	0	0	0	0	10	0	0	3	7	0	0	0	0	4	6	0	10	0	0	0	0	4	6	0	0	0	5	3	2	0	0	4	6	0	0	0	1	8	0	1	0
Wells	0	0	0	2	5	0	0	2	0	5	0	2	3	2	0	0	3	4	0	0	0	7	0	0	2	0	1	4	0	0	0	7	0	0	0	0	7	3	0	0	0	4	0	3	0	0
Yarbrough	0	0	0	0	6	0	0	0	0	6	0	2	4	0	0	0	2	3	0	1	0	6	0	0	0	0	3	3	0	0	0	0	4	2	0	0	3	3	0	0	0	2	3	0	1	0
Young	6	29	0	0	0	0	35	0	0	0	0	27	6	0	1	1	24	8	1	1	1	34	1	0	35	0	0	0	0	0	35	0	0	0	35	0	0	0	0	0	35	0	0	0	0	0

NOTE: HAFT ELEMENT MODIFICATION: X=None; U=Unmodified; L=Lateral; D=Diagonal; B=Basal; BLADE SHAPE: E=Excurvate; S=Straight; I=Incurvate; R=Recurvate; A=Angular; BASE SHAPE: E=Excurvate; S=Straight; I=Incurvate; R=Recurvate; A=Angular; BASE ORIENTATION: N=None; E=Angular External; I=Angular Internal; SHOULDER SHAPE: X=None; E=Excurvate; S=Straight; I=Incurvate; R=Recurvate; A=Angular; SHOULDER ORIENTATION: X=None; B=Barbed; H=Horizontal; T=Tapered; LATERAL HAFT ELEMENT SHAPE: X=None; E=Excurvate; S=Straight; I=Incurvate; R=Recurvate; A=Angular; LATERAL HAFT ELEMENT ORIENTATION: X=None; P=Parallel; E=Expanding; T=Contracting; C=Concave; V=Convex.

Table 24. Proximities Matrix for Selected South Bend Dart Points Based on X^2 Statistic.

CHI-SQUARE SIMILARITY COEFFICIENT MATRIX

CASE	CASTROVI	ELLIS	ENSOR	FRIO	LANGE	MARSHALL	MARTINDA	MORRILL/
ELLIS	3.5464							
ENSOR	6.7468	6.2815						
FRIO	9.2140	9.0278	7.8932					
LANGE	5.3738	4.3798	4.6415	6.6116				
MARSHALL	6.5282	6.9898	8.4414	9.7155	5.9036			
MARTINDA	9.8865	10.4985	13.3870	8.2487	9.0476	9.8997		
MORRILL/	11.6672	11.1987	13.5057	7.3767	8.9655	11.9217	13.0803	
NOLAN/TR	13.5402	13.1397	14.9195	8.3022	9.7971	13.4610	15.3596	6.0434
PALMILLA	7.1224	7.0752	7.5048	5.8543	5.4817	9.3389	11.5321	8.8541
PEDERNAL	10.0363	9.5395	11.8297	5.3489	7.3741	9.7943	9.0315	5.8957
PLAINVIE	16.6945	16.8991	20.1656	8.6934	11.9440	16.6503	17.7403	10.2474
DARL	12.9983	12.1470	13.2702	14.0577	9.3441	14.0424	17.7618	7.9680
GODLEY	11.5136	10.4133	10.5190	12.3423	8.8525	14.0394	17.5531	16.1586

CASE	NOLAN/TR	PALMILLA	PEDERNAL	PLAINVIE	DARL
PALMILLA	8.1610				
PEDERNAL	7.1712	7.2601			
PLAINVIE	12.5284	11.0553	9.2883		
DARL	11.7693	10.4123	12.1390	25.2734	
GODLEY	16.5167	5.6397	14.4805	22.5027	15.1838

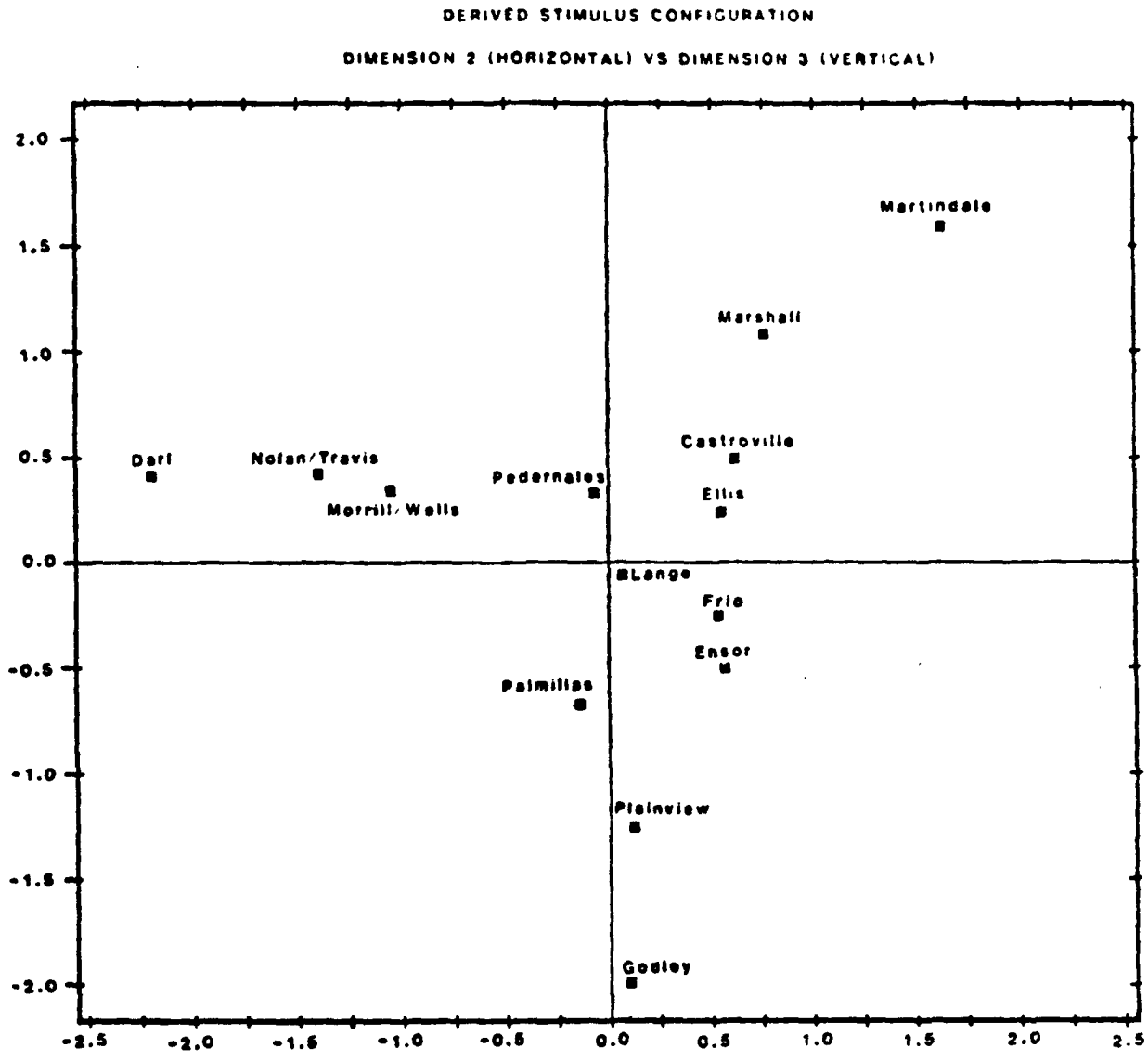


Figure 6. Two-dimensional Plot of the Morphological Relationships between Dart Point Types at South Bend.

Besides shape, size or proportion also seems important in the present analysis. Since differences in parent raw material size may exist in the two localities under study (ledge chert at Fort Hood; gravels and upland nodules at South Bend), it stands to reason that this may have affected manufacturing behavior as the aborigines adapted to a particular raw material.

In order to test for differences in size of finished projectile points between Fort Hood and South Bend, six metric observations, including maximum width, shoulder width, thickness, juncture width, basal width, and haft element length, were used in a discriminant function analysis. Length could not be used because of the low number of observations due to breakage. The SAS procedure *DISCRIM* (SAS Institute, Inc. 1987) was used to compute linear functions for classifying observations into two or more groups based on one or more numeric variables. In this case, the classification criteria were based on the sample populations of projectile points from Fort Hood and South Bend. Table 25 presents the number of observations, percent error, and number and percentage of points correctly classified according to the discriminant functions. The results of the analysis indicate an overall mean correct classification rate of 84% for the South Bend points and 82% for the Fort Hood points (Table 25). This seems to indicate that there are meaningful size differences between the same type from the two localities. The highest error rates occurred in the Fort Hood sample of *Darl, Ellis,* and *Ensor* points, and in the South Bend sample of *Darl* and *Ellis*. All other points had a correct classification of 70% or higher, with most being over 80%. With these data as background, comparisons of shape variability between the same types were made to evaluate the classification and assess the degree of similarity or dissimilarity between the Fort Hood and South Bend point shapes.

Table 25. Results of the Discriminant Function Analysis.

		South Bend			Fort Hood		
Type	N. Obs.†	% Error	N.Correct	% Correct	% Error	N.Correct	% Correct
Castroville	21	0	16	100	0	5	100
Darl	173	30.97	78	69.03	38.33	37	61.67
Ellis	26	33.33	10	66.67	36.36	7	63.64
Ensor	67	24.39	31	75.61	30.77	18	69.23
Godley	71	3.45	56	96.55	0	13	100
Lange	17	0	6	100	0	11	100
Marshall	16	25.0	6	75.00	25.0	6	75.00
Nolan/Travis	36	20.00	16	80.00	18.75	13	81.25
Palmillas	17	11.11	8	88.89	12.50	7	87.50
Pedernales	57	14.29	6	85.71	12.00	44	88.00
Perdiz	21	0	16	100	20.00	4	80.00
Scallorn	108	30.00	63	70.00	27.78	13	72.22
Uvalde/Martindale	18	14.29	6	85.71	9.09	10	90.91

†All variables had to be present in order for a specimen to be included in the analysis.

A sample of 12 dart point types was selected which were present at both Fort Hood and South Bend. The types were selected from each locality based on their suspected temporal distribution and sample size. The types were *Plainview, Martindale/Uvalde, Wells/Morrill, Nolan/Travis, Pedernales, Marshall, Lange, Castroville, Palmillas, Ellis, Ensor,* and *Darl*. Individual types whose overall morphology was very similar and which otherwise would not have been used due to sample size were considered together in the analysis. These appear to represent the dominant dart point forms at both localities and the sample size of 24 cases proved effective given the number of observations per case.

Table 26 presents the proximities matrix, which is based on the Phi^2 statistic. This statistic was used to compensate for discrepancies in sample size between the two localities. The proximities matrix was used as input into the SPSS-X ALSCAL program. Figure 7 plots the results of the multi-dimensional scaling in two-dimensional space, while Figure 8 plots them in three-dimensional

Table 26. Proximities Matrix for Selected Fort Hood and South Bend Dart Point Types Based on Phi² Statistic.

PHI-SQUARE SIMILARITY COEFFICIENT MATRIX

CASE	CASTROVI	DARL	ELLIS	ENSOR	LANGE	MARSHALL	MARTINDA	MORRILL/
DARL	.4306							
ELLIS	.3126	.2682						
ENSOR	.2443	.4038	.2130					
LANGE	.2898	.3814	.3665	.2138				
MARSHALL	.2830	.3704	.3429	.2953	.2406			
MARTINDA	.3500	.4367	.4204	.3014	.3685	.3220		
MORRILL/	.5579	.3722	.4607	.5079	.5532	.5472	.6131	
NOLAN/TR	.5524	.3692	.4382	.5230	.5186	.4984	.6127	.4553
PALMILLA	.4847	.3459	.3708	.4260	.5576	.4804	.5207	.4779
PEDERNAL	.5202	.3544	.4300	.5384	.4566	.4980	.4816	.3945
PLAINVIE	.9093	.7884	.9117	.8738	.8769	.8466	.8583	.8517
CASTROVI	.1791	.4007	.2449	.2440	.2510	.3088	.3634	.5414
DARL	.3756	.2775	.2270	.3754	.3475	.3794	.4578	.3503
ELLIS	.2498	.3856	.2309	.2655	.3015	.3142	.3917	.5319
ENSOR	.2991	.3876	.2179	.2035	.2744	.3145	.4106	.5092
LANGE	.3588	.3183	.2904	.2315	.3323	.2908	.4109	.5699
MARSHALL	.2742	.3743	.3593	.2608	.2721	.1941	.3018	.5513
MARTINDA	.3943	.4467	.4198	.3028	.3722	.3509	.2073	.6244
MORRILL/	.6096	.4400	.5656	.5558	.6424	.5910	.6657	.4167
NOLAN/TR	.6536	.4362	.5511	.6034	.6087	.5841	.6670	.5303
PALMILLA	.4982	.2987	.4041	.3895	.5353	.4675	.5247	.5521
PEDERNAL	.5792	.3272	.4829	.4662	.5566	.4943	.4946	.3726
PLAINVIE	.9012	.7922	.8928	.8571	.8696	.8435	.8431	.8344

CASE	NOLAN/TR	PALMILLA	PEDERNAL	PLAINVIE	CASTROVI	DARL	ELLIS	ENSOR
PALMILLA	.4804							
PEDERNAL	.5189	.3847						
PLAINVIE	.7320	.8938	.7969					
CASTROVI	.5200	.4078	.4982	.8950				
DARL	.2741	.3841	.4541	.7264	.3425			
ELLIS	.4921	.3927	.4917	.8916	.1489	.3191		
ENSOR	.4758	.4023	.5497	.8795	.2469	.3288	.2285	
LANGE	.4522	.4557	.4628	.8653	.2700	.2614	.2176	.1919
MARSHALL	.5201	.5113	.4414	.8598	.3044	.3545	.3140	.3287
MARTINDA	.5748	.5255	.4848	.8548	.3737	.4271	.3619	.3701
MORRILL/	.3579	.6014	.5126	.7764	.6001	.2245	.5693	.5672

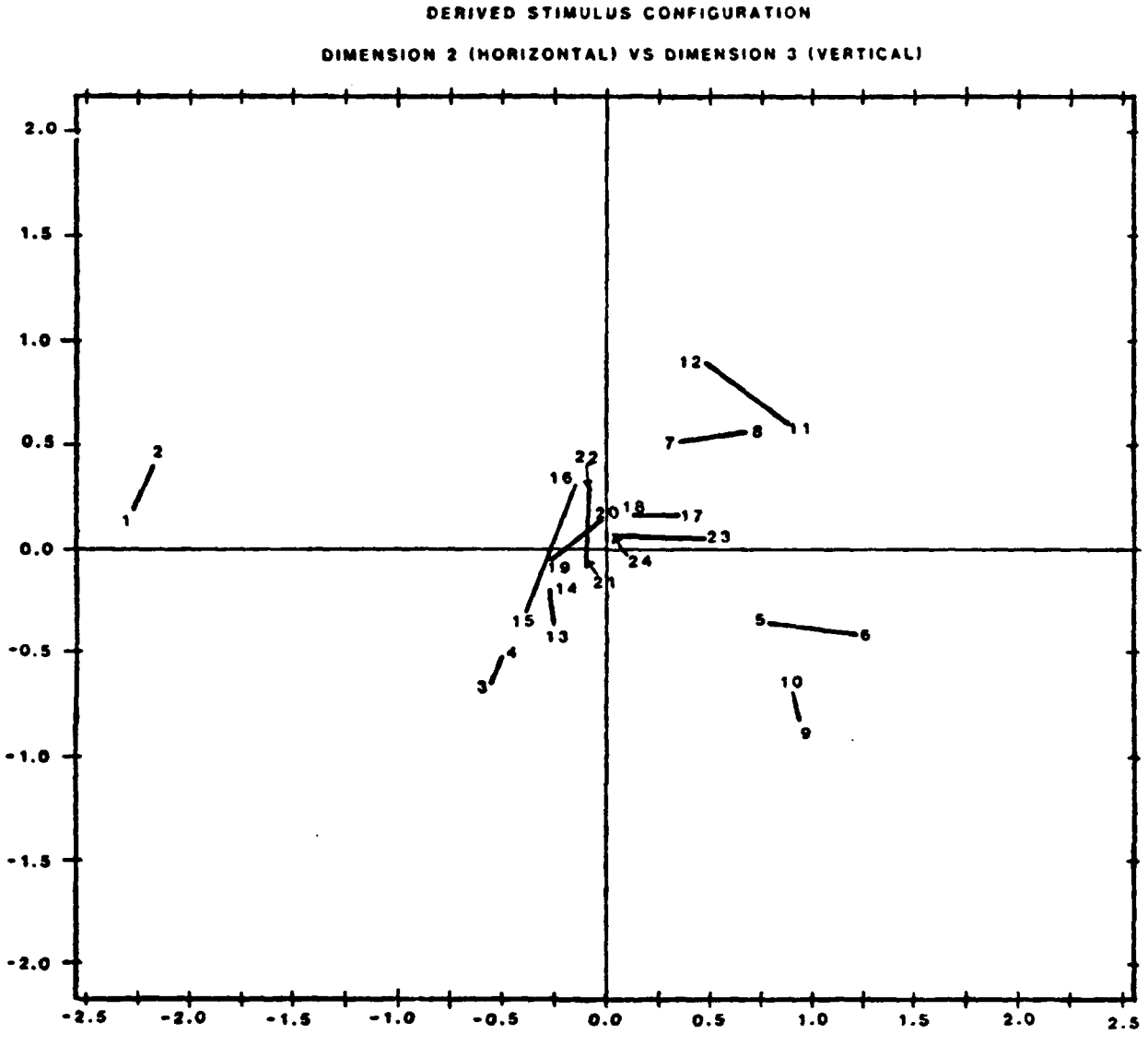
(Table continues on the following page.)

Table 26. Continued.

PHI SQUARE SIMILARITY COEFFICIENT MATRIX (CONT.)

CASE	NOLAN/TR	PALMILLA	PEDERNAL	PLAINVIE	CASTROVI	DARL	ELLIS	ENSOR
NOLAN/TR	2753	.5187	5346	.7416	6200	.3193	5960	5781
PALMILLA	.4051	.3303	.4505	.8737	.3754	.2955	.3683	3203
PEDERNAL	.4519	.4843	.3262	.8175	.5427	.3470	5092	5134
PLAINVIE	.7306	8882	.8042	.2009	.8911	.7198	8907	8676

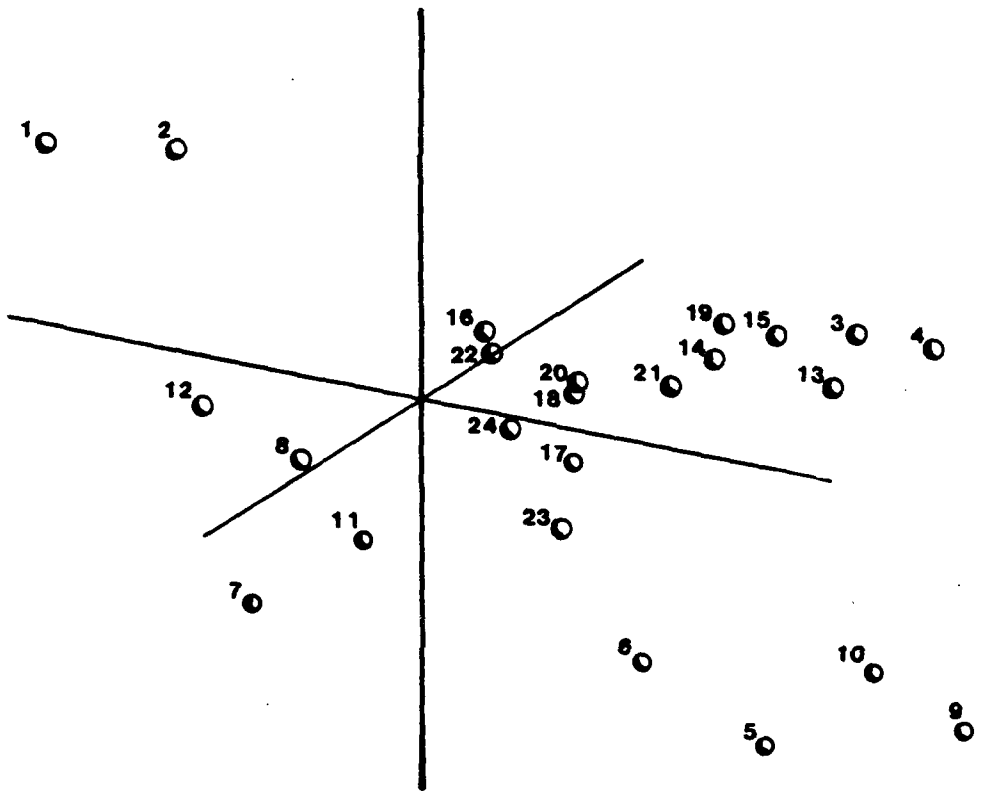
CASE	LANGE	MARSHALL	MARTINDA	MORRILL/	NOLAN/TR	PALMILLA	PEDERNAL
MARSHALL	.3231						
MARTINDA	3601	.3429					
MORRILL/	.6100	.5824	6372				
NOLAN/TR	.5520	.5911	.6376	.3507			
PALMILLA	.3896	5172	.5020	.6599	.4886		
PEDERNAL	5496	.4940	4859	.4632	.4439	6050	
PLAINVIE	.8688	.8478	.8533	.7836	.7625	.8938	.7994



KEY

1 = Plainview(SB)	9 = Pedernales(SB)	17 = Ellis(FH)
2 = Plainview(FH)	10 = Pedernales(FH)	18 = Ellis(SB)
3 = Martindale(FH)	11 = Palmillas(FH)	19 = Castroville(FH)
4 = Martindale(SB)	12 = Palmillas(SB)	20 = Castroville(SB)
5 = Wells/Morrill(SB)	13 = Marshall(SB)	21 = Ensor(FH)
6 = Wells/Morrill(FH)	14 = Marshall(FH)	22 = Ensor(SB)
7 = Nolan/Travis(FH)	15 = Lange(FH)	23 = Darl(FH)
8 = Nolan/Travis(SB)	16 = Lange(SB)	24 = Darl(SB)

Figure 7. Two-dimensional Plot of the Morphological Relationships between Projectile Point Types at Fort Hood and South Bend.



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7 = Nolan/Travis(FH)	15 = Lange(FH)	23 = Darl(FH)
8 = Nolan/Travis(SB)	16 = Lange(SB)	24 = Darl(SB)

Figure 8. Three-dimensional Plot of the Morphological Relationships between Projectile Points at Fort Hood and South Bend.

space. The relatively low stress value of .074 and the high goodness of fit value of .987 indicate a correlation between estimated distances and derived disparities ("fitted" distances) of the ALSCAL program. Note that the same types are connected by straight lines on the two-dimensional plot. In the two-dimensional plot they overlap, while in the three-dimensional plot they do not. These data seem to indicate a high degree of similarity between the same type from the two localities in terms of formal shape attributes. Looking at the plots, four major dimensions of form are readily apparent. The first consists of the *Plainview* outlier which differs from all others by virtue of its lanceolate, simple form. A second major dichotomy is evident between the stemmed, essentially unnotched forms (*Wells/Morrill,* and *Pedernales*) which differ from the corner-notched forms (*Ensor, Lange, Castroville, Marshall,* and *Martindale*). These corner-notched forms constitute a third major group with expanding haft elements and form a distinctive Late Archaic group except for the *Martindale/Uvalde* forms. It may be seen that the *Martindale/Uvalde* and *Darl* forms are set slightly apart from the other corner-notched forms. A fourth group consisting of the *Palmillas/Nolan/Travis* types is separated, and appears intermediate between the stemmed unnotched dimension and the corner-notched, expanding haft dimension.

The dart point types from both Fort Hood and South Bend seem very closely related and their overall formal shapes similar. The close morphological relationship among the Late Archaic corner-notched forms (*Ensor, Lange, Ellis, Marshall,* and *Castroville*) has resulted in some instances with a dart point type from South Bend (*Ellis*) being as close or closer to another type (*Castroville*) from South Bend than to the same type from Fort Hood (Figure 8). In other cases, two types (*Lange* and *Ensor*) from South Bend are plotted as close or closer together than the same type from both localities. This is largely the result of the overall similarity in absolute form for the Late Archaic types, and partially the result of the nature of the formal account which at this time does not include measures of proportion or technology. However, it is easily seen that based on shape alone the formal account has allowed the systematic reduction of multi-variate edge shapes and orientation into four basic underlying dimensions which appear to have some degree of cultural and chronological meaning. Ultimately the identity and adequacy of temporal types will depend upon testing against stratigraphic data from these two localities.

A STATISTICAL COMPARISON OF POINT TYPE FREQUENCY BETWEEN FORT HOOD AND SOUTH BEND

As stated in the research design, a statistical comparison between point types from Fort Hood and South Bend by time period is in order. If one examines Table 27, it can be seen that for the Paleoindian period the sample sizes are different, with twice as many Paleoindian points recovered from Fort Hood than South Bend. This difference in sample size is probably due primarily to the larger areas of upland terrain surveyed at Fort Hood, whereas much of the South Bend survey concentrated in lowland areas. Two types predominate in both areas, *Plainview* and *Angostura*. No significant difference in type proportion was noted in this comparison. This is perhaps reflective of a generalized, highly mobile hunting and gathering adaptation thought to have persisted across a wide portion of central and northern Texas during this time period (Weir 1976; Prewitt 1981; Black 1989).

Likewise, for the Early Archaic period in these two areas, an examination of the data (Table 27) indicates that the sample sizes are different, with over twice the number of Early Archaic points found at Fort Hood than South Bend. Again, this probably represents the differences in survey emphases of the two projects. It can be seen that *Gower, Martindale,* and *Uvalde* are the dominant Early Archaic forms. The main differences among these types for the two areas is the much lower number of *Gower* points identified at South Bend. Overall, though statistically significant at the .05 level, there does not seem to be a *substantial* difference in Early Archaic point type proportions between the two areas except for the *Gower* point.

Table 27. Comparison of Major Point Type Frequences by Period at Fort Hood and South Bend.

PALEOINDIAN

REGION	TYPE		
Frequency / Expected / Percent / Row Pct	ANGOSTURA	PLAINVIEW	Total
FORT HOOD	17	17	34
	15.265	18.735	
	34.69	34.69	69.39
	50.00	50.00	
SOUTH BEND	5	10	15
	6.7347	8.2653	
	10.20	20.41	30.61
	33.33	66.67	
Total	22	27	49
	44.90	55.10	100.00

Statistic	DF	Value	Prob
Chi-Square	1	1.169	0.280
Likelihood Ratio Chi-Square	1	1.188	0.276
Continuity Adj. Chi-Square	1	0.592	0.442
Mantel-Haenszel Chi-Square	1	1.145	0.285
Fisher's Exact Test (Left)			0.919
(Right)			0.222
(2-Tail)			0.358
Phi Coefficient		0.154	
Contingency Coefficient		0.153	
Cramer's V		0.154	

Sample Size = 49

EARLY ARCHAIC

REGION	TYPE			
Frequency / Expected / Percent / Row Pct	GOWER	MARTINDALE	UVALDE	Total
FORT HOOD	22	30	25	77
	17.035	36.115	23.85	
	19.47	26.55	22.12	68.14
	28.57	38.96	32.47	
SOUTH BEND	3	23	10	36
	7.9646	16.885	11.15	
	2.65	20.35	8.85	31.86
	8.33	63.89	27.78	
Total	25	53	35	113
	22.12	46.90	30.97	100.00

Statistic	DF	Value	Prob
Chi-Square	2	7.966	0.019
Likelihood Ratio Chi-Square	2	8.659	0.013
Mantel-Haenszel Chi-Square	1	1.124	0.289
Phi Coefficient		0.266	
Contingency Coefficient		0.257	
Cramer's V		0.266	

Sample Size = 113

(Table continues on the following page.)

Table 27. Continued.

EARLY-MIDDLE ARCHAIC

REGION	TYPE		
Frequency / Expected / Percent / Row Pct	MORRILL	WELLS	Total
FORT HOOD	12	44	56
	13.373	42.627	
	17.91	65.67	83.58
	21.43	78.57	
SOUTH BEND	4	7	11
	2.6269	8.3731	
	5.97	10.45	16.42
	36.36	63.64	
Total	16	51	67
	23.88	76.12	100.00

Statistic	DF	Value	Prob
Chi-Square	1	1.128	0.288
Likelihood Ratio Chi-Square	1	1.046	0.306
Continuity Adj. Chi-Square	1	0.456	0.499
Mantel-Haenszel Chi-Square	1	1.111	0.292
Fisher's Exact Test (Left)			0.242
(Right)			0.922
(2-Tail)			0.438
Phi Coefficient		-0.130	
Contingency Coefficient		0.129	
Cramer's V		-0.130	

Sample Size = 67

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

MIDDLE ARCHAIC

REGION	TYPE						
Frequency / Expected / Percent / Row Pct	BULVERDE	LANGE	MARSHALL	NOLAN	PEDERNALES	TRAVIS	Total
FORT HOOD	36	16	51	4	155	33	295
	30.628	23.374	62.063	15.314	131.38	32.24	
	9.84	4.37	13.93	1.09	42.35	9.02	80.60
	12.20	5.42	17.29	1.36	52.54	11.19	
SOUTH BEND	2	13	26	15	8	7	71
	7.3716	5.6257	14.937	3.6858	31.62	7.7596	
	0.55	3.55	7.10	4.10	2.19	1.91	19.40
	2.82	18.31	36.62	21.13	11.27	9.86	
Total	38	29	77	19	163	40	366
	10.38	7.92	21.04	5.19	44.54	10.93	100.00

Statistic	DF	Value	Prob
Chi-Square	5	92.088	0.000
Likelihood Ratio Chi-Square	5	85.586	0.000
Mantel-Haenszel Chi-Square	1	9.022	0.003
Phi Coefficient		0.502	
Contingency Coefficient		0.448	
Cramer's V		0.502	

Sample Size = 366

(Table continues on the following page.)

Table 27. Continued.

LATE ARCHAIC

REGION TYPE

Frequency / Expected / Percent / Row Pct	CASTROVILLE	ELLIS	MARCOS	PALMILLAS	Total
FORT HOOD	58	28	7	14	107
	51.031	32.923	8.7795	14.267	
	29.74	14.36	3.59	7.18	54.87
	54.21	26.17	6.54	13.08	
SOUTH BEND	35	32	9	12	88
	41.969	27.077	7.2205	11.733	
	17.95	16.41	4.62	6.15	45.13
	39.77	36.36	10.23	13.64	
Total	93	60	16	26	195
	47.69	30.77	8.21	13.33	100.00

Statistic	DF	Value	Prob
Chi-Square	3	4.551	0.208
Likelihood Ratio Chi-Square	3	4.565	0.207
Mantel-Haenszel Chi-Square	1	1.650	0.199
Phi Coefficient		0.153	
Contingency Coefficient		0.151	
Cramer's V		0.153	

Sample Size = 195

TERMINAL-TRANSITIONAL ARCHAIC

REGION TYPE

Frequency / Expected / Percent / Row Pct	DARL	ENSOR	FRIO	GODLEY	Total
FORT HOOD	113	128	20	16	277
	128.86	95.377	11.668	41.093	
	20.70	23.44	3.66	2.93	50.73
	40.79	46.21	7.22	5.78	
SOUTH BEND	141	60	3	65	269
	125.14	92.623	11.332	39.907	
	25.82	10.99	0.55	11.90	49.27
	52.42	22.30	1.12	24.16	
Total	254	188	23	81	546
	46.52	34.43	4.21	14.84	100.00

Statistic	DF	Value	Prob
Chi-Square	3	69.787	0.000
Likelihood Ratio Chi-Square	3	73.993	0.000
Mantel-Haenszel Chi-Square	1	4.556	0.033
Phi Coefficient		0.358	
Contingency Coefficient		0.337	
Cramer's V		0.358	

Sample Size = 546

(Table continues on the following page.)

Table 27. Continued.

LATE PREHISTORIC

REGION	TYPE		
Frequency / Expected / Percent / Row Pct	PERDIZ	SCALLORN	Total
FORT HOOD	7	35	42
	8.3611	33.639	
	3.24	16.20	19.44
	16.67	83.33	
SOUTH BEND	36	138	174
	34.639	139.36	
	16.67	63.89	80.56
	20.69	79.31	
Total	43	173	216
	19.91	80.09	100.00

Statistic	DF	Value	Prob
Chi-Square	1	0.343	0.558
Likelihood Ratio Chi-Square	1	0.355	0.551
Continuity Adj. Chi-Square	1	0.137	0.711
Mantel-Haenszel Chi-Square	1	0.342	0.559
Fisher's Exact Test (Left)			0.364
(Right)			0.785
(2-Tail)			0.670
Phi Coefficient		-0.040	
Contingency Coefficient		0.040	
Cramer's V		-0.040	
Sample Size = 216			

For the Early-Middle Archaic period, the main two types are *Wells* and *Morrill*. These types are fairly evenly distributed between the two areas (Table 27), although the Fort Hood sample size vastly outnumbers that of South Bend, probably reflective of the difference in survey areas as mentioned above, or perhaps also of a decrease in utilization of the South Bend area by peoples making these point types.

Up until this point, with minor exceptions, the point type frequencies have remained fairly homogeneous within each period and between each area. However, beginning with the Middle Archaic period, we see not only a statistically significant difference in type proportions between the regions, but also a proliferation of types. A major difference which is readily apparent is the high frequency of *Pedernales* and *Bulverde* points at Fort Hood when compared to South Bend (Table 27). In addition, almost twice as many *Marshall* points were recovered as Fort Hood and many more *Travis* points. On the other hand, the frequency of *Lange* points is about even and *Nolan* points are much more common at South Bend. This may signal a decrease in population at South Bend during the Round Rock period and/or be indicative of a different Middle Archaic expression there. The fact that most landforms examined and preserved at South Bend which contain intact sites are geologically fairly recent in age (4,000 years or younger) (Mandel 1988) may have caused a bias in the data base. Early-Middle Archaic sites at South Bend are probably buried in alluvial fans. However, the occurrence of burned rock middens at South Bend are much less frequent than at Fort Hood, perhaps indicating that Middle Archaic habitation in the area was somewhat different than there.

When we examine the Late Archaic data (Table 27), we see an evening of sample sizes, no doubt in part reflective of the extensive number of Late Archaic sites identified at South Bend. However, even though the sample sizes are fairly equitable, no statistical differences are noted between type proportions from the

two areas. *Castroville, Ellis, Marcos,* and *Palmillas* are all represented in about the same proportion. This suggests that the nature of Archaic settlement and demography may have been similar in both areas during this time period.

Moving on to the Terminal-Transitional Archaic period (Table 27), we see that the major types recognized include *Darl, Ensor, Frio,* and *Godley*. Again, the sample sizes are about equal, probably due to the high number of sites dating to this time interval at South Bend. Statistically different type proportions are present during these time periods, as *Darl* and *Godley* points (Transitional Archaic) at South Bend outnumber these same types at Fort Hood. Likewise *Ensor* and *Frio* points (Terminal Archaic) at Fort Hood outnumber these types at South Bend. This suggests that differences in intensity of occupation may have occurred between these two areas during these periods.

The final comparison is for the Late Prehistoric or Neo-American stage (Table 27). No statistically significant differences were noted between *Perdiz* and *Scallorn* points in the two areas, even though arrow points were much more numerous at South Bend. Since the Plains types *Washita, Fresno,* and *Harrell* are rare to nonexistent at Fort Hood, no comparison of these was necessary. It appears that the Washita River and Custer phase people who evidently frequented South Bend never expanded into the Fort Hood area on a regular basis.

To summarize, little variation in cultural occupation is seen between the two areas during the Paleoindian through Early Archaic or early Middle Archaic periods. However, beginning with the Middle Archaic proper, significant differences in individual types are noted, especially *Pedernales, Bulverde,* and *Nolan*. The Late Archaic period type frequencies are about the same, while significant differences in Terminal/Transitional type proportions are apparent (i.e., *Darl, Godly, Ensor,* and *Frio*). For the Late Prehistoric Neo-American stage no significant differences are noted (*Perdiz* and *Scallorn* points); however, it is clear that the Plains-related side-notched *Washita* and *Harrell* points were never common in the Fort Hood area, reflecting a cultural distinction between the two areas for a portion of the Late Prehistoric.

Although the results of the statistical comparison indicate only trends in the data, it is clear that prehistoric cultural adaptations were not static in these two areas. Therefore, the taxonomic units devised to classify them must be flexible enough to allow for these shifts and changes in adaptation which undoubtedly occurred many times over the years. Continued effort at integration of the projectile point classification within the taxominc model should be made as new data become available. Hopefully, this will eventually allow refinement and clarification of the cultural chronologies for these and other areas of Texas.

RECOMMENDATIONS AND CONCLUSIONS

SITE RECOMMENDATIONS

Sites recorded during the Delivery Order No. 1 and Delivery Order No. 6 surveys were evaluated for significance based on the survey level data provided by the field crew. National Register of Historic Places eligibility criterion (d)—(sites) that have yielded, or may be likely to yield, information important in prehistory of history (36CFR60.6) was used as a basis for evaluating significance.

The development of specific cultural contexts or problem domains for the Fort Hood locality is underway. Once fully developed, they may be used to generate specific, testable research questions and serve as the basis for determining site significance within criterion (d) above. Until then, recommendations are based on an implicit set of research questions which involve such traditional archaeological concerns as chronology, subsistence, environmental change, site type and function, and geographic location.

All sites for both surveys were classified by environmental zone, site type, and temporal period. Tables 28 and 29 give the frequency and percent of all sites recorded during the Delivery Order No. 1 survey by environmental zone, site type, and components for prehistoric and historic sites, respectively. Additionally, recommendations regarding each site's significance are given in Table 30. They are divided into three groups: (1) those eligible for inclusion in the National Register based on present data; (2) those considered potentially eligible based on present knowledge, but which require additional work; and (3) those which do not appear to be eligible based on current information.

Looking at Tables 28 and 29, it is seen that half of all sites are recommended for additional work or appear to have research potential. Of these, however, slightly over 50% of the prehistoric sites are deemed either eligible or potentially eligible, while only a third of the historic sites are so judged. For those prehistoric sites which require further evaluation, testing, either by formal excavation units and/or shovel probes, will be necessary. For the historic sites, a combination of archival/oral history with possible field testing may be necessary in some cases.

Turning to Delivery Order No. 6 sites, Tables 31 and 32 give the frequency and percent of all sites recorded during that survey by environmental zone, site type, and components for prehistoric and historic sites. Recommendations regarding each site's significance are given in Table 33. They are divided into the same three groups as were the Delivery Order No. 1 sites: (1) eligible, (2) potentially eligible, and (3) not eligible.

When we examine Table 33, it is clear that roughly half of the sites are considered either eligible or potentially eligible while the other half are not. Exactly 50% of the historic sites are deemed potentially eligible while just under 50% of the prehistoric sites are so considered. These will likely require additional field work/archival/oral history research to evaluate their research potential.

SUMMARY AND CONCLUSIONS

In this report, an update of the Fort Hood projectile point data base has been provided which includes all points found beginning with the Delivery Order No. 1 survey (Fiscal Year 1983) up through the Delivery Order No. 1 survey (Fiscal Year 1987). Points typed from surveys prior to that time are not included in the inventory. Summary statistics of metric variables as well as nominal attributes are provided by type.

Table 28. Distribution of Prehistoric Sites by Environmental Zone, Site Type, and Temporal Period for Delivery Order No. 1 Survey.

Environmental Zone	Total Sites	Percent	Sites in Groups 1&2	Percent
Intermediate Upland	13	86.7	7	87.5
Upland	2	13.3	1	12.5
Total	15	100.0	8	100.0

Site Type	Total Sites	Percent	Sites in Groups 1&2	Percent
Burned Rock Scatter	10	66.6	4	50.0
Lithic Quarry	1	6.7	0	0.0
Burned Rock Mound(s)	4	26.7	4	50.0
Total	15	100.0	8	100.0

Chronological Placement	Total Comp.	Percent	Sites in Groups 1&2	Percent
Middle Archaic	1		1	12.5
Late Archaic	1		1	12.5
Transitional Archaic	2		0	0.0
Unknown	6		6	75.0
Total	10	100.0	8	100.0

Table 29. Distribution of Historic Sites by Environmental Zone, Site Type, and Temporal Period for Delivery Order No. 1 Survey.

Environmental Zone	Total Sites	Percent	Sites in Groups 1&2	Percent
Intermediate Upland	20	100.0	5	100.0

Site Type	Total Sites	Percent	Sites in Groups 1&2	Percent
Dump	10	50.0	1	20.0
Farm/Ranch	2	10.0	1	20.0
Domestic Dwelling	5	25.0	1	20.0
Cemetery	1	5.0	1	20.0
Well	1	5.0	0	0.0
Cistern	1	5.0	1	20.0
Total	20	100.0	5	100.0

Chronological Placement	Total Comp.	Percent	Sites in Groups 1&2	Percent
1850-1879	1	3.2	1	20.0
1880-1929	8	25.0	1	20.0
1930-1953	15	46.9	1	20.0
1954-present	1	3.2	0	0.0
Unknown	7	21.9	2	40.0
Total	20	100.0	5	100.0

Table 30. Summary of Recommendations for Delivery Order 1 Sites.

Eligible—Prehistoric sites			
41BL877			
Potentially Eligible—Prehistoric Sites			
41BL170	41CV1441		41CV1445
41CV105	41CV1443		41CV1446
41CV413			
Not Eligible—Prehistoric Sites			
41BL411	41CV734		41CV1442
41BL412	41CV1369		41CV1444
41CV588			
Eligible—Historic Sites			
41CV1447			
Potentially Eligible—Historic Sites			
41BL410		41CV1456	
41CV412		41CV1457	
Not Eligible—Historic Sites			
41BL939	41BL943	41CV1449	41CV1453
41BL940	41CV731	41CV1450	41CV1454
41BL941	41CV1370	41CV1451	41CV1455
41BL942	41CV1448	41CV1452	

Building on previous work, Ensor has provided a study of projectile point morphology which seeks to evaluate the intuitive classification of points based on formal descriptive methods. In doing so, the Fort Hood data base was used in conjunction with multidimensional scaling to evaluate the underlying dimensions of variability inherent within the Fort Hood point sample. The same task was undertaken for a sample of points from the South Bend locality, approximately 100 km to the northwest.

These two data bases were then compared in terms of point size and morphological attributes using discriminant function analysis and multidimensional scaling. It is concluded, based on size alone, that the same types from Fort Hood and South Bend are significantly different. On the whole, South Bend points are smaller than their Fort Hood counterparts. However, in terms of overall shape variability, the disparate types matched fairly well suggesting a similar cultural succession in the two localities over time.

However, this cultural continuity does not mean that no differences have existed between the two areas throughout prehistory. Rather, it was suggested, based on a statistical comparison of point type frequencies by major time period, that important differences may obtain. For example, the Paleoindian and Early Archaic point type proportions were about the same for the two areas. However, beginning in the Middle Archaic period significant differences were noted in Middle Archaic type proportions. Following this period, the Late Archaic types appear to again occur in the same fashion as in the Paleoindian and Early Archaic points. The Terminal-Transitional Archaic periods again evidence disproportional

Table 31. Distribution of Prehistoric Sites by Environmental Zone, Site Type, and Temporal Period for Delivery Order No. 6 Survey.

Environmental Zone	Total Sites	Percent	Sites in Groups 1&2	Percent
Lowland	1	10.0	0	0.0
Intermediate Upland	8	80.0	2	66.7
Upland	1	10.0	1	33.3
Total	10	100.0	3	100.0

Site Type	Total Sites	Percent	Sites in Groups 1&2	Percent
Lithic Scatter	8	80.0	2	66.7
Lithic Quarry	1	10.0	1	33.3
Burned Rock Scatter	1	10.0	0	0.0
Total	10	100.0	3	100.0

Chronological Placement	Total Comp.	Percent	Sites in Groups 1&2	Percent
Middle Archaic	1	10.0	0	0.0
Terminal to Transitional Archaic	1	10.0	0	0.0
General Archaic	3	30.0	2	66.7
Unknown	5	50.0	1	33.3
Total	10	100.0	3	100.0

Table 32. Distribution of Historic Sites by Environmental Zone, Site Type, and Temporal Period for Delivery Order No. 6 Survey.

Environmental Zone	Total Sites	Percent	Sites in Groups 1&2	Percent
Lowland	5	41.7	1	33.3
Intermediate Upland	7	58.3	2	66.7
Total	12	100.0	3	100.0

Site Type	Total Sites	Percent	Sites in Groups 1&2	Percent
Domestic Dwelling	4	33.3	1	25.0
Farm/Ranch	5	41.7	1	25.0
Dump	2	16.7	2	50.0
Other Features	1	8.3	0	0.0
Total	12	100.0	4	100.0

Chronological Placement	Total Comp.	Percent	Sites in Groups 1&2	Percent
1850-1879	0	0.0	0	0.0
1880-1929	7	50.0	3	60.0
1930-1953	2	14.3	1	20.0
1954-present	4	28.6	1	20.0
Total	14	100.1	5	100.0

Table 33. Summary of Recommendations for Delivery Order No. 6 Sites.

Potentially Eligible—Prehistoric Sites		
41BL796	41BL866	41BL944
Not Eligible—Prehistoric Sites		
41BL177	41BL947	41BL949
41BL945	41BL948	41BL950
41BL946		
Potentially Eligible—Historic Sites		
41BL951		41BL959
41BL953		41BL960
Not Eligible—Historic Sites		
41BL881	41BL954	41BL957
41BL883	41BL955	41BL958
41BL952	41BL956	

type frequencies, suggesting differences in cultural adaptation and possibly population densities. With the onset of the Neo-American or Late Prehistoric period, the type proportions appear about the same except for the Plains types which do not occur in meaningful numbers at Fort Hood.

The results of the statistical analysis of types by chronological period between these two areas have indicated some interesting differences and similarities. By showing that the two areas contain basically the same types, albeit with possible technological and probable size distinctions, an argument can be put forth that the two localities belong to the same cultural region of Central Texas. However, as the shifts in point type proportions by period and between areas suggest, the prehistoric populations were by no means static. Rather, it appears that a dynamic relationship existed which was probably the result of numerous factors, including environmental change and social and political change, as well as basic shifts in production technology and subsistence requirements which resulted in changing demographies. For the present, this study has attempted to provide an objective means of comparing and contrasting two different geographic localities on the basis of projectile points.

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APPENDIX I

PREHISTORIC SITE DESCRIPTIONS AND ASSESSMENTS

by

H. Blaine Ensor and Robyn L. Pearson

PREHISTORIC SITES FROM D.O. 1

SITE: 41BL170

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Ridge/Plateau

ELEVATION: 950 feet

NEAREST WATER (DISTANCE): 150 m

AREA: 9,500 m²

VEGETATION: Wooded area (0-25%)

SITE TYPE: Single burned rock mound

DESCRIPTIVE SUMMARY: This site consists of a single burned rock mound and burned rock scatter. No ecofacts are noted, and burned rock density is heavy. No artifacts were observed or collected. The site is reported to be in fair condition, with 30% of the surface affected by tracked and wheeled vehicles, and erosion. The chronology of this site is unknown. Two other prehistoric sites occur in quad 12/41.

ASSESSMENTS AND RECOMMENDATIONS: This site is described as a dense burned rock scatter with a burned rock mound in good condition. Few lithic artifacts were associated. The site should be probed by shovel to determine extent and nature of deposit. It is considered potentially eligible to the National Register.

SITE: 41BL411

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Spur

ELEVATION: 935 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 29,400 m²

VEGETATION: Wooded area (0-25%)

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of a burned rock scatter and a lithic scatter. No ecofacts are noted, and burned rock density is light. Artifact density is low, and observed artifacts include a type III biface, a dart point fragment, flakes, retouched flakes, side scrapers, and cores. The single dart point fragment collected was identified as part of a *Darl* point. The site is reported to be in poor condition, with 90% of the surface affected by road construction, burning, erosion, and scraping. The diagnostic artifacts collected indicate a chronology of Transitional Archaic for this site. Two other prehistoric sites occur in quad 12/41.

ASSESSMENTS AND RECOMMENDATIONS: The site area is covered by a thin scatter of flakes and burned rock. Survey data indicates that the site is contained in a thin humus (0-10 cm) overlying the Walnut clay. Subsurface testing does not appear to be necessary. The lack of integrity and heavy machine disturbance indicate that this site is not eligible to the National Register, and no further work is recommended.

SITE: 41BL412

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Knoll

ELEVATION: 945 feet

NEAREST WATER (DISTANCE): 200 m

AREA: 6,875 m^2

VEGETATION: Grasslands

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of a burned rock scatter. No ecofacts are noted, and burned rock density is light. Artifact density is low, and observed artifacts include flakes, type II bifaces, a dart point fragment, a side scraper, and an end scraper. No artifacts were collected. The site is reported to be in poor condition, with 95% of the surface affected by construction, erosion, vandalism, and bulldozing. The chronology of this site is unknown. No other prehistoric sites occur in quad 12/42.

ASSESSMENTS AND RECOMMENDATIONS: This shallow site contains a sparse scatter of burned rock, flakes, and other tools. It has been "salted" by Fort Hood archaeologists in an attempt to study movement of artifacts and disturbance processes at sites. It has been heavily impacted by erosion and pothunting. Due to a lack of integrity and the "salting," no additional work is recommended and the site is considered not eligible to the National Register.

SITE: 41BL877

ENVIRONMENTAL ZONE: Upland

LANDFORM: Outlier

ELEVATION: 1,020 feet

NEAREST WATER (DISTANCE): 150 m

AREA: 443,000 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Multiple burned rock mounds

DESCRIPTIVE SUMMARY: This site consists of two burned rock mounds, a burned rock scatter, and a lithic scatter. No ecofacts are noted, and burned rock density is heavy. Artifact density is medium, and observed artifacts include flakes, chips, a type III biface, dart points, retouched flakes, retouched blades, side and end scrapers, cores, hammerstones, choppers, and a mano. Collected artifacts include a hammerstone, an untyped dart point and a *Castroville* point. The site is reported to be in good condition, with 25% of the surface affected by military trails and fences, borrow pits and trenches, erosion, vandalism, and vegetation clearing and burning. The diagnostic artifacts collected indicate a chronology of Late Archaic for this site. No other prehistoric sites occur in quad 21/47.

ASSESSMENTS AND RECOMMENDATIONS: This site was reported to cover almost the entire top of Black Mountain. Two relatively undisturbed burned rock mounds were reported along with a burned rock midden which has been exposed by a borrow pit. Cultural deposits may extend to a depth of 1 m. This portion of the site is considered eligible to the National Register, and even though a portion lies within the impact area, this had not stopped pothunters. Immediate action is recommended to remedy the destruction of this important mound/midden complex.

The eligibility of the remaining portions will have to be determined by additional survey, collection, and possibly subsurface sampling.

SITE: 41CV105

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Primary terrace

ELEVATION: 850 feet

NEAREST WATER (DISTANCE): 200 m

AREA: 54,531 m^2

VEGETATION: Grasslands with scattered trees

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of two burned rock scatters. Shell is noted, and burned rock density is medium. Artifact density is low, and observed artifacts include chips, flakes, retouched flakes, end scrapers, and cores. No artifacts were collected. The site is reported to be in fair condition, with 40% of the surface affected by roadways and trails, bulldozing and scraping, erosion, pipeline construction, and railroad construction. The chronology of this site is unknown. One other prehistoric site occurs in quad 12/44.

ASSESSMENTS AND RECOMMENDATIONS: Surveyors indicate that this site may be mostly buried in up to 2 m of alluvial fill. Widespread areas of burned rock were noted. The site should receive additional subsurface probing to determine the nature of cultural deposits. It is considered potentially eligible to the National Register.

SITE: 41CV413

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Terrace

ELEVATION: 805 feet

NEAREST WATER (DISTANCE): 75 m

AREA: 71,300 m^2

VEGETATION: Wooded area (0-25%)

SITE TYPE: Multiple burned rock mounds

DESCRIPTIVE SUMMARY: This site consists of two burned rock mounds, a burned rock scatter, and a lithic scatter. No ecofacts are noted, and burned rock density is medium. Artifact density is low, and observed artifacts include flakes, chips, and one dart point fragment. No artifacts were collected. The site is reported to be in poor condition, with 85% of the surface area affected by golf course construction and landscaping. The chronology of this site is unknown. Four other prehistoric sites occur in quad 13/46.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of multiple burned rock mounds in fair condition. Further testing is recommended to determine the depth and integrity of the mounds and surrounding site matrix since surveyors indicated that alluvial deposition has occurred on site. The site is considered potentially eligible to the National Register until such testing takes place.

SITE: 41CV588

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Spur

ELEVATION: 875 feet

NEAREST WATER (DISTANCE): 150 m

AREA: 30,400 m²

VEGETATION: Wooded area (0-25%)

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of a burned rock scatter and lithic scatter. No ecofacts are noted, and burned rock density is low. Artifact density is medium, and observed artifacts include flakes, chips, and retouched flakes. No artifacts were collected. The site is reported to be in poor condition, with 75% of the surface affected by construction and erosion. The chronology of this site is unknown. Four other prehistoric sites occur in quad 13/46.

ASSESSMENTS AND RECOMMENDATIONS: Survey showed this site to be an extensive scatter of burned rock and flakes in which were imbedded denser concentrations of burned rock. The cultural deposit is less than 10 cm thick and heavily disturbed by parking lot construction. For these reasons, it is not considered eligible to the National Register, and no further work is recommended.

SITE: 41CV734

ENVIRONMENTAL ZONE: Upland

LANDFORM: Outlier

ELEVATION: 1,020 feet

NEAREST WATER (DISTANCE): 150 m

AREA: 590,000 m²

VEGETATION: Wooded area (25-50%)

SITE TYPE: Lithic quarry

DESCRIPTIVE SUMMARY: This lithic quarry site consists of two burned rock scatters and a lithic scatter. No ecofacts are noted, and burned rock density is medium. Artifact density is low, and observed artifacts include flakes, chips, type II and III bifaces, and cores. A type III biface was collected. The site is reported to be in fair condition, with 80% of the surface affected by burning, ordnance, and tracked and wheeled vehicles. The chronology of this site is unknown. No other prehistoric sites occur in quad 21/48.

ASSESSMENTS AND RECOMMENDATIONS: This site contains an extensive scatter of lithics including flakes and tools with prominent burned rock scatters. Cultural material is contained in a shallow clay loam deposit of less than 40 cm. Extensive burning, erosion, vehicular traffic, and other Army maneuvers have seriously impacted the site. Because of this, the site is considered not eligible to the National Register, and no further work is recommended.

SITE: 41CV1369

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Knoll

ELEVATION: 870 feet

NEAREST WATER (DISTANCE): 250 m

AREA: 11,400 m^2

VEGETATION: Wooded area (0-25%)

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of a burned rock and lithic scatter. No ecofacts are noted, and burned rock density is heavy. Artifact density is low, and observed artifacts include chips, flakes, and retouched flakes. No artifacts were collected. The site is reported to be in fair condition, with 80% of the surface affected by erosion and historic habitation. The chronology of this site is unknown. No other prehistoric sites occur in quad 23/69.

ASSESSMENTS AND RECOMMENDATIONS: This extensive flake and burned rock scatter is situated on a knoll which is heavily eroded. The depth of the cultural deposit was determined to be less than 10 cm in thickness. Although one "possible" burned rock mound is indicated on the site form, the site has been so heavily eroded and damaged by historic habitation and brush fires that it does not appear to be eligible to the National Register. No further work is recommended.

SITE: 41CV1441

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Primary terrace

ELEVATION: 860 feet

NEAREST WATER (DISTANCE): 200 m

AREA: 9,688 m^2

VEGETATION: Grasslands with scattered trees

SITE TYPE: Single burned rock mound

DESCRIPTIVE SUMMARY: This site consists of a burned rock mound and burned rock scatter. No ecofacts are noted, and burned rock density is medium. Artifact density is also medium, and observed artifacts include flakes, type I bifaces, dart points, and retouched flakes. Collected artifacts include an untyped dart point and a *Pedernales* point. The site is reported to be in fair condition, with 55% of the surface affected by wheeled vehicles, erosion, and railroad construction. The diagnostic artifacts collected indicate a chronology of Middle Archaic for this site. One other prehistoric site occurs in quad 12/44.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of a buried burned rock midden, near a tributary of Clear Creek. Additional subsurface probing is recommended to determine the extent and nature of cultural deposits. It is considered potentially eligible to the National Register.

SITE: 41CV1442

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Spur

ELEVATION: 960 feet

NEAREST WATER (DISTANCE): 175 m

AREA: 1,875 m^2

VEGETATION: Wooded area (0-25%)

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of a single burned rock scatter. No ecofacts are noted, and burned rock density is light. Artifact density is low, and observed artifacts include flakes, dart points, and side scrapers. A *Darl* point was collected. The site is reported to be in good condition, with 12% of the surface affected by erosion and wheeled vehicles. The diagnostic artifacts collected indicate a chronology of Transitional Archaic for this site. No other prehistoric sites occur in quad 11/42.

ASSESSMENTS AND RECOMMENDATIONS: This site is a low density lithic scatter consisting primarily of burned rock and flakes. Site depth is less than 10 cm, and the scatter is extremely light. The site is not considered to be eligible to the National Register and no further work is recommended.

SITE: 41CV1443

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Secondary terrace

ELEVATION: 850 feet

NEAREST WATER (DISTANCE): 200 m

AREA: 111,875 m^2

VEGETATION: Grasslands with scattered trees

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of a burned rock and lithic scatter. No ecofacts are noted, and burned rock density is medium. Artifact density is also medium, and observed artifacts include flakes, retouched flakes, a type III biface fragment, end scrapers, cores, and a metate. A uniface scraper was collected. The site is reported to be in good condition, with 16% of the surface affected by a roadway, erosion, and bulldozing. The chronology of this site is unknown. No other prehistoric sites occur in quad 12/43.

ASSESSMENTS AND RECOMMENDATIONS: The survey indicated that this site consists of a burned rock scatter with flakes and other chipped stone implements eroding from a trail. The surveyor estimated the depth of the deposit to be less than 10 cm. Additional shovel probing is recommended to ascertain the depth of the cultural deposit since this was not accomplished during the initial survey and it was indicated that the north portion of the site may be buried. The site is considered to be potentially eligible to the National Register.

SITE: 41CV1444

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Terrace

ELEVATION: 860 feet

NEAREST WATER (DISTANCE): 15 m

AREA: 14,300 m^2

VEGETATION: Wooded area (0-25%)

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of a burned rock and lithic scatter (Figure 9). No ecofacts are noted, and burned rock density is medium. Artifact density is also medium, and observed artifacts include a type I biface, flakes, and retouched flakes. No artifacts were collected. The site is reported to be in poor condition, with 30% of the surface affected by ditch construction, erosion, and wheeled vehicles. The chronology of this site is unknown. Four other prehistoric sites occur in quad 13/46.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of a light burned rock scatter with flakes. It appears to be less than 10 cm in depth and has been extensively eroded and impacted by ditch construction. The site is not considered eligible to the National Register and no further work is recommended.

Figure 9. Burned Rock Scatter with Lithics—Site 41CV1444.

SITE: 41CV1445

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Terrace

ELEVATION: 820 feet

NEAREST WATER (DISTANCE): 25 m

AREA: 600 m^2

VEGETATION: Wooded area (0-25%)

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of a burned rock and lithic scatter. No ecofacts are noted, and burned rock density is heavy. Artifact density is medium, and observed artifacts include chips, flakes, and retouched flakes. No artifacts were collected. The site is reported to be in fair condition, with 70% of the surface affected by erosion, natural vegetation, and golf course construction. The chronology of this site is unknown. Four other prehistoric sites occur in quad 13/46.

ASSESSMENTS AND RECOMMENDATIONS: The results of survey estimated that this burned rock and lithic scatter is less than 30 cm in depth; however, it also indicated that is may fill the entire meander of a tributary of Clear Creek. Additional subsurface probing is recommended and the site is potentially eligible to the National Register.

SITE: 41CV1446

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Terrace

ELEVATION: 800 feet

NEAREST WATER (DISTANCE): 25 m

AREA: 1 m^2

VEGETATION: Wooded area (75-100%)

SITE TYPE: Burned rock scatter with no lithics

DESCRIPTIVE SUMMARY: This site consists of a hearth (Figure 10). No ecofacts are noted, and burned rock density is heavy. No artifacts were observed or collected. The site is reported to be in poor condition, with 95% of the surface affected by erosion and tree roots. The chronology of this site is unknown. Four other prehistoric sites occur in quad 13/46.

ASSESSMENTS AND RECOMMENDATIONS: This site was described by the surveyors as a burned rock scatter which has been truncated by Clear Creek. The sediments containing the hearth-like feature are estimated at 2 m in depth. Additional subsurface probing should occur in the vicinity of hearth-like feature to determine nature and extent of site. The site is considered to be potentially eligible to the National Register.

Figure 10. Hearth Exposed in Cutbank of Clear Creek—Site 41CV1446.

DESCRIPTIONS OF PREHISTORIC SITES FROM D.O. 6

SITE: 41BL177

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Hillock

ELEVATION: 970 feet

NEAREST WATER (DISTANCE): 80 m

AREA 27,343 m^2

VEGETATION: Wooded area (25-50%)

SITE TYPE: Lithic scatter

DESCRIPTIVE SUMMARY: This site consists of a lithic scatter with no features. Burned rock and ecofacts are absent, and artifact density is low. No artifacts were collected, and observed artifacts include type I bifaces, cores, flakes, and chips. The site is reported to be in poor condition, with 57% of the surface area affected by tracked vehicles and erosion. The chronology of this site is unknown. One other prehistoric site occurs in quad 26/46.

ASSESSMENTS AND RECOMMENDATIONS: This site was originally recorded by the Fort Hood Archaeological Society. However, a revisit during this survey indicated that the site is not eligible to the National Register of Historic Places. Very little in the way of cultural material was observed, only a light flake scatter

and some stained or burned chert nodules. No minimum concentrations or features were encountered.

SITE: 41BL796

ENVIRONMENTAL ZONE: Intermediate Upland

LANDFORM: Slope

ELEVATION: 875 feet

NEAREST WATER (DISTANCE): 260 m

AREA: 69,375 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Lithic scatter

DESCRIPTIVE SUMMARY: This site consists of a lithic scatter with no features recorded. Although burned rock and ecofacts are absent, artifact density is high. Observed artifacts include type II and III bifaces, a large dart point, retouched flakes, cores, flakes, and chips. One untyped dart point was collected. The site is reported to be in good condition, with 32% of the surface area affected by road construction, military activity, and erosion. The diagnostic artifacts collected indicate a chronology of General Archaic for this site. One other prehistoric site occurs in quad 27/44.

ASSESSMENTS AND RECOMMENDATIONS: Very little information exists for this site. It was recorded as a lithic scatter on a slope with a shallow deposit. There is not enough information to assess this site's importance. It should be revisited and further assessed prior to any specific recommendations. Until that time, it should be considered potentially eligible to the National Register.

SITE: 41BL866

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 250 feet

NEAREST WATER (DISTANCE): 240 m

AREA: 84,688 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Lithic scatter

DESCRIPTIVE SUMMARY: This site consists of a lithic scatter, but no features are recorded. Burned rock and ecofacts are not present, and artifact density of low. Observed artifacts include type I and II bifaces, a biface scraper, a dart point, cores, choppers, flakes, and chips. Collected artifacts include two untyped dart points, a dart point preform and a type III biface. The site is reported to be in good condition, with 26% of the surface area affected by military activity, erosion, and animals. The diagnostic artifacts collected indicate a chronology of General Archaic for this site. No other prehistoric sites occur in quad 62/34.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of a low density lithic scatter with evidence of primary reduction. The cultural deposit is shallow, from 0-15 cm thick. The site is in fairly good condition according to the surveyors, so it is recommended that the site be further assessed, perhaps

through controlled surface collection for significance. It is considered to be potentially eligible to the National Register since it may yield important data regarding early stage chert reduction practices at Fort Hood.

SITE: 41BL944

ENVIRONMENTAL ZONE: Upland

LANDFORM: Spur

ELEVATION: 944 feet

NEAREST WATER (DISTANCE): 220 m

AREA: 11,718 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Lithic quarry

DESCRIPTIVE SUMMARY: This site consists of a lithic quarry with dense flake clusters noted. Artifact density is high, but no ecofacts or burned rock are recorded. No artifacts were collected, and observed artifacts include type I and II bifaces, uniface blanks, hammerstones, flakes, and chips. The site is reported to be in good condition, with 11% of the surface area affected by erosion and roadways. The chronology of this site is unknown. One other prehistoric site occurs in quad 27/44.

ASSESSMENTS AND RECOMMENDATIONS: Recorded as an extensive quarry site with numerous bifaces and flakes, it contains a shallow deposit of 5-10 cm in thickness. The original recorder noted that some of the bifaces looked "fresh," perhaps the result of modern knappers; however, disturbance is minimal. Due to the high density of cultural remains related to procurement activities and its relatively undisturbed state, the site is considered to be potentially eligible to the National Register. It should be further assessed using a controlled surface collection technique for comparison with other sites in terms of artifact diversity and content.

SITE: 41BL945

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Bench

ELEVATION: 835 feet

NEAREST WATER (DISTANCE): 185 m

AREA: 12,188 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Burned rock scatter with lithics

DESCRIPTIVE SUMMARY: This site consists of dense lithic and burned rock scatter. No ecofacts are noted. Burned rock density is medium, and artifact density is medium. Observed artifacts include type II bifaces, biface scrapers, retouched flakes, side scrapers, cores, hammerstones, and flakes. No artifacts were collected. The site is reported to be in fair condition, with 35% of the surface area affected by erosion, military activity, and tank trails. The chronology of this site is unknown. No other prehistoric sites occur in quad 28/43.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of a medium-dense lithic scatter on a slope with several burned rock scatters. Depth of cultural deposit

is around 20 cm and erosion has affected the context of the artifacts. This site is judged to be in fair condition but not eligible to the National Register. It is doubtful if additional field work will be needed at this site.

SITE: 41BL946

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 845 feet

NEAREST WATER (DISTANCE): 500 m

AREA: 10,781 m^2

VEGETATION: Grasslands with scattered trees

SITE TYPE: Lithic scatter

DESCRIPTIVE SUMMARY: This site consists of a light lithic scatter (Figure 11) with a low artifact density. No ecofacts are recorded, and burned rock density is light. Observed artifacts include type I bifaces, cores, flakes, and chips. Collected artifacts include two *Ensor* points, a *Darl* point and a type III biface. The site is reported to be in fair condition, with 5% of the surface area affected by downslope erosion. The diagnostic artifacts collected indicate a chronology of Terminal to Transitional Archaic for this site. No other prehistoric sites occur in quad 29/43.

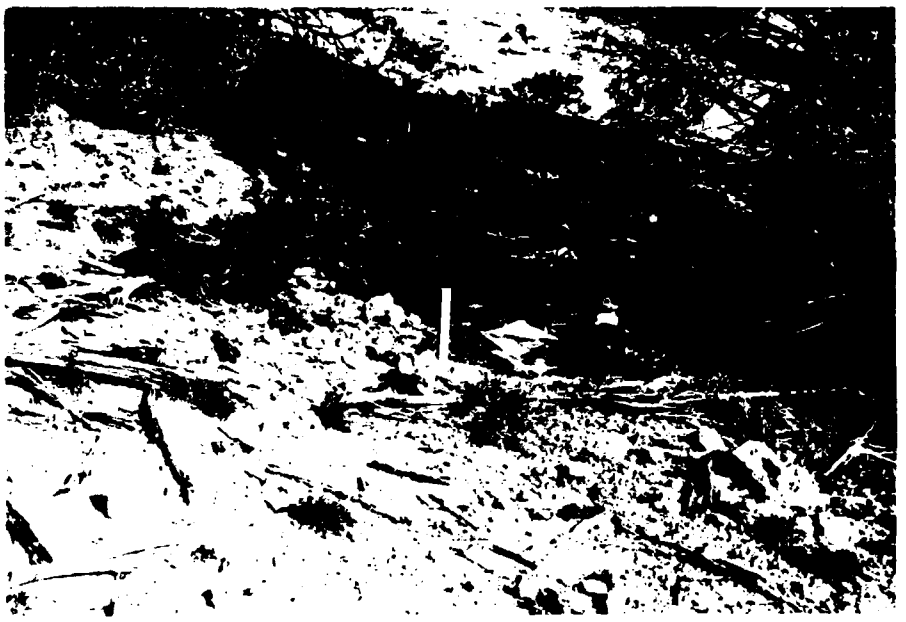

Figure 11. Lithic Scatter at Site 41BL946.

ASSESSMENTS AND RECOMMENDATIONS: This site was recorded as a low density lithic scatter approximately 5 cm in depth. It was stated that some of the artifacts may have washed downslope and that overall the site was in fair condition. The site is not considered eligible to the National Register due to the low artifact density and secondary context of some artifacts.

SITE: 41BL947

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 875 feet

NEAREST WATER (DISTANCE): 180 m

AREA: 31,718 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Lithic scatter

DESCRIPTIVE SUMMARY: This site consists of a moderate lithic scatter (Figure 12), but no features or ecofacts are recorded. Burned rock is absent, and observed artifacts include type I, II, and III bifaces, dart points, flakes and retouched flakes, and chips. A *Pedernales* point was collected. The site is reported to be in fair condition, with 30% of the surface area affected by erosion, military activity, and trails. The diagnostic artifacts collected indicate a chronology of Middle Archaic for this site. No other prehistoric sites occur in quad 28/44.

Figure 12. Lithic Scatter at Site 41BL947.

ASSESSMENTS AND RECOMMENDATIONS: The surveyors recorded this site as a moderate lithic scatter on a slope with flakes, bifaces, and a dart point. They stated that it is possible that some of the lithics may have washed down from above. As with 41BL946 above, the site is not considered to be potentially eligible to the National Register as many of the artifacts appear secondarily deposited.

SITE: 41BL948

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 850 feet

NEAREST WATER (DISTANCE): 625 m

AREA: 3,400 m^2

VEGETATION: Wooded area (25-50%)

SITE TYPE: Lithic scatter

DESCRIPTIVE SUMMARY: This site consists of a light lithic scatter and no features. Artifact density is low, and burned rock and ecofacts are absent. Observed artifacts include type II bifaces, end scrapers, and flakes. No artifacts were collected. The site is reported to be in fair condition, with 2% of the surface area affected by erosion. The chronology of this site is unknown. No other prehistoric sites occur in quad 06/60.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of a low density lithic scatter on a slope with a depth of 5 cm. Condition of the site was reported as fair. As with 41BL946 and 41BL947 above, the site is not considered to be potentially eligible to the National Register due to the low artifact density and questionable context.

SITE: 41BL949

ENVIRONMENTAL ZONE: Lowland

LANDFORM: Terrace

ELEVATION: 820 feet

NEAREST WATER (DISTANCE): 500 m

AREA: 781 m^2

VEGETATION: Grasslands with scattered trees

SITE TYPE: Lithic scatter

DESCRIPTIVE SUMMARY: This site consists of a lithic scatter and a possible burned rock scatter on the southern perimeter of the site area. No ecofacts are recorded, and artifact density is low. No artifacts were collected, and observed artifacts include type II bifaces, side scrapers, cores, and flakes. The site is reported to be in fair condition, with 19% of the surface area affected by erosion, roadways, military and animal activities. The chronology of this site is unknown. No other prehistoric sites occur in quad 05/60.

ASSESSMENTS AND RECOMMENDATIONS: This site was recorded as an extremely light lithic scatter with a few tools. Depth of cultural deposit is 5-10 cm. Some erosion has occurred but the surveyors indicate the site is in fair condition. this site is not considered to be eligible to the National Register due to the sparse artifact recovery.

SITE: 41BL950

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Spur

ELEVATION: 915 feet

NEAREST WATER (DISTANCE): 120 m

AREA: 59,375 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Lithic scatter

DESCRIPTIVE SUMMARY: This site consists of a lithic scatter and no features. Burned rock and ecofacts are not recorded, and artifact density is high. Observed artifacts include type II and III bifaces, biface scrapers, dart points, retouched flakes, side and end scrapers, cores, flakes, and chips. Collected artifacts include a type III biface and an untyped dart point. The site is reported to be in fair condition, with 22% of the surface area affected by roadways, military and agricultural activities. The diagnostic artifacts collected indicate a chronology of General Archaic for this site. One other prehistoric site occurs in quad 26/46.

ASSESSMENTS AND RECOMMENDATIONS: This site was recorded as a moderate lithic scatter with a shallow cultural deposit of less than 10 cm. It was reported to be in fair condition with some impact from roads. The site is not considered to be eligible to the National Register due to the shallow cultural deposit and impact from roads.

APPENDIX II

HISTORIC SITE DESCRIPTIONS AND ASSESSMENTS

by

H. Blaine Ensor and Robyn L. Pearson

HISTORIC SITES FROM D.O. 1

SITE: 41BL410

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Spur

ELEVATION: 1,005 feet

NEAREST WATER (DISTANCE): 400 m

AREA: 15,938 m^2

VEGETATION: Grasslands

SITE TYPE: Domestic Dwelling

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant patented to J.M. Jones on 5-4-1877. The rubble remnants of a former structure are noted. No domestic vegetation is recorded. Observed artifacts include undecorated and decorated whitewares, stonewares, toys, bottle glass, cold cream jars, condiment jars, lavender glass, car parts, clothing, farm machinery, household items, tin cans, tractor parts, brick, foundation materials, natural stone, wire nails, wooden planks, and rubber. Collected artifacts include clear bottle glass with an Owens scar (1904-1969), a pressed opaque white bowl (1938+), a ceramic doll part, a shell button, iron pipe, iron toys, and unidentified iron and zinc. The site is reported to be in fair condition, with 65% of the surface affected by burning, erosion, borrowing, bivouacking, and bulldozing. It appears the site is a Depression era domestic dwelling. No other historic sites occur in quad 10/41.

ASSESSMENTS AND RECOMMENDATIONS: This site exhibits the remains of a Depression era domestic dwelling or farm/ranch complex. Although the site surface has been disturbed by various agents of impact, intact portions remain. Because of the relatively intact foundation associated with the site, it is considered to be potentially eligible to the National Register. Additional archival work may be required.

SITE: 41BL939

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Spur

ELEVATION: 945 feet

NEAREST WATER (DISTANCE): 300 m

AREA: 9,531 m^2

VEGETATION: Grasslands

SITE TYPE: Domestic Dwelling

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant patented to Sam H. Henderson on 12-3-1873. A possible windmill base is noted, and no domestic vegetation is recorded. Observed artifacts include decorated and undecorated whitewares, lavender glass, car parts, tin cans, and natural stone. Collected artifacts include lavender glass tableware (1880-1918), a machine-made clear glass soft drink bottle and, decorated whiteware. The site is destroyed, with 95% of the surface affected by earthmoving and erosion. It appears the site is an early twentieth century/Depression era domestic dwelling. No other historic sites occur in quad 12/42.

ASSESSMENTS AND RECOMMENDATIONS: This site has been heavily impacted and destroyed by military activities. It is not considered eligible to the National Register, and no additional fieldwork is required.

SITE: 41BL940

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Primary terrace

ELEVATION: 923 feet

NEAREST WATER (DISTANCE): 50 m

AREA: 400 m^2

VEGETATION: Wooded area (0-25%)

SITE TYPE: Well

DESCRIPTIVE SUMMARY: This site is located within a 142 acre military preemption grant which J.H. Cross patented to F.E. Henderson on 7-20-1876. A well is recorded on this site, but no domestic vegetation is noted. No artifacts were observed or collected. The site is reported to be in good condition, with 30% of the surface affected by revegetation. It appears the site is a well of unknown date. One other historic site occurs in quad 12/41.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of an isolated well, perhaps associated at one time with a farm/ranch complex of unknown age. The well is reported to be in good condition, however the site is not considered to be potentially eligible to the National Register. It is not likely that additional fieldwork will be required.

SITE: 41BL941

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Bench

ELEVATION: 980 feet

NEAREST WATER (DISTANCE): 250 m

AREA: 1,000 m^2

VEGETATION: Grasslands

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 640 acre second class land grant which Julia Stephens patented to W.R. Smith on 7-12-1870. No features other than a trash dump are recorded, and no domestic vegetation is noted. Observed artifacts include decorated and undecorated whitewares, stonewares, maker's marks, lavender glass, medicine bottles, milk glass lid liners, condiment bottles, lantern parts, wagon hardware, tin cans, a tobacco can, and graphite battery cores. Collected artifacts include lavender bottle glass with improved tooled finish (1880-1915), clear pink bottle glass (1911-1935), clear glass bottles—one with machine-made finish (1903+), one pressed brandy/whiskey bottle, decorated and undecorated whiteware, stoneware with Bristol glaze (1920+), lavender glass (1880-1918), a cobalt blue medicine bottle made by the Maryland Glass Company (1940+), a clear green medicine bottle made by the Knox Glass Company, an iron lid, and a tin lantern part. The site is reported to be in good condition, with 40% of the surface affected by wheeled vehicles and erosion. It

appears the site is a Depression era dump. One other historic site occurs in quad 12/41.

ASSESSMENTS AND RECOMMENDATIONS: This trash dump was reported to be in fair condition with several impacts noted. No other features were located. It is considered to be Depression era in age and not eligible to the National Register. It does not appear that additional fieldwork will be necessary.

SITE: 41BL942

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Spur

ELEVATION: 970 feet

NEAREST WATER (DISTANCE): 200 m

AREA: 6,200 m^2

VEGETATION: Grasslands

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 640 acre second class land grant which Julia Stephens patented to W.R. Smith on 7-12-1870. No features other than a trash dump are recorded, and no domestic vegetation is noted. Observed artifacts include decorated and undecorated whitewares, stonewares, porcelain, maker's marks, bottle glass, canning jars, cold cream jars, condiment jars, Depression glass, lavender glass, medicine bottles, milk glass lid liners, tablewares, buckets, car parts, buckles, farm machinery, bedsprings, enamel ware, pans, tin cans, stove pipe, wire nails, barbed wire, hog wire, and rubber. Collected artifacts include an emerald green medicine bottle made by the Owens-Illinois Glass Company (1930-1954), green Depression glass (1930-1940), pressed pink Depression glass made by the Hocking Glass Company (1931-1937), lavender bottle glass with improved tooled finish (1880-1915), clear green glass with machine-made finish (1903+), clear bottle glass, pressed opaque white glass (1938+), pressed white milk glass made by the Macbeth-Evans Glass Company (1930-1936), decorated and undecorated whiteware, decorated semiporcelain, stoneware crockery—one with Albany interior/Bristol exterior (1880-1920) and one with Albany slip (1900+), and unidentified plastic. The site is reported to be in fair condition, with 70% of the surface affected by fence construction, erosion, and revegetation. It appears the site is a Depression era or early military period dump. No other historic sites occur in quad 13/41.

ASSESSMENTS AND RECOMMENDATIONS: The surveyors report this site to be a Depression era and/or early military dump area. It is in fair condition with impacts such as erosion and fence construction noted. The site is not considered to be eligible to the National Register. It is unlikely that additional fieldwork will be necessary.

SITE: 41BL943

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 900 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 46,500 m^2

VEGETATION: Wooded area (25-50%)

SITE TYPE: Farm/Ranch

DESCRIPTIVE SUMMARY: This site is located within a 2,332.86 acre first class land grant which Bailey Hardiman patented to his heirs on 8-16-1855. Features encountered are a dump, concrete porch remnants, and foundation rubble. Domestic vegetation includes horehound. Observed artifacts include stonewares, blue glass, clear glass, bottle glass, condiment jars, gun cartridges, a tire pump, brick, concrete piers, cut limestone, concrete steps and blocks, fence staples, wire nails, barbed wire, hog wire, upright fence posts, cattle bones, and graphite battery cores. Collected artifacts include decorated whiteware. The site is reported to be in poor condition, with 45% of the surface affected by burning/cutting, military activities, roadways, and erosion. It appears the site is an early military period farm/ranch. No other historic sites occur in quad 21/48.

ASSESSMENTS AND RECOMMENDATIONS: The surveyors indicate that this is the remains of an early military period farm/ranch complex as features were present in the form of concrete foundation remnants. The site is reported to be in overall poor condition. The site is not considered eligible to the National Register. Additional field/archival research will probably not be necessary.

SITE: 41CV412

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Ridge/Plateau

ELEVATION: 900 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 45,625 m^2

VEGETATION: Grasslands

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant patented to Sam H. Henderson on 12-3-1873. A gravel-berm-girded ditch feature is noted, and domestic vegetation includes horehound and nopale. Observed artifacts include coarse earthenwares, undecorated whitewares, stonewares, porcelain, bottle glass, cold cream jars, Depression glass, lavender glass, soft drink bottles, tableware, chains, horse hardware, household items, stove parts, tin cans, tractor parts, natural stone, bolts, lock plates, wire nails, chicken wire, and graphite battery cores. Collected artifacts include machine-made lavender bottle glass (1903-1918), pressed lavender flatware (1880-1918), a clear glass canning jar made by the Kerr Glass Manufacturing Company (1915-1948), machine-made aqua bottle glass (1903-1915), decorated whiteware, decorated and undecorated semiporcelain, pressed pink Depression glass (1931-1937), blue milk glass, and a machine-made clear glass jug (1903+). The site is reported to be in good condition, with 20% of the surface affected by erosion. It appears the site is an early twentieth century/ Depression era trash dump. Two other historic sites occur in quad 12/43.

ASSESSMENTS AND RECOMMENDATIONS: This site consists primarily of a trash dump which possibly was associated with an early twentieth century to Depression era farm/ranch complex. The site was reported by the survey crew to be in good condition. Pending the completion of the Fort Hood site testing plan, it is considered to be potentially eligible to the National Register and may require additional archival work. No additional fieldwork is recommended.

SITE: 41CV731

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 880 feet

NEAREST WATER (DISTANCE): 50 m

AREA: 9,000 m²

VEGETATION: Wooded area (50-75%)

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: The original abstract information for the land on which this site is located is not available. A trash dump is the only feature recorded, and no domestic vegetation is noted. Observed artifacts include decorated whitewares, bottle glass, lavender glass, aqua glass, clear glass, car parts, tin cans, miscellaneous metal, flat glass, cut limestone, bolts, wire nails, and wooden planks. Collected artifacts include clear green glass bottles—one with improved tooled finish (1870-1915), one "Bixby" bottle and two "Kilmer & Co." bottles, iron license plates—two 1930 and one 1941, and decorated whiteware. The site is reported to be in fair condition, with 45% of the surface affected by cutting/burning, military dumping, and erosion. It appears the site is a Depression era or early military trash dump. No other historic sites occur in quad 21/48.

ASSESSMENTS AND RECOMMENDATIONS: The only feature recorded at this site was a Depression era/early military trash dump. The site has been disturbed to some extent. The site is not considered eligible to the National Register due to its disturbed nature. No additional fieldwork is recommended.

SITE: 41CV1370

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Knoll

ELEVATION: 850 feet

NEAREST WATER (DISTANCE): 150 m

AREA: 12,300 m²

VEGETATION: Wooded area (0-25%)

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant patented to Simpson Breedlove on 7-31-1876. The only feature noted is a stone wall, and no domestic vegetation is recorded. Observed artifacts include undecorated whitewares, stonewares, cold cream jars, lavender glass, buckets, gun parts, barbed wire, plain wire, and rubber. No artifacts were collected. The site is reported to be in poor condition, with 90% of the surface affected by borrowing, erosion, and revegetation. It appears the site is a Depression era dump. Two other historic sites occur in quad 23/70.

ASSESSMENTS AND RECOMMENDATIONS: The surveyors recorded this site as a Depression era dump with a stone wall feature which may or may not be associated. The site surface has been extensively disturbed. The site does not appear to be significant; it is listed as not eligible to the National Register. No additional fieldwork is recommended.

SITE: 41CV1447

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 925 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 3,438 m^2

VEGETATION: Grasslands

SITE TYPE: Cemetery

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant which M.R. Lovelace patented to James Forehand on 9-20-1878. Features encountered are one marked grave and a circular slab of limestone. No domestic vegetation is recorded. No artifacts were observed or collected. The site is reported to be in fair condition, with 21% of the surface affected by undomesticated animals and fence construction. The gravestone is dated 1869 (Figure 13). No other historic sites occur in quad 11/42.

ASSESSMENTS AND RECOMMENDATIONS: This site is the location of Henderson Cemetery. It should be preserved and protected by either fencing or some other appropriate preservation measure. The site should be off-limits to the military. It is protected by state laws other than those concerned with historic preservation.

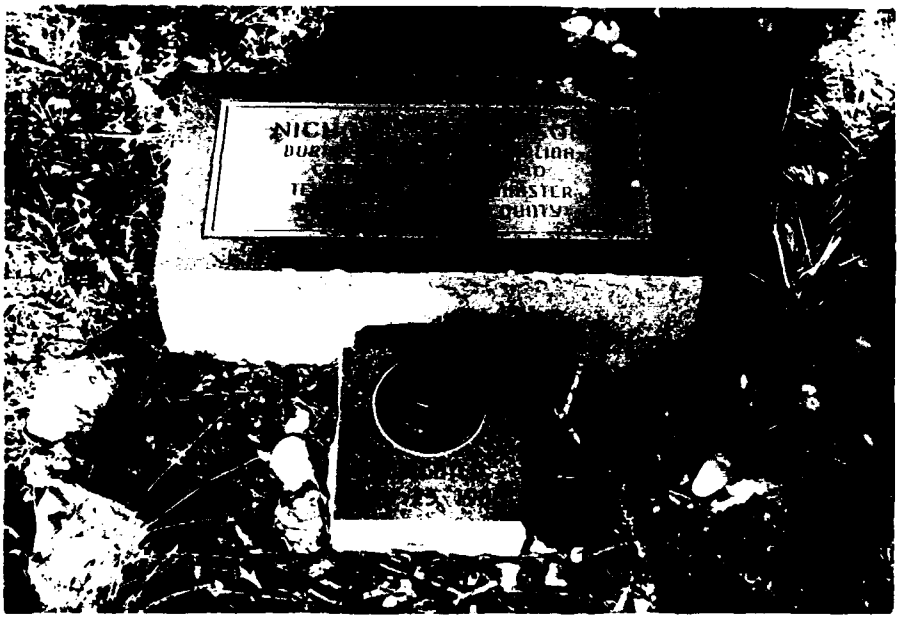

Figure 13. Nicholas Henderson Gravestone (1869) at Site 41CV1447.

SITE: 41CV1448

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Knoll

ELEVATION: 900 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 1,406 m^2

VEGETATION: Grasslands

SITE TYPE: Domestic Dwelling

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant patented to Sam H. Henderson on 12-3-1873. No features or domestic vegetation are recorded. Observed artifacts include decorated and undecorated whitewares, bottle glass, scrap metal, cut limestone, and barbed wire. Collected artifacts include clear green bottle glass with improved tooled finish (1870-1915) and decorated whiteware. The site is destroyed, with 90% of the surface affected by burning, revegetation, and earth-moving activities. It appears the site is an early twentieth century domestic dwelling. Two other historic sites occur in quad 12/43.

ASSESSMENTS AND RECOMMENDATIONS: There are no tangible remains of this site as numerous impacts have destroyed it. The site is not eligible to the National Register, and no further work is warranted.

SITE: 41CV1449

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Secondary terrace

ELEVATION: 865 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 5,928 m^2

VEGETATION: Grasslands with scattered trees

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant patented to Sam H. Henderson on 12-3-1873. No features or domestic vegetation are recorded. Observed artifacts include undecorated whitewares, bottle glass, lavender glass, household items, stove parts, brick, flat glass, cut limestone, natural stone, cut spikes, and barbed wire. Collected artifacts include aqua bottle glass made by the D.O. Cunningham Glass Company (1882-1915), clear green glass with applied tooled finish (1825-1875), and a brick fragment. The site is reported to be in fair condition, with 17% of the surface affected by wheeled vehicles, undomesticated animals, and revegetation. It appears the site is an early twentieth century dump. Two other historic sites occur in quad 12/43.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of an early twentieth century dump area. It has been affected by several impacts, including wheeled vehicles. The site is not considered eligible to the National Register. No additional fieldwork is recommended.

SITE: 41CV1450

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Primary terrace

ELEVATION: 865 feet

NEAREST WATER (DISTANCE): 50 m

AREA: 4,844 m^2

VEGETATION: Grasslands with scattered trees

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 320 acre military scrip grant which J. Poitevent patented to Sam H. Henderson on 4-5-1880. No features or domestic vegetation are recorded. Observed artifacts include undecorated whitewares, stonewares, porcelain, bottle glass, Depression glass, lavender glass, milk glass lid liners, buckets, bedsprings, enamel ware, tin cans, brick with maker's mark, wire nails, barbed and chicken wire, and tiles. Collected artifacts include pressed yellow Depression glass (1930-1940), a pressed green Depression glass bottle (1930-1940), clear bottle made by the Obear-Nester Glass Company, and decorated semiporcelain. The site is reported to be in fair condition, with 65% of the surface affected by wheeled vehicles and erosion. It appears the site is a Depression era domestic dwelling. One other historic site occurs in quad 12/44.

ASSESSMENTS AND RECOMMENDATIONS: This dump is reported in fair condition with impacts from wheeled vehicles and erosion. It is not considered to be eligible to the National Register. No additional fieldwork is recommended.

SITE: 41CV1451

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Spur

ELEVATION: 925 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 15,000 m^2

VEGETATION: Grasslands

SITE TYPE: Domestic Dwelling

DESCRIPTIVE SUMMARY: This site is located within a 2,569 acre first class land grant which James A. Wells patented to John W. Harris on 7-21-1874. Features encountered are three clusters of fence posts, paving stones, and a stock pond. Domestic vegetation includes horehound and rose bushes. Observed artifacts include decorated and undecorated whitewares, stonewares, semiporcelain, lavender glass, clear glass, tin cans, a bucket, brick, wire nails, barbed wire, and wooded fence posts. Collected artifacts include lavender bottle glass (1880-1918), decorated and undecorated whiteware, and a glass button. The site is reported to be in poor condition, with 65% of the surface affected by wheeled vehicles, bulldozing, burning, and revegetation. It appears the site is an early twentieth century/Depression era domestic dwelling. One other historic site occurs in quad 12/44.

ASSESSMENTS AND RECOMMENDATIONS: This site has been heavily impacted by bulidozing, burning, and other agents. It is in poor condition, however, some feature remnants are present such as fence posts and paving stones. It appears

to be the remains of an early twentieth century/Depression era farm/ranch complex. It does not appear that additional fieldwork will be required.

SITE: 41CV1452

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Knoll

ELEVATION: 935 feet

NEAREST WATER (DISTANCE): 200 m

AREA: 13,750 m^2

VEGETATION: Wooded area (25-50%)

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 1,269.5 acre first class land grant which Wm. P. Moore patented to his heirs on 8-12-1863. Features encountered are a Depression and a power pole anchor, and possible domestic vegetation includes mountain laurel. Observed artifacts include soft drink bottles, mirror fragments, bed or car seat springs, tin cans, concrete piers, metal straps, wire spikes, and wooden planks. Collected artifacts include a glass mirror flag, a glass button, and an iron strap. The site is reported to be in fair condition, with 25% of the surface affected by military trails/ maneuvering and erosion. It appears the site is an early military period dump. No other historic sites occur in quad 13/44.

ASSESSMENTS AND RECOMMENDATIONS: This site was recorded as an early military dump, associated with Camp Hood. It is in fair condition with disturbance from erosional and military maneuvers. Due to its recent age and disturbance, it is not eligible to the National Register. Additional fieldwork will not be necessary.

SITE: 41CV1453

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 910 feet

NEAREST WATER (DISTANCE): 150 m

AREA: 24,500 m^2

VEGETATION: Wooded area (0-25%)

SITE TYPE: Domestic Dwelling

DESCRIPTIVE SUMMARY: This site is located within a 737 acre first class land grant patented to Hugh Frazier on 8-11-1863. No features are noted, and the only domestic vegetation recorded is horehound. Observed artifacts include decorated and undecorated whitewares, stonewares, porcelain, undecorated earthenware, bottle glass, lavender glass, blue glass, gun cartridges, tractor parts, concrete piers, bolts, fence staples, and plain wire. Collected artifacts include decorated whiteware and stoneware crockery with Bristol glaze (1920+). The site is destroyed, with 100% of the surface affected by military bivouac, tracked and wheeled vehicles, erosion, and revegetation. It appears the site is an early twentieth century/Depression era domestic dwelling. No other historic sites occur in quad 13/46.

ASSESSMENTS AND RECOMMENDATIONS: This site has been destroyed by military activities and erosion. It is not eligible to the National Register and no further work is warranted.

SITE: 41CV1454

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 900 feet

NEAREST WATER (DISTANCE): 50 m

AREA: 180 m^2

VEGETATION: Grasslands

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 1,269.5 acre first class land grant which Wm. P. Moore patented to his heirs on 8-12-1863. The only feature noted is a trash dump, and possible domestic vegetation includes a concentration of prickly pear cactus around the dump. Observed artifacts include decorated and undecorated whitewares, stonewares, maker's marks, bottle glass, soft drink bottles, tablewares, buckets, tin cans, tractor parts, barbed wire, and plain wire. Collected artifacts include undecorated semiporcelain made by the Hall China Company (1930-1972). The site is reported to be in fair condition, with 25% of the surface affected by erosion and wheeled vehicles. It appears the site is a Depression era or early military period dump. One other historic site occurs in quad 14/45.

ASSESSMENTS AND RECOMMENDATIONS: This site represents the remains of a Depression era and/or early military dump. It is reported to be in fair condition but is not considered eligible to the National Register. No further work is recommended at the site.

SITE: 41CV1455

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 840 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 80 m^2

VEGETATION: Grasslands

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant patented to Simpson Breedlove on 7-31-1876. No features or domestic vegetation are recorded. Observed artifacts include undecorated whitewares, lavender glass, brown glass, and a cast iron pan. No artifacts were collected. The site is reported to be in poor condition, with 70% of the surface affected by burning, erosion, and revegetation. It appears the site is a Depression era or early military period dump. Two other historic sites occur in quad 23/70.

ASSESSMENTS AND RECOMMENDATIONS: This Depression era or early military dump has been severely impacted by burning and erosion and is in poor condition. It is

not considered eligible to the National Register as no intact features are present. No further work is warranted at this site.

SITE: 41CV1456

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Outlier

ELEVATION: 860 feet

NEAREST WATER (DISTANCE): 200 m

AREA: 57 m^2

VEGETATION: Wooded area (0-25%)

SITE TYPE: Cistern

DESCRIPTIVE SUMMARY: This site is located within a 160 acre military preemption grant patented to Simpson Breedlove on 7-31-1876. Two water features are recorded, including a square, mortared limestone cistern and a cylindrical metal-lined concrete cistern. No domestic vegetation is noted. Observed artifacts include mortar and natural stone; no artifacts were collected. The site is reported to be in good condition, with 50% of the surface affected by quarrying, revegetation, and erosion. It appears the site is an early twentieth century cistern. Two other historic sites occur in quad 23/70.

ASSESSMENTS AND RECOMMENDATIONS: This site appears to be the remains of two early twentieth cisterns. They are reported to be in good condition. They are considered to be potentially eligible to the National Register pending final recommendations. Additional fieldwork may be necessary to evaluate the contents of the cisterns.

SITE: 41CV1457

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 900 feet

NEAREST WATER (DISTANCE): 50 m

AREA: 90,000 m^2

VEGETATION: Grasslands

SITE TYPE: Farm/Ranch

DESCRIPTIVE SUMMARY: This site is located within a 1,269.5 acre first class land grant which Wm. P. Moore patented to his heirs on 8-12-1863. Features encountered are a dump, an above-ground cistern (Figure 14), a below-ground, bell-shaped cistern, and a dip tank. Domestic vegetation includes horehound. Observed artifacts include undecorated whitewares, stonewares, porcelain, bottle glass, lavender glass, tablewares, clear glass, aqua glass, green glass, brown glass, barrel hoops, sheet metal, tin cans, metal scraps, brick, flat glass, concrete piers, cut limestone, natural stone, mortar, wire nails, and barbed wire. Collected artifacts include a clear pressed glass goblet. The site is reported to be in good condition, with 35% of the surface affected by wheeled and tracked vehicles and erosion. It appears the site is an early twentieth century/ Depression era farm/ranch. One other historic site occurs in quad 14/45.

Figure 14. Above Ground Cistern at Site 41CV1457.

ASSESSMENTS AND RECOMMENDATIONS: This site appears to represent an early twentieth century or Depression era farm/ranch in good condition. It is considered to be potentially eligible to the National Register pending the completion of the testing plan. Additional field/archival research may or may not be necessary.

HISTORIC SITES FROM D.O. 6

SITE: 41BL881

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 895 feet

NEAREST WATER (DISTANCE): 110 m

AREA: 19,688 m^2

VEGETATION: Grasslands

SITE TYPE: Domestic dwelling

DESCRIPTIVE SUMMARY: This site is located within a 1,280 acre first class land grant patented to F.W. Thornton on 2-9-1846. No features or domestic vegetation are recorded. Artifact density is low, and observed artifacts include one unidentified piece of iron, which was collected. This site is listed in poor condition, with 40% of the surface area affected by tracked vehicles, cattle

grazing, and erosion. It appears this site is an early twentieth century domestic dwelling. No other historic sites occur in quad 23/46.

ASSESSMENTS AND RECOMMENDATIONS: This site was recorded as a portion of a previously recorded site in quad 25/47. No features or remains of the early twentieth century domestic dwelling were noted in that quad. The portion of the site which extends into this quad consists of only a low density artifact scatter which has been disturbed. That portion of the site which remains in 23/47 is not considered eligible to the National Register and no further work is recommended.

SITE: 41BL883

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 905 feet

NEAREST WATER (DISTANCE): 20 m

AREA: 400 m^2

VEGETATION: Grasslands

SITE TYPE: Farm/Ranch

DESCRIPTIVE SUMMARY: The original abstract information for the land on which this site is located is not available. A feature possibly associated is a stock tank. Domestic vegetation includes a common spice bush. Artifact density is low, and observed artifacts include undecorated whitewares, Depression glass, lavender glass, and an unidentified hand tool. No artifacts were collected. This site is listed in poor condition, with 50% of the surface area affected by tracked vehicles and roadways. It appears this site is a early 20th century farm/ranch complex. No other historic sites occur in quad 24/47.

ASSESSMENTS AND RECOMMENDATIONS: This site was recorded on the basis of low density artifact scatter and the possible association of a stock tank and wire enclosure. It is in poor condition and appears to represent the remains of an early twentieth century farm/ranch complex. It is not considered eligible to the National Register and no further work is recommended.

SITE: 41BL951

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 855 feet

NEAREST WATER (DISTANCE): 60 m

AREA: 34,375 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Domestic dwelling

DESCRIPTIVE SUMMARY: This site is located within a 4,605 acre first class land grant which William Cornwall patented to James Riley on 6-24-1845. No domestic vegetation is recorded, and one cistern is noted. Artifact density is medium, and observed artifacts include coarse earthenwares, decorated and undecorated whitewares, stonewares, bottle glass, cold cream jars, lavender glass, medicine bottles, barrel hoops, car parts, metal files, a pocket knife, a kettle, tin cans, flat glass, cut limestone, and mortar. Collected artifacts include

lavender bottle glass with improved tooled finish (1880-1915), lavender glass (1880-1918), a clear green glass bottle, a brown glass bottle, decorated and undecorated whiteware, decorated semiporcelain, stoneware with Bristol glaze (1920+), stoneware with Albany slip (1900+), an iron pocket knife and a brass razor head (1899+). This site is reported to be in good condition, with 25% of the surface area affected by military activity, erosion, and animals. It appears this site is a early twentieth century domestic dwelling. One other historic site occurs in quad 28/44.

ASSESSMENTS AND RECOMMENDATIONS: This site appears to be the remains of an early twentieth century farm/ranch complex. It is reported to be in good condition with minimal disturbance and one cistern preserved. The site is considered to be potentially eligible to the National Register until the Fort Hood testing plan has been prepared and implemented. Additional fieldwork/archival research may be necessary.

SITE: 41BL952

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Bench

ELEVATION: 865 feet

NEAREST WATER (DISTANCE): 100 m

AREA: 11,000 m^2

VEGETATION: Grasslands with scattered trees

SITE TYPE: Farm/Ranch

DESCRIPTIVE SUMMARY: This site is located within a 4,605 acre first class land grant which William Cornwall patented to James Riley on 6-24-1845. Features encountered include a stone-lined well (Figure 15), a cement cistern, and a stone fence. No domestic vegetation is recorded, and artifact density is low. Observed artifacts include undecorated whitewares, stonewares, porcelain, bottle glass, canning jars, condiment jars and bottles, lavender glass, barrel hoops, buckets, car parts, buckles, tin cans, brick, flat glass, natural stone, and mortar. Collected artifacts include a lavender glass canning jar made by the Kerr Glass Manufacturing Company (1904-1918), lavender bottle with improved tooled finish (1880-1915), cobalt blue hollowware, a machine-made clear glass bottle (1903+), a clear green bottle with improved tooled finish (1870-1915), stoneware crockery with Bristol glaze (1920+) and a brass lid. This site is listed in poor condition, with 5% of the surface area affected by erosion. It appears that this site is a late nineteenth/early twentieth century farm/ranch complex. One other historic site occurs in quad 28/44.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of the remains of a late nineteenth/early twentieth century farm/ranch complex. It is reported to be in poor condition, however features exist, such as a well, cistern, and stone fence. It is not considered to be eligible to the National Register. It does not seem likely that additional fieldwork/archival research will be necessary.

SITE: 41BL953

ENVIRONMENTAL ZONE: Lowland

LANDFORM: Primary terrace

ELEVATION: 900 feet

NEAREST WATER (DISTANCE): 20 m

Figure 15. Stone-lined Well at Site 41BL952.

AREA: 17,344 m²

VEGETATION: Wooded area (50-75%)

SITE TYPE: Farm/Ranch

DESCRIPTIVE SUMMARY: This site is located within a 160 acre first class land grant which Sampson McCowan patented to his heirs on 6-22-1874. Two bell-shaped wells are recorded, and no domestic vegetation is noted. Artifact density is low, and observed artifacts include undecorated whitewares, stonewares, bottle glass, cold cream jars, lavender glass, farm machinery, metal files, brick, cut limestone, mortar, and hog wire. No artifacts were collected. The site is reported to be in fair condition, with 50% of the surface area affected by military activity and erosion. This site appears to be a late nineteenth/early twentieth century isolated feature. One other historic site occurs in quad 26/45.

ASSESSMENTS AND RECOMMENDATIONS: The surveyors indicate that two cisterns are present, probably associated with a late nineteenth-early twentieth century farm/ranch complex. Overall, the site is in fair condition and considered potentially eligible to the National Register until the testing phase is completed and implemented. Additional fieldwork/archival research may be necessary.

SITE: 41BL954

ENVIRONMENTAL ZONE: Lowland

LANDFORM: Primary terrace

ELEVATION: 860 feet

NEAREST WATER (DISTANCE): 200 m

AREA: 35,600 m²

VEGETATION: Grasslands

SITE TYPE: Other Features

DESCRIPTIVE SUMMARY: This site is located within a 426.66 acre first class land grant which James W. Smith patented to his heirs on 11-8-1854. Features include concrete-filled barrel drums and a possibly recent water trough filled with cement. No domestic vegetation is recorded, and artifact density is low. Observed artifacts include coarse earthenwares, porcelain, bottle glass, lavender glass, tablewares, barrel hoops, and one shell button. Collected artifacts include a shell button, brown snuff bottle glass (1870+), lavender bottle glass (1880-1918), translucent green pressed glass (1930-1940), machine-made cold cream jars (1919+), decorated semiporcelain, undecorated whiteware, and stoneware with Bristol glaze (1920+). This site is listed in poor condition, with 10% of the surface area affected by tracked vehicles and cattle grazing. It appears that this site is a early twentieth century isolated feature. No other historic sites occur in quad 26/44.

ASSESSMENTS AND RECOMMENDATIONS: This site appears to consist of an isolated water trough and concrete-filled drums. It is listed as in poor condition. Although features exist, it is not considered eligible because of its poor condition. The site does not warrant additional work.

SITE: 41BL955

ENVIRONMENTAL ZONE: Lowland

LANDFORM: Primary terrace

ELEVATION: 920 feet

NEAREST WATER (DISTANCE): 110 m

AREA: 12,656 m²

VEGETATION: Grasslands with scattered trees

SITE TYPE: Farm/Ranch

DESCRIPTIVE SUMMARY: This site is located within a 160 acre first class land grant which Sampson McCowan patented to his heirs on 6-22-1874. Features include a windmill platform, a storage container (Figure 16), and a possible well. No domestic vegetation is recorded, and artifact density is low. Observed artifacts include stonewares, bottle glass, lavender glass, tablewares, wagon hardware, and nails. Collected artifacts include lavender bottle glass (1880-1918), a clear green glass jar with a Owens scar (1904-1915), clear pink glass (1911-1935), clear glass bottles—one with an Owens scar (1904-1969) and one with an Owens scar and Owens-Illinois Glass Company trademark (1929-1954), glass tableware, pressed opaque white glass (1938+), decorated and undecorated whiteware, stoneware crockery with Bristol glaze (1920+), a glass button, and an iron cut nail. The site is reported to be in fair condition, with 45% of the surface area affected by tracked vehicles and erosion. It appears this site is a early twentieth century isolated feature. One other historic site occurs in quad 26/45.

ASSESSMENTS AND RECOMMENDATIONS: All that was recorded at this site is a windmill base, a storage tank, a possible well, and an artifact scatter. The site is reported to be in fair condition and probably represents the remnants of a farm/ranch complex. The site is not considered to be potentially eligible to the National Register at this time. Additional fieldwork/archival research will probably not be necessary.

Figure 16. Storage Container at Site 41BL955.

SITE: 41BL956

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Hillock

ELEVATION: 975 feet

NEAREST WATER (DISTANCE): 110 m

AREA: 156 m^2

VEGETATION: Grasslands

SITE TYPE: Farm/Ranch

DESCRIPTIVE SUMMARY: This site is located within a 160 acre first class land grant which Sampson McCowan patented to his heirs on 6-22-1874. Features encountered include a limestone mortar water tank, a wellhead, and a windmill base. No domestic vegetation is recorded, and artifact density is low. Observed artifacts include bottle glass, cut limestone, and mortar. No artifacts were collected. This site is reported to be in fair condition, with 33% of the surface area affected by military activity and animals. It appears this site is a early twentieth century farm/ranch complex. No other historic sites occur in quad 26/46.

ASSESSMENTS AND RECOMMENDATIONS: Due to the presence of features such as a water tank, wellhead, and windmill base, as well as the artifact scatter, the site appears to represent the remains of an early twentieth century farm/ranch complex. It is reported to be in fair condition. The site is not considered to be eligible to the National Register at this time. It is doubtful if additional fieldwork/archival research will be necessary.

SITE: 41BL957

ENVIRONMENTAL ZONE: Lowland

LANDFORM: Primary terrace

ELEVATION: 880 feet

NEAREST WATER (DISTANCE): 300 m

AREA: 30,000 m²

VEGETATION: Grasslands

SITE TYPE: Domestic dwelling

DESCRIPTIVE SUMMARY: This site is located within a 1,280 acre first class land grant patented to F.W. Thornton on 2-9-1846. No features or domestic vegetation are recorded. Artifact density is low, and observed artifacts include undecorated whitewares, porcelain, bottle glass, bottle lips, cold cream jars, lavender glass, medicine bottles, hand tools, cast iron stove parts, brick, brick with maker's marks, and cut limestone. Collected artifacts include a clear green bottle with improved tooled finish (1870-1915) and a machine-made clear glass bottle (1903-1918). This site is listed in fair condition, with 34% of the surface area affected by tracked vehicles, erosion, and domestic animals. This site appears to be a late nineteenth/early twentieth century domestic dwelling. One other historic site is located in quad 24/46.

ASSESSMENTS AND RECOMMENDATIONS: This site appears to be the remains of a late nineteenth to early twentieth century farm/ranch complex. It is listed as in fair condition. This site is not considered eligible to the National Register at this time. It is doubtful if additional work will be required.

SITE: 41BL958

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 260 feet

NEAREST WATER (DISTANCE): 40 m

AREA: 22,969 m²

VEGETATION: Grasslands

SITE TYPE: Domestic dwelling

DESCRIPTIVE SUMMARY: This site is located within a 160 acre first class land grant patented to the heirs of Eli W. Lawler on 8-30-1861. Features include a well and a stone wall. No domestic vegetation is recorded, and artifact density is low. Observed artifacts include bottle glass, bottle bases, tumblers, brick, brick with maker's marks, cut limestone, and mortar. Collected artifacts include two whole pressed lavender glass spring clip lids made by the Illinois Glass Company (1906-1918), pressed lavender glass (1880-1918), and an iron tin can with folded side seams (1888+). This site is listed in poor to fair condition, with 30% of the surface area affected by military activity, pipeline construction, and animals. It appears this site is a late nineteenth/early twentieth century domestic dwelling. One other historic site occurs in quad 24/46.

ASSESSMENTS AND RECOMMENDATIONS: The remains of a late nineteenth/early twentieth century farm/ranch complex, this site is reported to be in poor to fair condition. Although features are present, it is not considered to be eligible

to the National Register due to its poor condition. It is doubtful if additional work will be required.

SITE: 41BL959

ENVIRONMENTAL ZONE: Upland

LANDFORM: Slope

ELEVATION: 950 feet

NEAREST WATER (DISTANCE): 140 m

AREA: 180 m^2

VEGETATION: Wooded area (75-100%)

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 640 acre military bounty which Thomas Norris patented to James B. Hair on 2-9-1846. The only feature recorded is a dump, and no domestic vegetation is noted. Artifact density is high, and observed artifacts include bottle glass, lavender glass, medicine bottles, buckets, kettle parts, and tin cans. Collected artifacts include lavender bottle glass (1880-1918), an iron enamel bowl, parts of a "Jersey" iron ice cream freezer, and clear glass bottles—one with machine-made finish (1903+) and one patent medicine bottle with an Owens scar (1911-1929). This site is reported to be in good condition with no surface damage. It appears that this is an early twentieth century dump. One other historic site is located in quad 27/45.

ASSESSMENTS AND RECOMMENDATIONS: This site consists of an early twentieth century dump area in good condition. It is considered to be potentially eligible to the National Register until the testing plan has been completed and implemented. It is doubtful if additional work will be required.

SITE: 41BL960

ENVIRONMENTAL ZONE: Intermediate upland

LANDFORM: Slope

ELEVATION: 900 feet

NEAREST WATER (DISTANCE): 80 m

AREA: 527 m^2

VEGETATION: Wooded area (50-75%)

SITE TYPE: Dump

DESCRIPTIVE SUMMARY: This site is located within a 640 acre military bounty which Thomas Norris patented to James B. Hair on 2-9-1846. Features encountered include a dump, and no domestic vegetation is noted. Artifact density is high, and observed artifacts include decorated and undecorated whitewares, marker's marks, bottle glass, canning jars, condiment jars and bottles, Depression glass, insulators, lavender glass, medicine bottles, milk glass lid liners, tumblers, chains, cast iron stove parts, enamel ware, pans, tin cans, and washtubs. Collected artifacts include a pressed lavender glass lid (1880-1918); translucent green pressed glass (1930-1940); brown snuff bottles—one with machine-made finish (1903-1915); clear glass bottles—one made with an Owens scar with Owens Bottle Company trademark (1911-1929), one with an Owens scar by Illinois Glass Company (1916-1929), one with a machine-made finish (1903-1915), one made by

Owens-Illinois Glass Company (1929-1954), and one with machine-made, threaded finish (1919+); clear tumbler glass; decorated and undecorated whiteware; and a dry cell carbon rod. This site is reported to be in good condition, with 25% of the surface area affected by tank trails and erosion. It appears that this site is a early twentieth century dump. One other historic site occurs in quad 27/45.

ASSESSMENTS AND RECOMMENDATIONS: This early twentieth century dump is reported to be in good condition. It is considered potentially eligible to the National Register until the testing plan is completed and implemented. Additional fieldwork/archival research will probably not be necessary.

APPENDIX III

PREHISTORIC MATERIAL CULTURE DISCUSSION

by

H. Blaine Ensor

PREHISTORIC MATERIAL CULTURE DISCUSSION

Thirty-eight lithic artifacts were collected and analyzed from 22 prehistoric sites and 10 isolated sites during the FY 1987-1988 Fort Hood survey project. The artifacts consist principally of dart points, other bifaces, and unifacial scrapers.

The procedure for describing the artifacts follows that presented by Ensor (1987). The projectile point typology conforms to the method and theory discussed by Ensor (1987). This method allows presentation of the current point data in a format which is directly comparable to that from previous Texas A&M surveys beginning with the FY 1984 survey. This method allows the continual refinement and expansion of the Ft. Hood projectile point data base as new types and classes warrant. All new projectile point classes found during the present surveys are described below.

A summary of all nominal lithic attributes and individual metric observations are given in Appendix VII. Table 6 presents an inventory of cultural affiliation by site based on the projectile point data. Figures 17-19 illustrate samples of lithic specimens including all new point classes. Artifacts illustrated include *Uvalde, Morrill, Pedernales, Castroville, Ellis, Ensor, Frio, Darl,* and untyped dart points, Biface II, Biface III, a dart point preform, and unifacial scrapers.

The following section describes and summarizes the new projectile point classes by type.

Pedernales (Class 49; N=1; Figure 17:D)

Vertex class 7, diagonally modified haft element, excurvate blade edges, incurvate base, nonangular base orientation, straight tapered shoulders, excurvate convex lateral haft element shape and orientation.

Ensor (Class 39; N=1; Figure 17:H)

Vertex class 7, laterally modified haft element, incurvate blade edges, excurvate base, nonangular base orientation, incurvate tapered shoulders, expanding excurvate lateral haft element shape and orientation.

Ensor (Class 40; N=1; Figure 17:I)

Vertex class 7, laterally modified haft element, straight blade edges, excurvate base, nonangular base orientation, incurvate barbed shoulders, incurvate expanding lateral haft element shape and orientation.

Untyped Dart Point (Class 64; N=1; Figure 18:B)

Vertex class 3, no haft element modification, excurvate blade edges, incurvate base, nonangular base orientation, no shoulder shape or orientation, no lateral haft element shape or orientation.

Untyped Dart Point (Class 65; N=1; Figure 18:C)

Vertex class 7, diagonally modified haft element, straight blade edges, incurvate base, nonangular base orientation, straight tapered shoulders, excurvate convex lateral haft element edges.

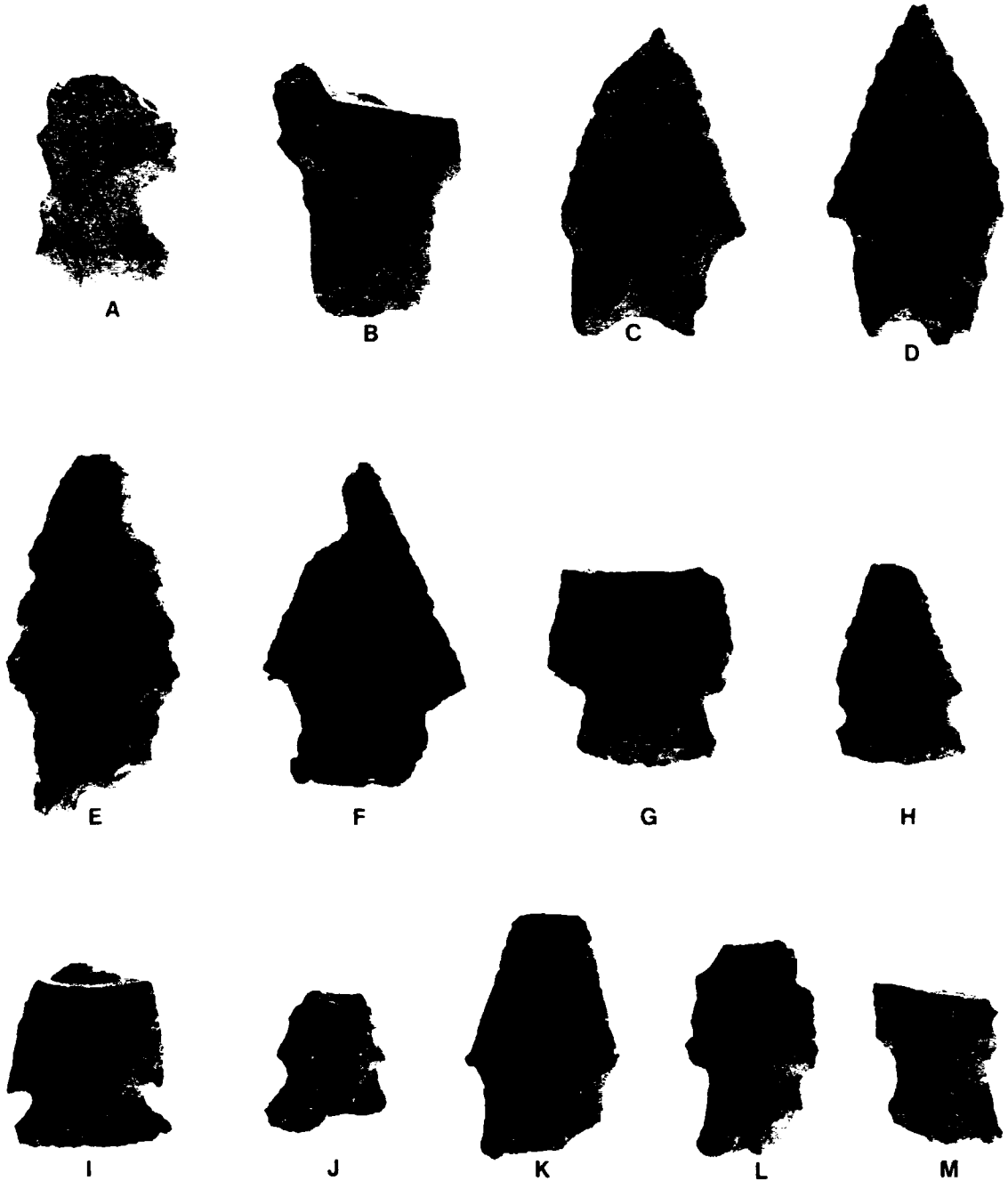

Figure 17. Dart Points—(A) *Uvalde*: Unclassed; (B) *Morrill*: Unclassed; (C) *Pedernales*: Class 10; (D) *Pedernales*: Class 49; (E) *Pedernales*: Unclassed; (F) *Castroville*: Unclassed; (G) *Ellis*: Unclassed; (H) *Ensor*: Class 40; (J) *Frio*: Class 7; (K) *Darl*: Class 24; (L-M) *Darl*: Unclassed.

Figure 18. Untyped Dart Points—(A) Class 6; (B) Class 64; (C) Class 65; (D-I) Unclassed.

Figure 19. Bifaces, Preforms, and Scrapers—(A) Biface II; (B-C) Biface III; (D) Dart Point Preform; (E-G) Uniface Scraper.

Summary

The analysis of lithic remains recovered from the FY 1988 surveys at Fort Hood has resulted in the addition of five new projectile point classes. These have been illustrated and described and entered into the overall point data base. Artifacts from these surveys which conform to previously established categories are selectively illustrated and inventoried by site in Appendix VII.

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APPENDIX IV

HISTORIC MATERIAL CULTURE DISCUSSION
by
Shawn Bonath Carlson

HISTORIC MATERIAL CULTURE DISCUSSION

ISOLATING HISTORIC SITES

Historic Sites Definition

Historic sites represent the tail-end of an archaeological continuum and, as such, should be perceived no differently than prehistoric or protohistoric sites. Despite the disputes and controversy over an acceptable definition of historic sites archaeology and its relationship to history (Schuyler 1978:1-32), Robert Schuyler has proposed that it simply be defined as "the study of the material remains from any historic period" (1978:27). The historic period is that in which a documentary record is available and enables the researcher to understand the historic archaeological site more fully. With the aid of documentation and the use of the direct historical approach, the potential for understanding protohistoric and prehistoric sites increases. Consequently, the same methods may be used on prehistoric, protohistoric, and historic sites. Within a field context and for the purposes of recording at Fort Hood, historic sites may be identified by the presence of (1) a structural feature (i.e., building foundations, wells, cisterns, root cellars, fences, etc.) or (2) three artifact classes within a 5 m radius (i.e., ceramics, glass, metal, etc.).

Historic Site Recording

All techniques described for prehistoric site recording at Fort Hood may be applied to historic sites as well, the only difference being in the artifact classes observed or collected.

Historic Site Features

The following cultural features have been previously observed on historic sites at Fort Hood.

A. Bridges: generally wooden or iron pilings and associated hardware.

B. Carvings: usually dates or names engraved in the limestone caprock.

C. Chimney falls: either brick or stone with mortar attached and possible evidence of burning. Bricks that have been subjected to intense heat will exhibit a greenish-colored glaze that results from silicas in the clay being drawn to the surface.

D. Cisterns: subsurface water storage facilities that are usually bell-shaped but may be square or cylindrical as well. They are generally constructed of brick or stone with the neck extending above the ground's surface and are plastered with mortar on the interior to hold the water. Cisterns are generally fitted with a cover (though the covers are not found with the cisterns) so that a pipe can drain rain water from the gutters of a nearby structure.

E. Concrete piers: these are generally trapezoidal or rectangular in shape and used to support a structure. They may be used in combination with stone or wooden stumps.

F. Concrete slabs: these usually represent sidewalks or slab structures on late dating sites.

G. Concrete and stone water tanks: above ground water storage facilities associated with windmills. These are usually quite tall (3 m or more) and wide (3 m in diameter or more).

H. Corrals: small fenced or stone enclosures for livestock.

I. Dams: low concrete and stone walls crossing a water way.

J. Depressions: these low sunken features may represent former privy, root cellar or storm cellar locations.

K. Dip tanks: commonly used in the 1920s and 1930s for tick infestation in cattle, these concrete features may have a concrete loading platform with an abrupt drop-off into the subsurface dip tank. The tank is a narrow passage just wide enough for a single cow to walk through with a sloping exit up to another concrete platform. Fenced corrals would be common at either end of this feature.

L. Domestic plants: some plants have been identified as markers for historic sites and generally include (1) large live oak trees, (2) invading mesquite trees, (3) border grass along pathways, (4) perennial flowers such as daffodils or irises, and (5) rose bushes.

M. Drainage Ditch: a depressed linear feature for drainage of water.

N. Extant structures: few standing or partially standing structures remain at Fort Hood and should be carefully recorded if found.

O. Fencelines/fenceposts: barbed wire fencelines and wooden fenceposts, designating property boundaries, field boundaries or corrals.

P. Foundations: for domestic dwellings and outbuildings are common and generally represented by brick, stone or wooden piers in some type of linear arrangement that can be recognized as a building foundation. More common, however, are loose foundation stones and bricks bulldozed into piles.

Q. Graves: community cemeteries or isolated family grave sites.

R. Paving stones: flat flagstones either *in situ* or loose.

S. Roads: historic roads are probably more apparent on aerial photographs than in the field and will appear as a linear sunken feature that is heavily overgrown with vegetation. Portions of it may be disturbed.

T. Root cellars: rectangular subsurface features for storing vegetables and measuring approximately 1 x 2 m with a depth of about 1.5 m. These may be unlined or lined with wood, brick or stone. During use, these would probably have had some type of wooden plank covering.

U. Rubble: rubble piles often represent structures that have been bulldozed by the Army and should be examined for structural remains (foundation stones, bricks from chimney falls, nails, window glass, etc.).

V. Stock tanks: large circular water impoundments with a man-made berm along one edge. These are commonly called "stock tanks" in Texas but known as "stock ponds" elsewhere.

W. Stone walls: dry laid stone walls are common in some areas of Fort Hood and probably represent early property lines or field boundaries during initial clearing of the land.

X. Troughs: above ground water or feeding containers. They include small concrete cylindrical basins, approximately 60 cm in depth and 60 cm in diameter, and large rectangular stone or concrete features, both of which rest on the ground; and covered wooden or metal bins elevated on wooden legs.

Y. Wells: deep and narrow circular shafts lined with brick or stone. These should not be confused with cisterns or concrete water/feeding troughs.

Z. Windmills: blade parts or iron leg remains may be found, possibly in association with concrete footings, and will probably be found near large concrete tanks that store the water pumped by windmills.

AA. Other: any cultural feature that does not fall into the above categories should also be described.

Historic Site Chronological Indicators

Ceramics are usually the best chronological indicator on historic sites, but for late nineteenth and early twentieth century sites, such as those at Fort Hood, glassware is believed to be a better indicator. For metal artifacts, patent numbers and trademarks generally give the best chronological information. The following paragraphs address the chronological significance of artifacts that are most likely to be found at Fort Hood. A complete listing of historic artifacts found in the Delivery Orders 1 and 6 surveys is given in Appendix IX; selected artifacts are pictured in Figures 20 and 21.

A. Ceramics (Figures 20 and 21)

1. Coarse earthenwares: these low-fired soft-paste ceramics are found infrequently on historic sites at Fort Hood. They are usually red paste utilitarian wares such as crocks, jugs, jars, platters, and mugs prior to 1850 (Ketchum 1983:10). After 1850, these "redwares" are usually confined to flowerpots and drain tiles. "Yellowware" bowls with pink and blue slip banding, on the other hand, occur frequently at Fort Hood.

2. Whitewares: Creamware (1760-1820), a refined white paste earthenware with a yellowish-tinged clear lead glaze and pearlware (1780-1830), a refined white paste earthenware with a bluish-tinged clear lead glaze, were the precursors of the nineteenth century whitewares produced from about 1830 on into the early twentieth century (Ketchum 1983:21; Price 1979). From 1830-1860, whitewares are nearly indistinguishable from the pearlwares because many of the decorations were the same. The primary difference is that the glaze is clear so they appear whiter plus the paste has been improved upon and is harder. The term "ironstone" is sometimes used to refer to these wares but is generally not used. The decorations that occur most frequently are: annular (or banded), edge-decorated, sponged, cut sponged, stamped, stenciled, and transferprinted.

Annular ware is easily recognized by the multiple bands that occur below the rim of each vessel, usually a bowl or mug form. Below the bands, on the body of the vessel, other decorations may occur. These are generally one of the following: (1) mocha—a dendritic brown design on rust and less frequently on blue or green, (2) marbled—a cloudy mixture of colors swirled together, (3) swirled—a mixture of colors trailed across the vessel in a manner resembling fingerpainting, (4) cat's eye—a mixture of colors applied by finger resembling a cat's eye, and (5) engine-turned—an impressed geometric design.

Edge decorated wares are mostly limited to "shell-edge" which is a feather-like impression along the rim, mostly of plates, and is generally painted blue over the impressions. Tableware that has a single band along the rim is also referred to as edge decorated for this period.

Sponged wares (sometimes called spatterware) have had the decoration applied by a sponge, usually in bright red, green, blue, or lavender, that may cover the entire vessel.

Cut sponged wares are the same except that a design has been cut from the sponge and stamped on the vessel—usually a crude flower form.

True stamped wares have a much finer and delicate design than the cut sponged wares that generally occurs as a border design.

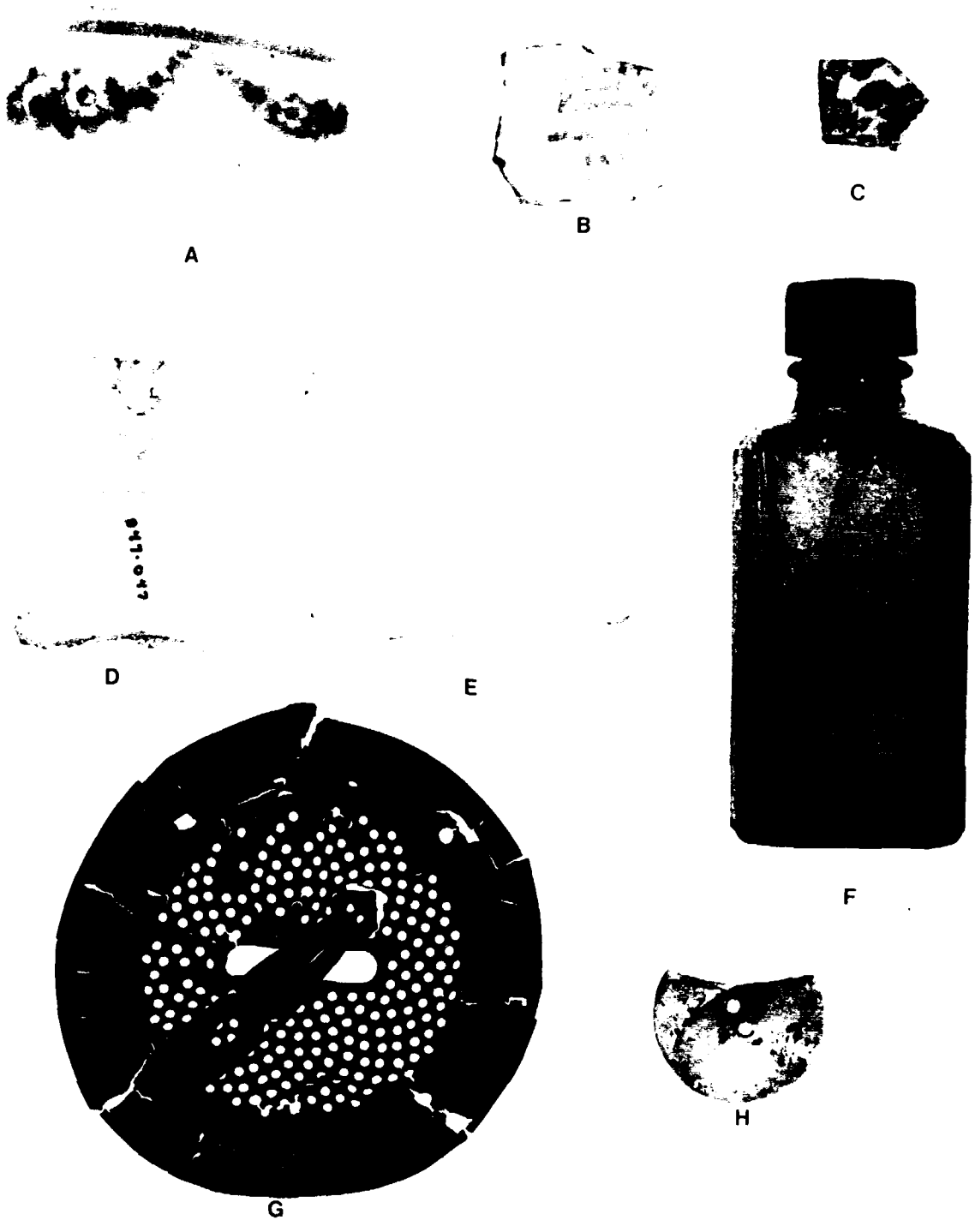

Figure 20. Historic Artifacts Recovered from Delivery Order No. 1 Survey: (A) decal-decorated semiporcelain (1900+); (B) whiteware with partial maker's mark; (C) transferprinted whiteware; (D) aqua bottle glass with improved tooled finish (1880-1915); (E) pink Depression glass (1930-1940); (F) emerald green bottle by Owens-Illinois Glass Co. (1930-1954); (G) lantern part; (H) shell button fragment.

Figure 21. Historic Artifacts Recovered from Delivery Order No. 6 Survey: (A) Bristol-glazed stoneware with partial maker's mark (1920+); (B) whiteware with stenciled decoration; (C) whiteware with decal decoration (1900+); (D) machine-made bottle glass (1903+); (E) improved-tooled aqua bottle glass (1880-1915); (F) lavender glass canning jar spring-clip lid (1880-1918); (G) cut nail; (H) pocket knife.

And finally, transferprinted decorations are applied with an inked waxed paper onto which the design was transferred from a copper plate engraving. Blue is the most common color, but black, brown, green, lavender, red, etc., also occur. "Flown" blue, which is a variation of transferprinting, also occurs during this period and reappears in the 1890s.

By 1855, a trend towards undecorated whitewares began and continued up until about 1930 (Wetherbee 1980). Prior to 1900, these wares are characterized by a molded rim design but later are completely devoid of decoration. Around 1900, decal decorated wares were available in the United States but did not become popular until the 1930s (Lehner 1980). The decals are generally polychrome floral designs that can be scratched off with use. The edge of the decal can be felt and should not be confused with transferprinted wares which are always monochrome and rarely have two colors applied one on top of the other. These decorations occur on whiteware, semiporcelain, and porcelain.

3. Stoneware: this ware is a nonporous hard-paste ware that has been fired at a higher temperature than the whitewares. The early white paste earthenwares, creamware and pearlware, are fired at a temperature so low that the paste can be scratched with a fingernail. The later whitewares have been improved and are harder, hence the term "ironstone." Stoneware, however, actually has ground flint in the paste, causing it to be harder. The paste colors usually fall within the ranges of gray and tan, and vessel form is utilitarian (i.e., crocks, jugs, butter churns, and milk pans). Stonewares predating 1900 generally have a salt glaze which is clear with an "orange peel" finish (Noel-Hume 1969). Interiors are often slipped with a matte brown Albany slip, a clay source from New York. After 1900, a Bristol glaze is more common. This glaze is a thick creamy white glaze that sometimes appears to be pitted. It is used for the interior and exterior, however, all combinations of the Albany slip and Bristol glaze occur. The most common is a Bristol glazed exterior and an Albany slipped interior. Blue Bristol glazes also occur frequently on chamber pots with molded decoration.

4. Semiporcelain: this ware is a fine thin tableware with a high fired white paste and a clear alkaline glaze. The paste has somewhat of a grainy texture and decal decorations or oriental decorations are common (Ketchum 1983:21; Lehner 1980). It occurs infrequently during the late nineteenth and early twentieth century at Fort Hood.

5. Porcelain: this is the highest fired ware and is very thin with a smooth glass-like texture (Ketchum 1983:21). Decal decorations are, again, popular on this ware. Overglaze oriental designs are also common. Porcelain has generally been an expensive ware and occurs infrequently at Fort Hood during the late nineteenth and early twentieth centuries.

B. Glassware (Figures 20 and 21)

1. Fire polished (?-1855), flanged or folded finishes (?-1870): these are the earliest types of glass bottle finishes (Deiss 1981; Lorrain 1968) and are rarely found on Fort Hood sites. Fire polished finishes result from breaking the bottle neck from a blow-pipe and then smoothing the roughened edges in a fire. Flanged and folded finishes are done similarly except that while the glass is still warm the lip is flared (flanged) outward for easier pouring, or completely folded over.

2. Applied string finishes (?-1845): these bottle finishes are made the same way as a fire polished finish except that an extra band of glass has been applied around the lip and exhibits the impression from a string used in holding the bottle cork in place. This is also rarely found at Fort Hood.

3. Applied tooled finishes (1825-1875): these bottle finishes are found infrequently at Fort Hood and can be identified by the obvious piece of glass that has been applied to the bottle neck. It has been "tooled" with a lipping shears so that its shape is regular. Lipping usually occurs on the exterior below the tooled portion of the lip where it attaches to the bottle. A ridge can

also be felt inside the bottle neck as further evidence that the finish has been applied.

4. Improved tooled finish (1870-1915): these bottle finishes occur frequently on Fort Hood sites and are characterized by their regular shaping. The lipping shears have been used directly on the unfinished bottle neck without the application of more glass as in the applied tooled finish. The easiest identifying characteristic is the absence of mold lines on either side of the bottle immediately below the tooled finish. The mold lines may stop on the shoulder of the bottle but usually extend up the lip almost to the finish.

5. Three-piece dip bottom mold (1830-1905): bottles exhibiting this type of mold method have seams encircling the shoulder and one on either side extending upwards from the shoulder. They are not common on Fort Hood sites.

6. Snap case (1860-1915): this type of mold method leaves no seams but indentations on the body of the bottle may be apparent where the snap case grips it.

7. Three-piece post bottom mold (1858+): a circular seam appears on the base of bottles made by this method with one seam extending out and up either side of the bottle all the way to the finish.

8. Three-piece cup bottom mold (date unknown but seems to coincide with the three-piece post bottom): a seam encircles the bottle just above the base and has one seam extending up either side of the bottle to the finish.

9. Owens scar (1904-1969): an irregular feathery circular suction cut-off scar on the base of machine-made bottles, sometimes extending up onto the sides of the bottle (Miller and Pacey 1985). Note that machine-made bottle finishes have mold seams extending up and over the bottle lip.

10. Valve mark (1935-1955): a small (circa 1 cm diameter) regularly shaped circular scar on machine-made bottle bases (Miller and Pacey 1985).

11. "Federal Law Prohibits" (1933-1964): usually inscribed on bottle sides just beneath shoulder or just above base (Toulouse 1971).

12. "Duraglas" in script (1940-1963) (Toulouse 1971:170).

13. "Duraglas" printed (1964-present) (Toulouse 1971:170).

14. Lavender glass (1880-circa 1918): this glass is a result of attempts to decolorize glass because of the many impurities that can cause it to be various colors (greens, browns, yellows, etc.) (Toulouse 1969:145-146). Manganese dioxide was imported from Germany until 1918 and used as a decolorant in glassware. Exposure to the sun caused it to turn lavender or purple as did the heat from machine manufacture. This is an important chronological marker for historic sites at Fort Hood.

15. Carnival glass (1905-1935): an iridescent pressed tableware given away at carnivals during the early part of the century (Florence 1977).

16. Depression glass (1930-1940): a pressed glass tableware usually occurring in pale pink and pale green colors and to a lesser extent in pale blue and amber (Florence 1983, 1984).

C. Trademarks

Trademarks are the most accurate method of dating historic artifacts since their use has usually been documented. Ceramic trademarks are usually stamped in ink on the base of vessels but may be found on other parts of the vessel as well. Glass trademarks usually consist of an emblem on the base of bottles. In their absence, manufacturer's names or product names are also helpful. Glass tableware generally does not have trademarks present although some does. Metal

is less easily identified and dated because of corrosion, however, manufacturer's names occur with some frequency on various metal items.

D. Building Materials (Figure 21)

Few building materials can be precisely dated. However, some items can provide limited information.

1. Nails: the preponderance for cut nails over wire nails, or vice versa, can be of significance. The pennyweight of whole nails can also aid in structural identification (Fontana and Greenleaf 1962; Nelson 1968).

2. Window glass: measurements on window glass thickness have been used for dating historic sites although there are many limitations with this method (Moir 1983; Roenke 1978).

3. Bricks: some bricks have been stamped by their manufacturer. Also, crudely made bricks may be evidence of either early manufacture or local manufacture (Garlick n.d.).

4. Barbed wire: barbed wire types can be identified, but their use as a chronological indicator is limited since most were patented during a small period of time and were used over a long period of time (Glover 1980).

5. Log notching: while log structural remains are not expected, the method of notching in structures that are found may be useful in determining a date of construction (Jordan 1978).

E. Miscellaneous

Many "modern" artifacts, such as plastic, rubber, or military debris, etc., occur on historic sites at Fort Hood. While these may seem unimportant, their presence is useful in determining the length of occupation of a site or its disturbance. Floral and faunal materials are generally not considered useful since their date of deposit cannot be determined.

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APPENDIX V

PREHISTORIC SITE CODING FORMAT

by

David L. Carlson and Erwin Roemer, Jr.

FORT HOOD PREHISTORIC SITE CODING FORMAT

ENVIRONMENTAL VARIABLES

TARL: TARL trinomial site number (if available).

FIELD: SITE field number (if available).

EASTQUAD: Quad Easting (southeastern corner of square kilometer, to be read X 1000 m).

NORTHQUAD: Quad Northing (same as above).

PROJECT: Project (most recent). There are nine choices: "FY78," fiscal year 1978; "BS78," "brave shield" sample of 1978; "FY79," fiscal year 1979; "F80S," spring of fiscal year 1980; "F80F," fall of fiscal year 1980; "FY81," fiscal year 1981; "FY82," fiscal year 1982; "FY83," fiscal year 1983; and "FY84," fiscal year 1984.

EASTING: UTM Easting (The most precise location of the site's center, rounded to the nearest 10 m).

NORTHING: UTM Northing (same as above).

DRAINAGE: Drainage. This is the major drainage whose basin contains the site. There are five choices:

1 - Leon River
2 - Owl Creek
3 - Cowhouse Creek
4 - Nolan Creek
5 - Lampasas River

ENV_ZONE: Environmental Zone. This is a broad classification divided into three choices:

1 - Lowland (a zone devised by Fort Hood archaeologists to portray the bottomland associated with perennial and intermittent streams)
2 - Intermediate upland (land higher than the lowland zone, but not including the bedded, massive limestone found in certain portions of Fort Hood)
3 - Upland (the bedded, massive limestone coded "1" on the Engineering Geology maps of Fort Hood)

CRK_CRST: Creek/Crest Classification. This locates a site in nearest relation to a major drainage or a topographic divide separating drainages.

1 - Creek
2 - Crest

LANDFORM: Landform. These are physiographic headings defined by the Fort Hood archaeologists. As a refinement of the Environmental Zone, the initial coding here has been based on notes. Certain categories occasionally overlap to present problems for coders. Also, identification of various terrace types (codes 8-10) was difficult and the general terrace code (7) was used more often. Many sites appear in rather nondescript physiographic settings, and the slope designation (Intermediate Upland, code 15) was common. Because the codes below may be formed into new variables by the computer, divisions such as that between "hillock" and "knoll" can be easily adjusted.

1 - Outlier (may include eroded buttes)
2 - Buttes (cf. Reed Mountain near Quad E24/N52)
3 - Ridge/Plateau (these may be large areas and correspond to bedded massive limestone)
4 - Bench (upland associated)
5 - Spur (upland associated)
6 - Draw (upland associated)
7 - Terrace (see discussion above)
8 - Primary Terrace
9 - Secondary Terrace
10 - Tertiary Terrace
11 - Rudimentary Terrace (usually not visible on maps)
12 - Escarpment Edge (bedded massive limestone escarpments)
13 - Hillock (considered slightly larger than a knoll)
14 - Knoll
15 - Slope (Intermediate Upland, see discussion above)
16 - Interfluvial (type of slope)
17 - Bank (type of slope—on edge of intermittent stream)
18 - Drainage Divide (area between two major watersheds)

POSITION: Position. This locates the site relative to the landform. For example, a site may be at the base of a butte.

1 - Top
2 - Slope
3 - Base

ELEVATION: Elevation (feet).

VEG_ZONE: Vegetation Zone. These categories were interpreted directly from the Environmental Ground Tactical Data Maps of Fort Hood. The numerical codes and titles used here are those of the maps.

1 - Baregrounds
2 - Croplands
3 - Grasslands
4 - Grasslands with scattered trees
5 - Wooded area (0- 25%)
6 - Wooded area (25- 50%)
7 - Wooded area (50- 75%)
8 - Wooded area (75-100%)
9 - Thick brush

P_WATER: Perennial Water. The first (decimal place) number of the codes is equivalent to the major Drainage coding of columns 29-30. Numbers have been added to form series of less perennial drainages which connect to the major drainage. Minor perennial drainages are defined by any occurrence of the solid or long-dashed blue lines indicated on the basic terrain maps of Fort Hood. Intermittent streams and water courses shown by dotted lines are not included.

10 - Leon River
11 - Shoal Creek
20 - Owl Creek (below Preacher's Creek)
21 - Preacher's Creek (below southern edge of quad E29/N57)
22 - Flint Creek (below southern edge of quad E39/N57)
30 - Cowhouse Creek
31 - Brown's Creek (below eastern center of quad E19/N55)
32 - House Creek (below eastern center of quad E19/N55)
33 - Table Rock Creek (western edge of quad E2/N56)
34 - Settlement Branch (tributary of Table Rock, below center of quad E0/N53)
35 - Bee House Creek (west of Fort Hood near quad E6/N61)
36 - Stampede Creek
37 - Tributary to Stampede Creek
38 - Two Year Old Creek
39 - Waddle Hollow
40 - Nolan Creek
41 - North Nolan Creek (below stock tank in quad E31/N47)
42 - South Nolan Creek (below quad E19/N43)
43 - Tributary of South Nolan Creek (below quad E19/N43)
50 - Lampasas River
51 - Clear Creek (below northeastern corner of quad E5/N31)
52 - Reese Creek (below southern edge of quad E16/N32)
60 - Cottonwood Creek
61 - Unnamed tributary to Cottonwood Creek

DIST_P_W: Distance to Perennial Water (m). This is a straight measurement in meters from the site to the nearest perennial water, using the same drainages offered above. Note that the nearest perennial water is not always the drainage basin that contains the site.

N_WATER: Nearest Water (m). Drainages as above (perennial water), or:

1 - Intermittent Creek (shown by orange dotted lines on the basic terrain maps of Fort Hood)
2 - Spring

Many sites are near intermittent creeks (1) which are very minor watercourses, normally dry.

DIST_N_W: Distance to Nearest Water (m). This is a measurement to the drainage identified as nearest water.

AREA: Area (square meters, obtained from site records)

EXPOSURE: Exposure. Coded or commented on in site records, this is an assessment of the site's ground cover and visibility.

1 - Poor
2 - Fair
3 - Good

CONDITN: Condition. An assessment of the site's condition was coded from the most recent field notes.

1 - Destroyed
2 - Poor
3 - Fair
4 - Good
5 - Excellent

PCT_DIST: % Disturbed. This is a judgmental assessment made by the field recorders.

SLOPE: Slope. The basic terrain maps of Fort Hood provide a ground slope classification of six choices:

1 - 0- 3% (basically flat)
2 - 3- 10%
3 - 10- 30%
4 - 30- 45%
5 - 45-100%
6 - 100+%

TYPE: Site Type. The most appropriate qualitative label is coded here for prehistoric or historic sites. The coding here is presently incomplete but will have great importance for the study of site functions. To allow for future categories, the prehistoric series begins at zero, and historic sites begins with 50.

0 - Unknown
1 - Cave
2 - Rockshelter
3 - Petroglyph
4 - Pictograph
5 - Midden
6 - Burned rock scatter with no lithics
7 - Burned rock scatter with lithics
8 - Single burned rock mound
9 - Multiple burned rock mounds
10 - Lithic scatter (chipping debris)
11 - Lithic quarry (on-site lithic resources)
12 - Other

CULTURAL VARIABLES

FIELD: Site Field Number

FEATURE: Features Present:

1 - Slab hearth
2 - Burned rock midden
3 - Burned rock hearth
4 - Burned clay hearth
5 - Shell concentrations
6 - Rock cairn
7 - Numbers 3 and 5 above
8 - "Wall"/windbreak
9 - Midden associated with rock shelter

CHARCOAL: Charcoal
0 - Absent
1 - Present

BONE: Bone
0 - Absent
1 - Present

SHELL: Shell
0 - Absent
1 - Present

DENSITY: Artifact Density
0 - None
1 - Low
2 - Medium
3 - High

B_ROCK: Burned Rock
0 - Absent
1 - Light
2 - Medium
3 - Heavy

FLAKES: Flakes
0 - Absent
1 - Present

CHIPS: Chips
0 - Absent
1 - Present

B_TYPE1: Biface Type 1
0 - Absent
1 - Present

B_TYPE2: Biface Type 2
0 - Absent
1 - Present

B_TYPE3: Biface Type 3
0 - Absent
1 - Present

BORER: Borer
0 - Absent
1 - Present

B_SCRAPR: Biface Scraper
0 - Absent
1 - Present

MOD_BIF: Other Modified Biface
0 - Absent
1 - Present

DART: Dart Point
0 - Absent
1 - Present

ARROW: Arrow Point
0 - Absent
1 - Present

BLANK: Blank
0 - Absent
1 - Present

RE_FLAKE: Flake with Retouch
0 - Absent
1 - Present

R_BLADE: Blade with Retouch
0 - Absent
1 - Present

S_SCRAPR: Side Scraper
0 - Absent
1 - Present

E_SCRAPR: End Scraper
0 - Absent
1 - Present

GRAVER: Graver
0 - Absent
1 - Present

BURIN: Burin
0 - Absent
1 - Present

OTHER_UN: Other Uniface
0 - Absent
1 - Present

CORE: Core
0 - Absent
1 - Present

HAMMER: Hammer
0 - Absent
1 - Present

CHOPPER: Chopper
0 - Absent
1 - Present

MANO: Mano
0 - Absent
1 - Present

METATE: Metate
0 - Absent
1 - Present

GRO_STON: Other Ground Stone
0 - Absent
1 - Present

INTERVAL: Number of 5 m Sampling Intervals

DEBITAGE: Debitage Count (total)

TOOLS: Tool Count (total)

ECOFACTS: Ecofact Count (total)

B_ROCK: Burned Rock
0 - Absent
1 - Present, light
2 - Present, heavy

NOTE: Code as light is burned rock present in any location. Code as heavy only if heavy is the modal value for the transect.

CHRONOLOGICAL COMPONENTS

For each possible component leave blank if the component is not represented at the site. If the component is present, code the number of diagnostics from the site which indicate this time period.

PALEO: Paleoindian

ARCHAIC: General Archaic

E_ARCH: Early Archaic

M_ARCH: Middle Archaic

L_ARCH: Late Archaic

T_ARCH: Terminal Archaic

L_PREHIS: Late Prehistoric

AUSTIN: Austin Phase

TOYAH: Toyah Phase

ML_ARCH: Middle to Late Archaic

SITE ATTRIBUTES

If a particular attribute or feature is not present on the site, leave the field blank. If it is present, code 1 for present/absent attributes (e.g., lithic scatter and lithic procurement) and the number of features for the others (e.g., the number of mounds or rockshelters).

LITHIC_S: Scatter of lithic debitage

BROCK_S: Scatter of burned rock

ROCKSH: Rockshelter or cave

LITHIC_P: Evidence of lithic procurement or lithic resources are available on or adjacent to the site

SPRING: Spring nearby

MIDDEN: Cultural midden (e.g., burned rock, charcoal, ash, bone)

APPENDIX VI
HISTORIC SITE CODING FORMAT

by
Shawn Bonath Carlson

FORT HOOD HISTORIC SITE CODING FORMAT

ENVIRONMENTAL VARIABLES

TARL: TARL trinomial site number (if available).

FIELD: SITE field number (if available).

EASTQUAD: Quad Easting (southeastern corner of square kilometers, to be read X 1000 m).

NORTHQUAD: Quad Northing (same as above).

PROJECT: Project (most recent). There are nine choices: "FY78," fiscal year 1978; "BS78," "break shield" sample of 1978; "FY79," fiscal year 1979; "F80S," spring of fiscal year 1980; "F80F," fall of fiscal year 1980; "FY81," fiscal year 1981; "FY82," fiscal year 1982; "FY83," fiscal year 1983; and "FY84," fiscal year 1984.

EASTING: UTM Easting (The most precise location of the site's center, rounded to the nearest 10 m).

NORTHING: UTM Northing (same as above).

DRAINAGE: Drainage. This is the major drainage whose basin contains the site. There are five choices:

1 - Leon River
2 - Owl Creek
3 - Cowhouse Creek
4 - Nolan Creek
5 - Lampasas River

ENV_ZONE: Environmental Zone. This is a broad classification divided into three choices:

1 - Lowland (a zone devised by Fort Hood archaeologists to portray the bottomland associated with perennial and intermittent streams)
2 - Intermediate upland (land higher than the lowland zone, but not including the bedded, massive limestone found in certain portions of Fort Hood).
3 - Upland (the bedded, massive limestone coded "1" on the Engineering Geology maps of Fort Hood).

CRK_CRST: Creek/Creek Classification. This locates a site in nearest relation to a major drainage or a topographic divide separating drainages.

1 - Creek
2 - Crest

LANDFORM: Landform. These are physiographic headings defined by the Fort Hood archaeologists. As refinement of the Environmental Zone, the initial coding here has been based on map interpretations supplemented by site notes. Certain categories occasionally overlap to present problems for coders. Also, identification of various terrace types (codes 8-10) was difficult and the general terrace code (7) was used more often. Many sites appear in rather nondescript physiographic settings, and the slope designation (Intermediate Upland, code 15) was common. Because the codes below may be formed into new variables by the computer, divisions such as that between "hillock" and "knoll" can be easily adjusted.

1 - Outlier (may include eroded buttes)
2 - Buttes (cf. Reed Mountain near Quad E24/N52)
3 - Ridge/Plateau (these may be large areas and correspond to bedded massive limestone)
4 - Bench (upland associated)
5 - Spur (upland associated)
6 - Draw (upland associated)
7 - Terrace (see discussion above)
8 - Primary Terrace
9 - Secondary Terrace
10 - Tertiary Terrace
11 - Rudimentary Terrace (usually not visible on maps)
12 - Escarpment Edge (bedded massive limestone escarpments)
13 - Hillock (considered slightly larger than a knoll)
14 - Knoll
15 - Slope (Intermediate Upland, see discussion above)
16 - Interfluvial (type of slope)
17 - Bank (type of slope - on edge of intermittent stream)
18 - Drainage Divide (area between two major watersheds)

POSITION: Position. This locates the site relative to the landform. For example, a site may be at the base of a butte.

1 - Top
2 - Slope
3 - Base

ELEVATION: Elevation (feet).

VEG_ZONE: Vegetation Zone. These categories were interpreted directly from the Environmental Ground Tactical Data Maps of Fort Hood. The numerical titles used here are those of the maps.

1 - Baregrounds
2 - Croplands
3 - Grasslands
4 - Grasslands with scattered trees
5 - Wooded area (0- 25%)
6 - Wooded area (25- 50%)
7 - Wooded area (50- 75%)
8 - Wooded area (75-100%)
9 - Thick brush

P_WATER: Perennial Water. The first (decimal place) number of the codes is equivalent to the major Drainage coding of columns 29-30. Numbers have been added to form series of less perennial drainages which connect to the major drainage. Minor perennial drainages are defined by any occurrence of the solid or long-dashed blue lines indicated on the basic terrain maps of Fort Hood. Intermittent streams and water courses shown by dotted lines are not included.

10 - Leon River
12 - Shoal Creek
20 - Owl Creek (below Preacher's Creek)
21 - Preacher's Creek (below southern edge of quad E29/N57)
22 - Flint Creek (below southern edge of quad E39/N57)
30 - Cowhouse Creek
31 - Brown's Creek (below eastern center of quad E19/N55)
32 - House Creek (below eastern center of quad E19/N55)
33 - Table Rock Creek (western edge of quad E2/N56)
34 - Settlement Branch (tributary of Table Rock, below center of quad E0/N53)
35 - Bee House Creek (west of Fort Hood near quad E6/N61)
36 - Stampede Creek
37 - Tributary to Stampede Creek
38 - Two Year Old Creek
39 - Waddle Hollow
40 - Nolan Creek
41 - North Nolan Creek (below stock tank in quad E31/N47)
42 - South Nolan Creek (below quad E19/N43)
43 - Tributary of South Nolan Creek (below quad E19/N43)
50 - Lampasas River
51 - Clear Creek (below northeastern corner of quad E5/N31)
52 - Reese Creek (below southern edge of quad E16/N32)
60 - Cottonwood Creek
61 - Unnamed tributary to Cottonwood Creek

DIST_P_W: Distance to Perennial Water (m). This is a straight measurement in meters from the site to the nearest perennial water, using the same drainages offered above. Note that the nearest perennial water is not always the drainage basin that contains the site.

N_WATER: Nearest Water (m). Drainages as above (perennial water), or:

1 - Intermittent Creek (shown by orange dotted lines on the basic terrain maps of Fort Hood)
2 - Stock Tank
3 - Spring

Many sites are near intermittent creeks (1) which are very minor watercourses, normally dry.

DIST_N_W: Distance to Nearest Water (m). This is a measurement to the drainage identified as nearest water.

AREA: Area (square meters, obtained from site records).

EXPOSURE: Exposure. Coded or commented on in site records, this is an assessment of the site's ground cover and visibility.

1 - Poor
2 - Fair
3 - Good

CONDITN: Condition. An Assessment of the site's condition was coded from the most recent field notes.

1 - Destroyed
2 - Poor
3 - Fair
4 - Good
5 - Excellent

PCT_DIST: % Disturbed. This is a judgmental assessment made by the field recorders.

SLOPE: Slope. The basic terrain maps of Fort Hood provide a ground slope classification of six choices:

1 - 0- 3% (basically flat)
2 - 3- 10%
3 - 10- 30%
4 - 30- 45%
5 - 45-100%
6 - 100+%

TYPE: Site Type. The most appropriate qualitative label is coded here for prehistoric or historic sites. The coding here is presently incomplete but will have great importance for the study of site functions. To allow for future categories, the prehistoric series begins at zero, and historic sites begins with 50.

50 - Unknown Historic
51 - Cemetery
52 - Farm/Ranch
53 - Town
54 - Cattle Dip Tank
55 - Cistern
56 - Cattle Water Tank
57 - Well
58 - Bridge
59 - Dump
60 - Domestic Dwelling
61 - Windmill
62 - Carvings in Rock
63 - Dam
64 - School
65 - Springhouse
66 - Mill
67 - Cattle Water Trough
68 - Sheep Dip Tank
69 - Concrete Water Trough

CULTURAL VARIABLES

TARL: TARL trinomial site number

FIELD: Site field number

DENSITY: Density. Quantity of cultural material present.

0 - None
1 - Low
2 - Medium
3 - High

Chronological Period based on the site form and the evaluation of the survey team.

UNKNOWN: Unknown
0 - Absent
1 - Present

MIDDLE: Middle-nineteenth Century
0 - Absent
1 - Present

LATE: Late-nineteenth Century
0 - Absent
1 - Present

L_EARLY: Late-nineteenth/Early-twentieth Century
0 - Absent
1 - Present

EARLY: Early-twentieth Century
0 - Absent
1 - Present

DEP_P: Depression Period
0 - Absent
1 - Present

MILITARY: Military Period
0 - Absent
1 - Present

Ceramics observed on the site

C_EWARE: Coarse Earthenware
0 - Absent
1 - Present

UND_WW: Undecorated Whiteware
0 - Absent
1 - Present

DEC_WW: Decorated Whiteware
0 - Absent
1 - Present

STWARE: Stoneware
0 - Absent
1 - Present

PORCELN: Porcelain
0 - Absent
1 - Present

M_MARK: Maker's Mark
0 - Absent
1 - Present

PIPES: Tobacco Pipes
0 - Absent
1 - Present

C_TOYS: Ceramic Toys
0 - Absent
1 - Present

OTHER_C: Other Ceramics
0 - Absent
1 - Present

Glass observed on the site

BOT_GL: Bottle Glass
0 - Absent
1 - Present

BR_W_BOT: Brandy/Whiskey Bottles
0 - Absent
1 - Present

CANJAR: Canning Jars
0 - Absent
1 - Present

C_CREM: Cold Cream Jars
0 - Absent
1 - Present

CON_JAR: Condiment Jars/Bottles
0 - Absent
1 - Present

DEP_GL: Depression Glass
0 - Absent
1 - Present

INSULATOR: Insulator
0 - Absent
1 - Present

KER_LAM: Kerosene Lamp Parts
0 - Absent
1 - Present

MED_BOT: Medicine Bottles
0 - Absent
1 - Present

LAV_GL: Lavender Glass
0 - Absent
1 - Present

MLK_GLS_LL: Milk Glass Lid Liner
0 - Absent
1 - Present

SNUFF: Snuff Bottles
0 - Absent
1 - Present

TAB_WAR: Tableware
0 - Absent
1 - Present

OTHER_GL: Other Glass
0 - Absent
1 - Present

Metal observed on the site

BAR_HOOP: Barrel Hoops
0 - Absent
1 - Present

BUCKET: Buckets
0 - Absent
1 - Present

CAR: Car Parts
0 - Absent
1 - Present

CHAINS: Chains
0 - Absent
1 - Present

CLOTHING: Clothing Items
0 - Absent
1 - Present

FARM_MAC: Farm Machinery
0 - Absent
1 - Present

GUNS: Guns/Gun Parts
0 - Absent
1 - Present

H-TOOLS: Hand Tools
0 - Absent
1 - Present

HORSE: Horse Hardware
0 - Absent
1 - Present

HOUSEHLD: Household Goods
0 - Absent
1 - Present

PLOW: Plow Parts
0 - Absent
1 - Present

TINCAN: Tin Cans
0 - Absent
1 - Present

M_TOYS: Metal Toys
0 - Absent
1 - Present

TRACTOR: Tractor Parts
0 - Absent
1 - Present

WASHTUB: Washtubs
0 - Absent
1 - Present

OTHER_M: Other Metal
0 - Absent
1 - Present

Building material observed on the site

ASPHALT: Asphalt
0 - Absent
1 - Present

BRICKS: Bricks
0 - Absent
1 - Present

BRICK_MM: Brick with Maker's Mark
0 - Absent
1 - Present

FLAT_GL: Flat Glass
0 - Absent
1 - Present

FOUND_M: Foundation Material
0 - Absent
1 - Present

STR_HRDW: Structural Hardware
0 - Absent
1 - Present

TILES: Tiles
0 - Absent
1 - Present

TIN ROOFING: Tin Roofing Materials
0 - Absent
1 - Present

WOODEN: Wooden Building Materials
0 - Absent
1 - Present

OTHER_B: Other Building Material
0 - Absent
1 - Present

Miscellaneous materials observed on the site

BUT_BONE: Butchered Bone
0 - Absent
1 - Present

GRAPHITE: Graphite
0 - Absent
1 - Present

LEATHER: Leather
0 - Absent
1 - Present

PLAST: Plastic
0 - Absent
1 - Present

RUBBER: Rubber
0 - Absent
1 - Present

MORTAR: Mortar
0 - Absent
1 - Present

WINDMILL: Windmill Parts
0 - Absent
1 - Present

OT_MISC: Other Miscellaneous Materials
0 - Absent
1 - Present

Features observed on the site

BRIDGE: Bridge
0 - Absent
1 - Present

CHIMNEY: Chimney Fall/Hearth
0 - Absent
1 - Present

CISTERN: Cistern
0 - Absent
1 - Present

CON_PIER: Concrete Foundation Piers
0 - Absent
1 - Present

SLAB: Concrete Slab
0 - Absent
1 - Present

CTANK: Concrete Water Tank
0 - Absent
1 - Present

CORRAL: Corral
0 - Absent
1 - Present

DEPRESS: Depression
0 - Absent
1 - Present

DIPTANK: Dip Tank
0 - Absent
1 - Present

TREES: Domestic Vegetation
0 - Absent
1 - Present

STRUC: Extant Structure
0 - Absent
1 - Present

FENCE: Fence
0 - Absent
1 - Present

FOUND: Foundations
0 - Absent
1 - Present

STONES: Paving Stones
0 - Absent
1 - Present

CELLAR: Root Cellar
0 - Absent
1 - Present

RUBBLE: Rubble
0 - Absent
1 - Present

STOCK_T: Stock Tank
0 - Absent
1 - Present

WALL: Stone Wall
0 - Absent
1 - Present

TROUGH: Trough
0 - Absent
1 - Present

WELL: Well
0 - Absent
1 - Present

F_WINDML: Windmill
0 - Absent
1 - Present

F_OTHER: Other Features
0 - Absent
1 - Present

APPENDIX VII

TABULATION OF PROJECTILE POINT NOMINAL AND METRIC DATA

Individual Nominal Data by Type and Catalog Number.

CATALOG	NAME	VERTEX	HE_MOD*	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
35-3120	Alba	7	D	S	I	N	S	B	S	P
35-2972	Alba	7	D	S	S	N	S	B	S	P
36-3535	Alba	7	D	S	S	N	S	B	S	P
41-0266	Alba	7	D	S	S	N	S	B	E	V
36-3639	Alba	0								
41-0093	Angostura	5	D	S	S	N	X	X	S	T
35-2900	Angostura	5	D	S	S	N	X	X	S	T
35-0178	Angostura	5	D	I	R	N	X	X	S	T
40-1025	Angostura	3	X	E	I	N	X	X	X	X
36-4324	Angostura	3	X	E	I	N	X	X	X	X
41-0013	Angostura	3	X	E	I	N	X	X	X	X
44-0741	Angostura	3	X	E	I	N	X	X	X	X
36-3006	Angostura	3	X	R	I	N	X	X	X	X
35-2108	Angostura	3	X	R	I	N	X	X	X	X
44-0476	Angostura	3	X	R	I	N	X	X	X	X
40-1043	Angostura	3	X	R	I	N	X	X	X	X
37-0717	Angostura	3	X	R	S	N	X	X	X	X
40-1205	Angostura	3	X	E	S	N	X	X	X	X
40-1081	Angostura	3	X	E	S	N	X	X	X	X
43-0233	Angostura	3	X	E	E	N	X	X	X	X
40-0982	Angostura	0								
44-1632M	Angostura	0								
41-0250	Bulverde	7	D	S	S	N	I	B	S	P
40-1286	Bulverde	7	D	S	S	N	I	B	S	P
40-0404	Bulverde	7	D	S	S	N	I	H	S	P
40-0410	Bulverde	7	D	S	S	N	I	H	S	P
40-0841	Bulverde	7	D	S	S	N	I	H	S	P
41-0132	Bulverde	7	D	S	S	N	I	H	S	P
35-2914	Bulverde	7	D	S	S	N	I	H	S	P
35-2888	Bulverde	7	D	R	S	N	I	B	S	P
35-2896	Bulverde	7	D	E	S	N	I	H	S	C
36-3499	Bulverde	7	D	E	S	N	I	B	S	T
36-3471	Bulverde	7	D	E	S	N	I	B	S	T
36-3547	Bulverde	7	D	E	S	N	I	B	S	T
35-2924	Bulverde	7	D	S	S	N	S	B	S	P
35-2107	Bulverde	7	D	R	I	N	I	T	S	P
37-0458	Bulverde	7	D	S	S	N	I	T	S	T
37-0761	Bulverde	7	D	S	S	N	S	T	S	P
40-0520	Bulverde	7	D	S	S	N	S	T	S	P
38-0472	Bulverde	7	D	S	I	N	S	H	S	T
38-0814	Bulverde	7	D	S	I	N	S	H	S	T
40-0069	Bulverde	7	D	E	S	N	S	T	S	T
40-1041	Bulverde	7	D	S	I	N	I	B	S	P
40-1042	Bulverde	7	D	E	I	N	S	H	S	P
43-0106	Bulverde	7	D	E	S	N	I	H	S	P
44-0725	Bulverde	7	D	S	S	N	S	B	I	P
38-0852	Bulverde	0								
37-0366	Bulverde	0								
37-0636	Bulverde	0								
40-1274	Bulverde	0								
44-0359	Bulverde	0								
35-3129	Bulverde	0								
37-0004	Bulverde	0								
35-2752	Bulverde	0								
41-0094	Bulverde	0								
35-2349	Bulverde	0								
44-1016M	Bulverde	7	D	E	S	N	S	H	S	T
44-0904	Bulverde	0								
37-0359	Castroville	7	D	S	S	N	S	B	S	E
35-2649	Castroville	7	D	S	S	N	S	B	S	E
35-0150	Castroville	7	D	S	S	N	S	B	S	E
41-0384	Castroville	7	D	S	S	N	I	B	I	E
38-0479	Castroville	7	D	S	S	N	I	B	I	E
35-2396	Castroville	7	D	S	S	N	I	B	I	E
41-0219	Castroville	7	D	S	E	N	R	B	I	C
35-0147	Castroville	7	D	S	S	N	I	B	S	E
36-3680	Castroville	7	D	S	S	N	I	B	S	E
35-0151	Castroville	7	D	S	S	N	I	B	S	E
36-3031	Castroville	7	D	S	S	N	I	B	S	E
38-0469	Castroville	7	D	S	S	N	I	B	S	E
41-0037	Castroville	7	D	S	S	N	I	B	S	E
37-0056	Castroville	7	D	S	E	N	I	B	I	E
41-0006	Castroville	7	D	S	E	N	I	B	I	E
41-0065	Castroville	7	D	S	E	N	I	B	I	E
36-3711	Castroville	7	D	S	E	N	I	B	S	E
36-3057	Castroville	7	D	S	E	N	I	B	S	E
40-0331	Castroville	7	D	S	E	N	I	B	S	E
36-4317	Castroville	7	D	S	E	N	I	B	S	E
40-0840	Castroville	7	D	S	E	N	I	B	S	E
36-3304	Castroville	7	D	S	E	N	I	B	S	E
40-0406	Castroville	7	D	S	E	N	I	B	S	E
37-0627	Castroville	7	D	S	E	N	I	B	S	E
36-3069	Castroville	7	D	S	E	N	I	B	S	E

* HE_MOD=haft element modification; BLADE_SH=blade shape; BASE_OR=base orientation; SHOLD_SH=shoulder shape; SHOLD_OR=shoulder orientation; LATHF_SH=lateral haft element shape; LATHF_OR= lateral haft element orientation.

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
41-0221	Castroville	7	D	S	E	N	I	B	S	E
41-0213	Castroville	7	D	S	S	N	S	T	S	E
36-4049	Castroville	7	D	S	I	N	I	B	S	E
40-0517	Castroville	7	D	S	S	N	S	B	R	E
43-0034	Castroville	7	D	I	E	N	I	B	S	E
44-0770	Castroville	7	D	I	E	N	S	H	S	E
35-3099	Castroville	0								
40-1084	Castroville	0								
43-0406	Castroville	0								
35-3165	Castroville	0								
35-2390	Castroville	0								
44-0284	Castroville	0								
35-3022	Castroville	0								
36-4268	Castroville	0								
35-2152	Castroville	0								
35-2323	Castroville	0								
40-0068	Castroville	0								
35-3047	Castroville	0								
35-2147	Castroville	0								
36-3025	Castroville	0								
35-2385	Castroville	0								
36-4252	Castroville	0								
36-3922	Castroville	0								
40-0034	Castroville	0								
44-0020	Castroville	0								
37-0726	Castroville	0								
38-0238	Castroville	0								
35-2212	Castroville	0								
36-3925	Castroville	0								
44-1410M	Castroville	0								
44-1014M	Castroville	0								
44-0822	Castroville	7	D	S	E	N	S	B	S	E
47-0035	Castroville	0								
37-0369	Darl	7	D	S	I	N	S	T	S	E
41-0001	Darl	7	D	S	I	N	S	T	S	E
37-0356	Darl	7	D	S	I	N	S	T	S	E
36-3484	Darl	7	D	S	I	N	S	T	S	E
41-0322	Darl	7	D	S	I	N	S	T	S	E
41-0264	Darl	7	D	S	I	N	S	T	S	E
36-3055	Darl	7	D	S	I	N	S	T	S	E
38-0806	Darl	7	D	S	I	N	S	T	S	E
35-2946	Darl	7	D	S	I	N	S	T	S	E
35-2921	Darl	7	D	S	I	N	S	T	S	E
35-2639	Darl	7	D	S	I	N	S	T	S	E
36-3896	Darl	7	D	S	I	N	S	T	S	E
36-3487	Darl	7	D	S	I	N	S	T	S	E
35-2429	Darl	7	D	S	I	N	S	T	S	E
36-3531	Darl	7	D	S	I	N	S	T	S	E
36-3321	Darl	7	D	S	I	N	S	T	S	E
41-0032	Darl	7	D	S	I	N	I	T	S	E
43-0032	Darl	7	D	S	I	N	I	T	S	E
35-2959	Darl	7	D	S	E	N	I	T	I	C
35-2866	Darl	7	D	I	I	N	S	T	I	E
41-0116	Darl	7	D	E	I	N	S	T	E	V
41-0258	Darl	7	D	E	I	N	S	T	E	V
38-0326	Darl	7	D	E	I	N	I	T	S	E
41-0323	Darl	7	D	E	I	N	I	T	S	E
35-2325	Darl	7	D	E	S	N	I	H	S	E
40-0847	Darl	7	D	E	I	N	S	T	S	P
36-3520	Darl	7	D	E	I	N	S	T	S	P
38-0736	Darl	7	D	E	I	N	S	T	S	P
41-0257	Darl	7	D	E	I	N	S	T	S	P
35-2905	Darl	7	D	E	I	N	S	T	S	P
36-3898	Darl	7	L	E	I	N	S	T	E	E
35-2871	Darl	7	L	E	I	N	S	T	E	E
40-0370	Darl	7	D	S	I	N	S	T	I	E
35-2382	Darl	7	D	S	I	N	S	T	I	E
41-0268	Darl	5	L	E	I	N	X	X	I	C
35-3026	Darl	7	D	I	S	N	S	T	I	E
36-3699	Darl	7	D	S	S	N	I	T	S	P
36-4247	Darl	7	D	E	S	N	S	T	S	P
37-0363	Darl	7	D	S	S	N	S	T	S	E
37-0719	Darl	7	D	S	S	N	S	T	S	E
41-0203	Darl	7	D	S	S	N	S	T	S	E
41-0115	Darl	7	D	S	E	N	S	T	R	E
41-0241	Darl	7	D	S	E	N	S	T	R	E
36-3619	Darl	7	D	S	E	N	S	T	S	E
35-2431	Darl	7	D	S	S	N	S	T	R	E
41-0162	Darl	7	D	S	S	N	I	H	S	E
36-3068	Darl	7	D	S	S	N	I	T	I	C
41-0368	Darl	7	D	S	S	N	I	T	I	E
35-2445	Darl	7	D	S	S	N	I	T	I	E
36-3608	Darl	7	D	S	S	N	I	T	I	E
36-3036	Darl	7	D	S	S	N	I	T	I	E
36-3513	Darl	7	D	S	S	N	I	H	I	E
35-2326	Darl	7	D	S	I	N	I	H	I	E

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
36-3437	Darl	7	D	S	I	N	I	H	I	E
36-3534	Darl	7	D	S	I	N	I	T	I	E
35-3103	Darl	7	D	S	I	N	I	T	I	E
35-3163	Darl	7	D	S	I	N	I	T	I	E
35-2976	Darl	7	D	R	I	N	I	T	I	E
36-3302	Darl	7	D	R	I	N	I	T	I	E
35-2004	Darl	7	D	E	S	N	I	T	I	E
40-0529	Darl	7	D	E	S	N	I	T	I	E
35-3126	Darl	7	D	E	S	N	I	T	I	E
36-3023	Darl	7	D	E	E	N	I	T	R	E
36-4257	Darl	7	D	E	E	N	I	T	R	E
35-2021	Darl	7	D	E	S	N	S	T	S	E
35-0164	Darl	7	D	E	S	N	S	T	S	E
36-3965	Darl	7	D	E	S	N	S	T	S	E
36-3584	Darl	7	D	E	S	N	S	T	S	E
35-3024	Darl	7	D	E	S	N	S	T	S	E
35-3023	Darl	7	D	E	S	N	S	T	S	E
36-3754	Darl	7	D	E	S	N	S	T	S	E
36-3059	Darl	7	D	E	I	N	I	T	I	E
35-3072	Darl	7	D	E	I	N	I	T	I	E
35-2960	Darl	7	D	E	I	N	I	T	I	E
37-0371	Darl	7	D	E	I	N	I	T	I	E
40-0366	Darl	7	D	E	I	N	I	T	I	E
41-0237	Darl	7	D	E	I	N	I	T	I	E
35-3043	Darl	7	D	S	R	N	I	T	I	E
35-2966	Darl	7	D	E	S	N	I	T	I	C
35-2899	Darl	7	D	R	S	N	I	T	S	E
37-0625	Darl	7	D	E	S	N	I	T	I	E
37-0054	Darl	7	D	S	S	N	S	T	I	C
37-0357	Darl	7	D	S	I	N	S	T	R	V
38-0739	Darl	5	D	S	I	N	X	X	S	P
40-0715	Darl	7	D	S	I	N	S	T	S	P
40-0662	Darl	7	D	S	I	N	S	T	S	P
40-0974	Darl	5	L	E	R	N	I	T	I	C
43-0311	Darl	7	D	S	E	N	I	T	S	E
43-0258	Darl	7	D	S	S	N	S	T	S	P
44-0025	Darl	7	D	R	I	N	I	T	S	P
37-0497	Darl	0								
38-0019	Darl	0								
44-0727	Darl	0								
36-3494	Darl	0								
36-3423	Darl	0								
41-0211	Darl	0								
35-2928	Darl	0								
41-0337	Darl	0								
41-0137	Darl	0								
41-0438	Darl	0								
36-4278	Darl	0								
36-3433	Darl	0								
36-3454	Darl	0								
36-3434	Darl	0								
36-4251	Darl	0								
36-3432	Darl	0								
44-1271M	Darl	0								
44-0891	Darl	5	D	S	R	N	S	T	S	P
44-0892	Darl	0								
44-0893	Darl	7	D	S	S	N	I	T	I	E
47-0044	Darl	7	D	S	I	N	I	T	I	E
47-0114	Darl	0								
50-0008	Darl	0								
43-0235	Dawson	7	D	S	E	N	S	T	S	P
36-3110	Ellis	7	D	S	S	N	S	T	S	E
40-0977	Ellis	7	D	S	S	N	S	T	S	E
36-3063	Ellis	7	D	S	S	N	I	H	I	E
36-3655	Ellis	7	D	S	S	N	I	H	I	E
36-3595	Ellis	7	D	S	S	N	I	H	I	E
44-0696	Ellis	7	D	S	S	N	I	H	S	E
35-2931	Ellis	7	D	S	E	N	S	T	S	E
36-3483	Ellis	7	D	S	E	N	S	T	S	E
37-0749	Ellis	7	D	S	S	N	I	B	I	E
38-0466	Ellis	7	D	S	S	N	I	H	E	V
40-0184	Ellis	7	D	S	S	N	I	B	S	E
43-0357	Ellis	7	D	S	E	N	I	T	I	E
44-0191	Ellis	7	D	R	E	N	S	T	I	E
44-0559	Ellis	7	D	S	S	N	I	T	S	E
44-0726	Ellis	7	D	E	E	N	I	B	S	E
37-0751	Ellis	0								
41-0319	Ellis	0								
37-0759	Ellis	0								
38-0752	Ellis	0								
35-0157	Ellis	0								
36-3614	Ellis	0								
36-3065	Ellis	0								
35-2971	Ellis	0								
35-3106	Ellis	0								
35-3027	Ellis	0								

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
44-1458M	Ellis	7	D	S	S	N	I	B	S	P
44-1517M	Ellis	7	D	S	E	N	I	B	I	E
44-1011M	Ellis	7	D	S	S	N	I	B	S	E
50-0096	Ellis	0								
36-3703	Ensor	7	D	S	R	N	I	B	I	E
35-2970	Ensor	7	D	S	R	N	I	B	I	E
36-3934	Ensor	7	D	S	R	N	I	B	I	E
35-3132	Ensor	7	D	S	S	N	I	B	S	E
36-3357	Ensor	7	D	S	S	N	I	B	S	E
35-3131	Ensor	7	D	S	S	N	I	B	S	E
35-3038	Ensor	7	D	S	S	N	I	B	S	E
36-3524	Ensor	7	D	S	S	N	I	B	S	E
41-0088	Ensor	7	D	S	S	N	I	B	S	E
36-3457	Ensor	7	D	S	S	N	I	B	S	E
36-4184	Ensor	7	D	S	S	N	I	B	S	E
36-4244	Ensor	7	D	S	S	N	I	B	S	E
41-0216	Ensor	7	D	S	S	N	I	B	S	E
36-3554	Ensor	7	D	S	S	N	I	B	S	E
35-2880	Ensor	7	D	S	S	N	I	B	S	E
35-2393	Ensor	7	D	S	S	N	I	B	S	E
41-0109	Ensor	7	D	S	S	N	I	B	S	E
36-3358	Ensor	7	D	S	S	N	I	B	S	E
36-3019	Ensor	7	D	S	S	N	I	B	S	E
37-0670	Ensor	7	D	S	S	N	I	B	S	E
37-0370	Ensor	7	D	S	S	N	I	B	S	E
43-0409	Ensor	7	D	S	S	N	I	B	S	E
36-3810	Ensor	7	D	S	E	N	I	B	I	E
44-0714	Ensor	7	D	S	E	N	I	B	I	E
38-0018	Ensor	7	D	S	E	N	I	B	I	E
36-3111	Ensor	7	D	S	E	N	I	B	S	E
35-3149	Ensor	7	D	S	E	N	E	B	S	E
35-2958	Ensor	7	D	S	S	N	I	T	A	E
36-3527	Ensor	7	D	E	S	N	I	B	A	E
35-2954	Ensor	7	D	S	R	N	I	H	S	E
36-4272	Ensor	7	D	S	R	N	I	H	S	E
35-3133	Ensor	7	D	S	R	N	I	H	S	E
40-0976	Ensor	7	D	S	R	N	I	H	S	E
35-2174	Ensor	7	D	E	S	N	I	T	A	E
36-3571	Ensor	7	L	S	E	N	I	T	I	E
35-2922	Ensor	7	L	S	S	N	I	T	S	E
35-2353	Ensor	7	L	S	S	N	I	T	S	E
36-3020	Ensor	7	L	S	S	N	I	T	S	E
37-0060	Ensor	7	L	S	S	N	I	T	S	E
35-2213	Ensor	7	L	S	S	N	I	B	A	E
36-3453	Ensor	7	D	S	I	N	I	B	S	E
36-4033	Ensor	7	D	S	I	N	I	B	S	E
35-3134	Ensor	7	D	S	I	N	I	B	S	E
37-0760	Ensor	7	D	S	I	N	I	B	S	E
35-2448	Ensor	7	L	S	S	N	S	T	S	E
35-2154	Ensor	7	L	S	S	N	S	T	S	E
35-2158	Ensor	7	L	S	S	N	S	T	S	E
35-2354	Ensor	7	L	S	S	N	S	T	S	E
41-0321	Ensor	7	L	S	S	N	S	T	S	E
36-3005	Ensor	7	L	S	S	N	S	T	S	E
35-3157	Ensor	7	L	S	S	N	S	T	S	E
36-3056	Ensor	7	L	S	S	N	S	T	S	E
38-0407	Ensor	7	L	S	S	N	S	T	S	E
36-3493	Ensor	7	L	S	R	N	I	T	I	E
38-0024	Ensor	7	L	S	R	N	I	T	I	E
36-4246	Ensor	7	L	S	S	N	S	H	I	E
36-3565	Ensor	7	L	S	S	N	S	H	I	E
36-3526	Ensor	7	D	S	S	N	I	H	I	E
41-0087	Ensor	7	D	S	S	N	I	H	I	E
41-0365	Ensor	7	D	I	S	N	I	B	S	E
41-0214	Ensor	7	D	I	S	N	I	B	S	E
41-0461	Ensor	7	L	I	I	N	I	T	A	E
35-2176	Ensor	7	L	I	R	N	I	H	S	E
35-2206	Ensor	7	D	S	S	N	I	B	I	E
35-2953	Ensor	7	D	S	S	N	I	B	I	E
40-1297	Ensor	7	D	S	S	N	I	B	I	E
43-0036	Ensor	7	D	S	S	N	I	B	I	E
40-0716	Ensor	7	D	S	S	N	I	B	I	E
44-0032	Ensor	7	D	S	S	N	I	B	I	E
36-4046	Ensor	7	D	S	S	N	S	B	I	E
44-0783	Ensor	7	D	S	S	N	S	B	I	E
36-4253	Ensor	7	D	S	I	N	I	H	S	E
35-2917	Ensor	7	D	S	I	N	I	T	S	E
35-2979	Ensor	7	L	S	R	N	I	H	S	E
35-2645	Ensor	7	L	E	I	N	I	H	I	E
35-0182	Ensor	7	L	I	R	N	I	H	I	E
38-0389	Ensor	7	D	S	S	N	I	T	I	E
38-0734	Ensor	7	D	S	S	N	I	T	I	E
38-0819	Ensor	7	D	S	E	N	S	H	I	E
40-0717	Ensor	7	L	S	E	N	I	H	S	E
40-0942	Ensor	7	L	S	S	N	I	T	I	E
40-1077	Ensor	7	L	S	E	N	S	T	S	E

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
40-0944	Ensor	7	L	S	E	N	S	T	S	E
40-0405	Ensor	7	D	S	R	N	I	B	S	E
43-0030	Ensor	7	D	S	I	N	I	B	I	E
43-0400	Ensor	7	L	I	R	N	I	T	R	E
44-0716	Ensor	7	D	S	E	N	S	B	S	E
35-2175	Ensor	0								
36-3000	Ensor	0								
35-2908	Ensor	0								
41-0435	Ensor	0								
35-2637	Ensor	0								
35-2451	Ensor	0								
36-3597	Ensor	0								
36-3551	Ensor	0								
36-4212	Ensor	0								
36-3066	Ensor	0								
35-2356	Ensor	0								
35-2654	Ensor	0								
41-0210	Ensor	0								
36-3503	Ensor	0								
35-2889	Ensor	0								
41-0099	Ensor	0								
38-0023	Ensor	0								
40-0186	Ensor	0								
41-0056	Ensor	0								
44-0190	Ensor	0								
36-4249	Ensor	0								
38-0811	Ensor	0								
41-0355	Ensor	0								
37-0663	Ensor	0								
36-3422	Ensor	0								
40-0573	Ensor	0								
44-0712	Ensor	0								
44-0790	Ensor	0								
40-1038	Ensor	0								
44-0148	Ensor	0								
37-0778	Ensor	0								
36-3652	Ensor	0								
37-0774	Ensor	0								
36-3455	Ensor	0								
44-1494M	Ensor	0								
44-1041M	Ensor	7	L	S	E	N	I	H	I	E
44-1407M	Ensor	7	L	S	S	N	S	T	I	E
44-0844	Ensor	0								
44-0926	Ensor	0								
50-0010	Ensor	7	L	S	E	N	I	B	I	E
50-0011	Ensor	7	L	I	E	N	I	T	E	E
35-2956	Fresno	3	X	S	I	N	X	X	X	X
41-0031	Fresno	3	X	S	S	N	X	X	X	X
38-0483	Fresno	3	X	S	S	N	X	X	X	X
35-3141	Frio	7	L	I	R	N	I	H	S	E
36-3102	Frio	7	L	I	R	N	I	H	S	E
36-4182	Frio	7	L	I	R	N	I	H	S	E
36-4027	Frio	7	L	I	R	N	I	H	S	E
35-3148	Frio	7	L	I	R	N	I	H	S	E
36-3632	Frio	7	L	I	R	N	I	H	S	E
35-2446	Frio	7	L	S	R	N	S	T	I	E
36-3882	Frio	7	L	S	R	N	S	T	I	E
41-0089	Frio	7	L	S	R	N	S	T	I	E
35-2149	Frio	9	L	S	I	N	I	B	A	E
35-3073	Frio	9	L	S	I	N	I	B	A	E
41-0003	Frio	9	L	S	I	N	I	B	A	E
38-0046	Frio	7	L	S	I	N	I	H	A	V
40-1282	Frio	7	D	S	R	N	I	B	I	E
40-0978	Frio	7	D	I	R	N	I	B	I	E
36-3889	Frio	0								
38-0001	Frio	0								
38-0194	Frio	0								
36-3962	Frio	0								
50-0093	Frio	7	L	S	R	N	I	T	I	E
35-2635	Godley	7	D	E	E	N	S	T	S	E
36-3507	Godley	7	D	S	E	N	I	T	I	E
35-2009	Godley	7	D	S	E	N	I	T	I	E
35-3068	Godley	7	D	S	E	N	I	T	I	E
36-3509	Godley	7	D	S	E	N	I	T	I	E
41-0103	Godley	7	D	S	E	N	I	T	I	E
35-2018	Godley	7	D	E	E	N	S	T	I	C
35-2886	Godley	7	D	E	E	N	I	T	I	E
37-0631	Godley	7	D	E	E	N	I	T	I	E
36-4258	Godley	7	D	E	E	N	I	T	I	E
35-3032	Godley	7	D	E	E	N	I	T	I	E
35-3128	Godley	7	D	E	E	N	I	T	I	E
35-3142	Godley	7	D	S	E	N	I	T	S	E
40-0164	Godley	7	D	S	E	N	I	H	I	E
43-0046	Godley	7	D	S	S	N	I	T	I	C
44-0825	Godley	7	D	S	S	N	S	H	I	E
38-0854	Golondrina	3	X	E	R	N	X	X	X	X

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
41-0242	Marshall	0								
35-2965	Marshall	0								
37-0504	Marshall	0								
35-0152	Marshall	0								
35-2159	Marshall	0								
37-0752	Marshall	0								
40-0071	Marshall	0								
41-0434	Marshall	0								
44-1286M	Marshall	0								
44-1710M	Marshall	7	D	S	S	N	R	B	S	E
44-1482M	Marshall	7	DD	RS	SS	NN	II	BB	II	EE
44-1096M	Marshall	7	DD	SS	IR	NN	II	BB	SS	EE
40-0070	Martindale	7	DD	SS	RR	NN	II	BB	SS	EE
36-3505	Martindale		DD	SS	RR	NN	II	BB	SS	EE
35-0177	Martindale		DD	SS	RR	NN	II	BB	SS	EE
36-3480	Martindale	7	DD	SS	RR	NN	II	BB	SS	EE
38-0738	Martindale	7	DD	SS	RR	NN	II	BB	SS	EE
36-4337	Martindale	7	DD	SS	RR	NN	II	BB	SS	EE
35-2975	Martindale	7	DD	SS	RR	NN	IS	BB	SS	EE
43-0119	Martindale	7	DD	SS	RR	NN	SS	BB	SS	EE
40-1310	Martindale	7	DD	SS	RR	NN	SS	BB	SS	EE
35-3151	Martindale	7	DD	SS	RR	NN	SS	BB	SS	EE
35-0179	Martindale	7	DD	ES	RR	NN	IS	BB	II	EE
36-3884	Martindale	7	DD	SS	RR	NN	SS	BB	II	EE
36-3087	Martindale	7	DD	SS	RR	NN	SS	BB	II	EE
36-3012	Martindale	7	DD	SS	RR	NN	SS	BB	II	EE
36-4183	Martindale	7	DD	SS	RR	NN	SS	BB	II	EE
41-0238	Martindale	7	DD	SS	RR	NN	SS	BB	II	EE
37-0724	Martindale	7	DD	SS	RR	NN	SS	BB	II	EE
37-0735	Martindale	7	DD	SS	RR	NN	IS	BB	II	EE
40-1307	Martindale	7	DD	SS	RR	NN	SS	BB	EE	EE
43-0107	Martindale	7	DD	SS	RR	NN	II	BB	EE	EE
44-0146	Martindale	7	DD	IS	RR	NN	II	BB	SS	EE
44-0735	Martindale	7	D	E	R	N	I	B	S	E
36-4261	Martindale	0								
35-2459	Martindale	0								
37-0360	Martindale	0								
37-0329	Martindale	0								
36-3519	Martindale	0								
44-1324M	Martindale	7	D	S	R	N	I	B	I	E
44-1342M	Martindale	7	D	S	R	N	I	B	I	E
44-1455M	Martindale	0								
35-2207	Montell	9	D	S	A	I	I	B	I	E
35-3139	Montell	9	DD	SS	AA	II	II	BB	II	EE
36-4298	Montell	9	DD	SS	AA	II	II	BB	II	EE
36-3555	Montell	9	DD	SS	AA	II	II	BB	II	EE
35-2146	Montell	9	DD	SS	AA	II	II	BB	II	EE
37-0489	Montell	9	DD	SS	AA	II	II	BB	II	EE
40-0962	Montell	9	DD	SS	AA	II	II	BB	II	EE
36-3592	Montell	9	DD	SS	AA	II	II	BB	II	EE
41-0061	Montell	9	DD	IS	AA	II	IS	BT	IS	EE
35-2691	Montell	9	DD	SS	AA	II	II	BH	ES	EE
35-2948	Montell	9	DD	SS	AA	II	II	BB	SS	EE
40-0066	Montell	9	DD	SS	AA	II	IS	BT	IS	EE
37-0731	Montell	9	DD	SS	AA	II	SI	BB	IS	EE
38-0750	Montell	9	DD	ES	AA	II	IR	BB	IS	EP
40-0401	Montell	9	DD	SS	AA	II	SS	HH	SS	PP
40-0537	Montell	9	D	S	A	I	S	H	S	P
44-0749	Montell	9								
41-0240	Montell	0								
40-0064	Montell	0								
36-4245	Montell	0								
35-2937	Montell	0								
40-0533	Montell	0								
36-4335	Montell	0								
40-0722	Montell	0								
44-0560	Montell	0								
38-0467	Montell	0								
41-0424	Montell	0								
44-1507M	Montell	0								
37-0666	Morrill	7	D	S	S	N	S	T	S	P
37-0671	Morrill	7	DD	SS	SS	NN	SS	TT	SS	PP
40-0664	Morrill	7	DD	SS	SS	NN	SS	TT	SS	PP
35-2894	Morrill	7	DD	SS	SS	NN	SS	TT	SS	PP
41-0398	Morrill	7	DD	ES	IS	NN	SS	TT	SS	PT
37-0005	Morrill	7	DD	SS	SE	NN	SS	TT	SS	PT
40-0162	Morrill	5	L	S	E	N	X	X	I	E
35-2864	Morrill	0								
36-3641	Morrill	0								
40-1082	Morrill	0								
35-2892	Morrill	0								
5 97	Morrill	0								
35-0169	Nolan	7	D	E	S	N	I	T	S	P
44-1691M	Nolan	7	DD	EE	SE	NN	II	TT	SI	PE
44-1321M	Nolan	7	DD	EE	ES	NN	II	TT	SI	PE
44-1708M	Nolan	7	D	E	S	N	I	T	I	E

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
44-1292M	Nolan	0								
41-0122	Palmillas	7	D	S	E	N	S	T	E	V
41-0437	Palmillas	7	D	S	E	N	S	T	E	V
35-2010	Palmillas	7	D	S	E	N	S	T	E	V
35-2903	Palmillas	7	D	E	S	N	I	H	E	V
35-3154	Palmillas	7	D	S	E	N	I	H	I	E
35-3125	Palmillas	7	D	S	E	N	I	T	R	P
35-3077	Palmillas	7	D	E	E	N	I	T	I	E
38-0026	Palmillas	7	D	S	E	N	I	B	I	E
35-2987	Palmillas	0								
35-2456	Palmillas	0								
35-2957	Palmillas	0								
35-0183	Palmillas	0								
35-0175	Palmillas	0								
36-4308	Palmillas	0								
36-3061	Pedernales	7	D	S	I	N	I	B	E	V
41-0399	Pedernales	7	D	S	I	N	I	B	E	V
36-3560	Pedernales	7	D	S	I	N	I	B	E	V
35-2204	Pedernales	7	D	S	I	N	S	T	E	V
36-3883	Pedernales	7	D	S	I	N	S	T	E	V
35-3109	Pedernales	7	D	S	I	N	S	T	E	V
40-1037	Pedernales	7	D	S	I	N	S	T	E	V
37-0669	Pedernales	7	D	E	I	N	S	T	S	P
36-3085	Pedernales	7	D	E	I	N	S	T	S	P
36-4273	Pedernales	7	D	E	I	N	S	T	S	P
37-0718	Pedernales	7	D	E	I	N	S	T	S	P
36-4285	Pedernales	7	D	E	I	N	S	T	S	P
35-2867	Pedernales	7	D	E	I	N	S	T	S	P
41-0204	Pedernales	7	D	E	I	N	S	T	S	P
35-3019	Pedernales	7	D	E	I	N	I	T	S	P
36-3026	Pedernales	7	D	E	I	N	I	T	S	P
35-2391	Pedernales	7	D	E	I	N	I	T	S	P
43-0102	Pedernales	7	D	E	I	N	I	T	S	P
35-2895	Pedernales	7	D	E	I	N	I	T	S	P
35-2951	Pedernales	7	D	E	I	N	I	T	S	P
35-2875	Pedernales	7	D	E	I	N	I	T	S	P
35-2868	Pedernales	7	D	E	I	N	I	T	S	P
41-0104	Pedernales	7	D	R	I	N	I	H	E	V
35-2901	Pedernales	7	D	R	I	N	I	H	E	V
36-3681	Pedernales	7	D	S	I	N	S	B	S	T
35-2855	Pedernales	7	D	S	I	N	S	B	S	T
36-4180	Pedernales	7	D	E	R	N	S	T	S	P
38-0733	Pedernales	7	D	S	I	N	I	H	S	P
36-3322	Pedernales	7	D	S	I	N	I	H	S	P
36-3491	Pedernales	7	D	S	I	N	I	H	S	P
36-3431	Pedernales	7	D	S	I	N	I	H	S	P
43-0294	Pedernales	7	D	S	I	N	I	H	S	P
35-2384	Pedernales	7	D	S	I	N	I	H	S	P
36-3003	Pedernales	7	D	S	I	N	I	H	S	P
36-3034	Pedernales	7	D	S	I	N	I	H	S	P
35-2357	Pedernales	7	D	S	I	N	S	.	S	P
38-0333	Pedernales	7	D	S	I	N	S	T	S	P
41-0054	Pedernales	7	D	S	I	N	S	T	S	P
36-3642	Pedernales	7	D	S	I	N	S	T	S	P
36-3549	Pedernales	7	D	S	I	N	S	T	S	P
35-2891	Pedernales	7	D	S	I	N	S	T	S	P
35-2873	Pedernales	7	D	S	I	N	S	T	S	P
36-3486	Pedernales	7	D	S	I	N	S	T	S	P
35-2648	Pedernales	7	D	S	I	N	S	T	S	P
41-0133	Pedernales	7	D	S	I	N	S	T	S	P
35-2350	Pedernales	7	D	S	I	N	S	T	S	P
40-1160	Pedernales	7	D	S	I	N	S	T	S	P
40-1182	Pedernales	7	D	S	I	N	S	T	S	P
35-2647	Pedernales	7	D	S	I	N	S	T	S	P
36-3539	Pedernales	7	D	S	I	N	S	T	S	P
44-0328	Pedernales	7	D	S	I	N	S	T	S	P
41-0220	Pedernales	7	D	S	I	N	S	T	S	P
35-2653	Pedernales	7	D	S	I	N	S	T	S	P
36-3229	Pedernales	7	D	E	I	N	S	T	E	V
35-2876	Pedernales	7	D	E	I	N	S	T	E	V
36-3879	Pedernales	7	D	E	I	N	S	T	E	V
35-3011	Pedernales	7	D	E	I	N	S	T	E	V
36-3081	Pedernales	7	D	E	I	N	S	T	E	V
35-0173	Pedernales	7	D	E	I	N	E	B	S	T
35-2884	Pedernales	7	D	R	I	N	I	B	S	P
36-3095	Pedernales	7	D	S	I	N	S	B	S	P
41-0218	Pedernales	7	D	S	I	N	S	B	S	P
40-0065	Pedernales	7	D	S	I	N	S	B	S	P
41-0051	Pedernales	7	D	S	I	N	I	H	S	C
35-2205	Pedernales	7	D	E	I	N	I	H	S	P
36-3456	Pedernales	7	D	E	I	N	I	H	S	P
36-3880	Pedernales	7	D	E	I	N	I	H	S	P
36-3683	Pedernales	7	D	E	I	N	I	H	S	P
41-0251	Pedernales	7	D	R	I	N	I	H	S	P
41-0275	Pedernales	7	D	S	I	N	I	H	S	E
41-0191	Pedernales	7	D	S	I	N	I	H	S	E

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
41-0007	Pedernales	7	D	I	I	N	I	B	R	C
36-3897	Pedernales	7	D	E	I	N	I	T	I	C
41-0058	Pedernales	7	D	E	I	N	I	T	I	C
38-0098	Pedernales	7	D	E	I	N	I	T	I	C
35-0185	Pedernales	7	D	E	I	N	I	H	S	T
35-2007	Pedernales	7	D	E	I	N	S	T	S	T
35-2392	Pedernales	7	D	E	I	N	S	T	S	T
41-0008	Pedernales	7	D	R	I	N	I	T	S	T
41-0129	Pedernales	7	D	E	I	N	E	T	E	V
36-4323	Pedernales	7	D	E	I	N	S	T	S	E
41-1294	Pedernales	7	D	E	I	N	S	T	S	E
36-3035	Pedernales	7	D	E	I	N	S	T	I	C
35-2863	Pedernales	7	D	S	I	N	S	T	S	T
35-2650	Pedernales	7	D	S	I	N	S	T	S	T
36-3096	Pedernales	7	D	S	I	N	S	T	S	T
36-4290	Pedernales	7	D	S	I	N	S	T	S	T
36-4320	Pedernales	7	D	S	I	N	S	T	S	T
41-0092	Pedernales	7	D	S	I	N	S	T	S	T
35-2395	Pedernales	7	D	E	I	N	S	H	S	P
41-0239	Pedernales	7	D	R	I	N	S	T	S	P
41-0017	Pedernales	7	D	S	I	N	S	T	E	E
41-0060	Pedernales	7	D	E	I	N	S	T	R	E
41-0139	Pedernales	7	D	E	I	N	S	T	R	E
41-0272	Pedernales	7	D	S	I	N	S	H	R	P
36-3479	Pedernales	7	D	E	I	N	S	H	R	P
36-4266	Pedernales	7	D	E	I	N	S	H	R	P
35-0180	Pedernales	7	D	E	I	N	I	H	R	P
40-0407	Pedernales	7	D	S	I	N	I	T	S	P
37-0626	Pedernales	7	D	S	I	N	I	T	S	P
37-0368	Pedernales	7	D	I	I	N	I	B	S	P
37-0721	Pedernales	7	D	E	I	N	I	T	I	E
37-0358	Pedernales	7	D	S	I	N	S	B	I	C
38-0021	Pedernales	7	D	S	I	N	I	B	S	P
38-0403	Pedernales	7	D	S	I	N	S	T	I	E
40-0981	Pedernales	7	D	E	I	N	I	B	S	T
43-0108	Pedernales	7	D	S	I	N	S	T	S	E
43-0110	Pedernales	7	D	S	I	N	I	H	S	T
44-0021	Pedernales	7	D	S	I	N	S	T	R	T
44-0247	Pedernales	7	D	S	I	N	R	B	S	E
44-0549	Pedernales	7	D	I	I	N	S	T	S	T
44-0643	Pedernales	5	U	S	I	N	X	X	S	P
40-0964	Pedernales	0								
37-0032	Pedernales	0								
41-0325	Pedernales	0								
36-3947	Pedernales	0								
40-1269	Pedernales	0								
36-3100	Pedernales	0								
40-1295	Pedernales	0								
38-0816	Pedernales	0								
40-1303	Pedernales	0								
40-0403	Pedernales	0								
36-3873	Pedernales	0								
40-0918	Pedernales	0								
35-2949	Pedernales	0								
36-3001	Pedernales	0								
43-0122	Pedernales	0								
36-3436	Pedernales	0								
35-3136	Pedernales	0								
40-0961	Pedernales	0								
35-2652	Pedernales	0								
38-0842	Pedernales	0								
43-0240	Pedernales	0								
36-3696	Pedernales	0								
35-2909	Pedernales	0								
44-0441	Pedernales	0								
44-0471	Pedernales	0								
38-0408	Pedernales	0								
41-0190	Pedernales	0								
44-1620M	Pedernales	7	D	S	I	N	I	H	E	E
44-1253M	Pedernales	7	D	S	I	N	I	T	S	P
44-1492M	Pedernales	7	D	E	I	N	I	T	I	E
44-1315M	Pedernales	7	D	I	I	N	S	T	S	T
44-1629M	Pedernales	7	D	S	I	N	S	T	S	P
44-1319M	Pedernales	0								
44-1010M	Pedernales	0								
44-1442M	Pedernales	0								
44-1443M	Pedernales	0								
44-1614M	Pedernales	0								
44-1409M	Pedernales	7	D	S	I	N	I	B	S	T
44-0821	Pedernales	0								
44-0862	Pedernales	7	D	S	I	N	I	B	E	V
47-0041	Pedernales	7	D	E	I	N	S	T	E	V
50-0027	Pedernales	0								
50-0092	Pedernales	7	D	S	I	N	I	T	E	T
36-3892	Perdiz	7	D	I	E	N	S	B	S	C
41-0350	Perdiz	7	D	S	S	N	S	B	E	T

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
35-3046	Perdiz	7	D	S	S	N	I	B	S	T
36-4286	Perdiz	5	U	S	E	N	I	B	X	X
41-0085	Perdiz	0								
36-4241	Perdiz	0								
36-4181	Perdiz	0								
37-0758	Plainview	3	X	E	I	N	X	X	X	X
36-3107	Plainview	3	X	E	I	N	X	X	X	X
36-3092	Plainview	3	X	E	I	N	X	X	X	X
35-2882	Plainview	3	X	E	I	N	X	X	X	X
41-0155	Plainview	3	X	E	I	N	X	X	X	X
36-3511	Plainview	3	X	E	I	N	X	X	X	X
44-0713	Plainview	3	X	E	I	N	X	X	X	X
35-2881	Plainview	3	X	E	I	N	X	X	X	X
35-3076	Plainview	3	X	E	I	N	X	X	X	X
36-3688	Plainview	5	X	I	I	N	X	X	I	C
44-0093	Plainview	3	X	S	I	N	X	X	X	X
44-0553	Plainview	3	X	S	R	N	X	X	X	X
43-0114	Plainview	0								
43-0370	Plainview	0								
36-3305	Plainview	0								
35-2860	Plainview	0								
44-1631M	Plainview	0								
35-2324	Scallorn	7	D	S	S	N	I	B	I	E
35-3018	Scallorn	7	D	S	S	N	I	B	I	E
41-0349	Scallorn	7	D	S	S	N	I	B	I	E
40-1133	Scallorn	7	D	S	S	N	I	B	S	E
41-0385	Scallorn	7	D	S	S	N	I	B	S	E
40-0509	Scallorn	7	D	S	S	N	I	B	S	E
38-0475	Scallorn	7	D	S	S	N	I	B	S	E
41-0269	Scallorn	7	D	S	E	N	I	T	R	E
41-0262	Scallorn	7	D	S	S	N	I	H	I	E
41-0200	Scallorn	7	D	S	S	N	S	T	S	E
35-2202	Scallorn	7	D	E	S	N	I	B	I	E
36-3529	Scallorn	7	D	S	E	N	S	B	I	E
37-0732	Scallorn	7	D	S	E	N	S	B	I	E
36-3937	Scallorn	7	D	S	E	N	S	B	I	E
35-2754	Scallorn	7	D	S	E	N	S	B	I	E
40-0510	Scallorn	7	D	S	E	N	S	B	I	E
35-3017	Scallorn	7	D	S	S	N	S	B	S	E
35-2981	Scallorn	7	D	E	I	N	I	B	I	E
37-0502	Scallorn	7	D	S	I	N	S	B	I	E
44-0548	Scallorn	7	D	I	R	N	I	B	S	E
35-3080	Scallorn	0								
36-3936	Scallorn	0								
43-0257	Scallorn	0								
38-0342	Scallorn	0								
44-0030	Scallorn	0								
44-0737	Scallorn	0								
37-0367	Scallorn	0								
43-0037	Scallorn	0								
36-3553	Scallorn	0								
36-3518	Scallorn	0								
40-1283	Scallorn	0								
40-0845	Scallorn	0								
44-0029	Scallorn	0								
44-1462M	Scallorn	0								
44-0903	Scallorn	7	D	E	S	N	I	B	S	E
40-1305	Tortugas	3	X	S	S	N	X	X	X	X
35-3164	Travis	7	D	E	S	N	I	T	I	C
41-0163	Travis	7	D	E	S	N	E	T	S	P
35-2897	Travis	7	D	E	S	N	E	T	S	P
35-2019	Travis	5	D	S	I	N	X	X	I	C
35-2017	Travis	7	D	E	E	N	X	X	I	C
40-1294	Travis	5	D	E	S	N	X	X	I	C
35-2916	Travis	5	D	E	S	N	X	X	I	C
35-3075	Travis	5	D	E	S	N	X	X	I	C
41-0160	Travis	5	D	E	S	N	X	X	I	C
35-2346	Travis	5	D	E	S	N	X	X	I	C
35-2015	Travis	7	D	E	S	N	S	T	S	P
36-0006	Travis	7	D	E	I	N	S	T	S	P
43-0044	Travis	7	D	E	E	N	I	T	I	E
36-3472	Travis	7	D	E	E	N	I	T	I	E
40-0521	Travis	7	D	E	E	N	I	T	I	E
36-3875	Travis	7	D	E	E	N	I	T	I	E
43-0112	Travis	7	D	E	E	N	I	T	I	E
38-0100	Travis	7	D	S	S	N	S	T	S	E
37-0752	Travis	7	D	S	S	N	S	T	S	E
38-0802	Travis	7	D	S	S	N	S	T	S	P
40-0409	Travis	7	D	S	S	N	S	T	S	P
40-0661	Travis	7	D	S	S	N	S	T	S	P
38-0025	Travis	5	L	S	S	N	I	T	I	E
40-0032	Travis	5	L	S	S	N	X	X	S	P
43-0353	Travis	7	D	E	I	N	I	T	S	E
43-0111	Travis	5	D	E	E	N	X	X	I	C
43-0360	Travis	7	D	E	S	N	S	T	I	E
43-0256	Travis	7	D	E	E	N	I	T	I	C

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
44-0031	Travis	7	L	S	S	N	S	T	I	C
44-0187	Travis	7	D	R	S	N	S	T	S	T
44-0736	Travis	3	X	E	E	N	X	X	X	X
44-0298	Travis	0								
44-0708	Travis	0								
37-0784	Untyped arrow	0								
41-0201	Untyped arrow	0								
36-4280	Untyped arrow	0								
36-3537	Untyped arrow	0								
36-4142	Untyped arrow	0								
36-3027	Untyped arrow	0								
41-0165	Untyped arrow	0								
40-0133	Untyped arrow	0								
41-0260	Untyped arrow	0								
36-3303	Untyped arrow	0								
35-2968	Untyped arrow	0								
37-0729	Untyped arrow	0								
40-0665	Untyped arrow	0								
40-0842	Untyped arrow	0								
40-1284	Untyped arrow	0								
43-0035	Untyped arrow	0								
41-0086	Untyped arrow	0								
41-0111	Untyped arrow	0								
35-2942	Untyped arrow	0								
37-0637	Untyped arrow	0								
38-0477	Untyped arrow	0								
36-3559	Untyped arrow	0								
43-0407	Untyped arrow	0								
41-0091	Untyped arrow	0								
37-0459	Untyped arrow	0								
37-0029	Untyped arrow	0								
35-0155	Untyped arrow	0								
36-3103	Untyped arrow	0								
41-0015	Untyped arrow	0								
36-3108	Untyped arrow	0								
36-3538	Untyped arrow	0								
35-2969	Untyped arrow	0								
36-4250	Untyped arrow	0								
41-0444	Untyped arrow	0								
41-0083	Untyped arrow	0								
35-2961	Untyped arrow	0								
44-0797	Untyped arrow	0								
44-0898	Untyped arrow	0								
44-0901	Untyped arrow	0								
44-0902	Untyped arrow	0								
37-0764	Untyped dart	7	D	S	S	N	I	T	S	P
36-3894	Untyped dart	7	D	S	S	N	I	T	S	P
44-0631	Untyped dart	7	D	S	S	N	I	T	S	P
35-3146	Untyped dart	7	D	S	E	N	I	H	S	E
35-2315	Untyped dart	7	D	S	E	N	I	H	S	E
36-3686	Untyped dart	7	D	S	I	N	I	T	I	C
35-2104	Untyped dart	7	D	S	I	N	I	T	I	C
41-0102	Untyped dart	7	D	S	I	N	I	T	I	C
41-0271	Untyped dart	7	D	S	S	N	I	T	I	C
36-3490	Untyped dart	7	D	R	S	N	I	T	S	E
35-3085	Untyped dart	7	D	S	S	N	I	T	I	E
36-3021	Untyped dart	7	D	S	S	N	I	T	I	E
35-2011	Untyped dart	7	D	S	S	N	I	T	I	E
35-2203	Untyped dart	7	D	S	S	N	I	T	I	E
35-2013	Untyped dart	7	D	E	S	N	I	T	S	E
36-3585	Untyped dart	7	D	E	S	N	I	H	I	E
36-3510	Untyped dart	7	D	S	S	N	I	H	I	E
35-2927	Untyped dart	7	D	S	S	N	I	H	S	E
35-3117	Untyped dart	7	D	E	S	N	I	B	S	E
36-3596	Untyped dart	7	D	S	I	N	I	B	S	E
36-3093	Untyped dart	7	D	S	I	N	I	B	I	E
36-3014	Untyped dart	7	D	S	I	N	I	B	I	E
41-0389	Untyped dart	7	D	S	I	N	I	T	S	E
41-0175	Untyped dart	7	D	S	I	N	I	T	S	P
38-0471	Untyped dart	7	D	E	S	N	I	T	S	P
36-3948	Untyped dart	7	D	E	S	N	I	T	S	P
43-0356	Untyped dart	7	D	E	S	N	I	T	S	P
37-0461	Untyped dart	7	D	E	S	N	S	T	S	P
36-3105	Untyped dart	7	D	E	S	N	S	T	S	P
35-2352	Untyped dart	7	D	E	S	N	S	T	S	P
35-3084	Untyped dart	7	D	E	S	N	S	T	S	P
36-3241	Untyped dart	7	D	E	S	N	S	T	S	P
35-3111	Untyped dart	7	D	E	S	N	S	T	S	P
36-3881	Untyped dart	7	D	E	S	N	I	H	S	P
36-3089	Untyped dart	7	D	E	S	N	I	H	S	P
36-4340	Untyped dart	7	D	E	S	N	I	H	S	P
41-0161	Untyped dart	7	D	E	S	N	I	H	S	P
35-2963	Untyped dart	7	D	E	S	N	I	H	S	P
35-2211	Untyped dart	7	D	E	S	N	I	H	S	P
35-2934	Untyped dart	7	D	S	S	N	S	T	S	P
41-0121	Untyped dart	7	D	S	S	N	S	T	S	P

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
40-0059	Untyped dart	7	D	S	S	N	S	T	S	P
40-1296	Untyped dart	7	D	S	S	N	S	T	S	P
40-1079	Untyped dart	7	D	S	S	N	S	T	S	P
41-0352	Untyped dart	7	D	S	E	N	S	T	S	E
35-3135	Untyped dart	7	D	S	I	N	I	T	S	P
40-1290	Untyped dart	7	D	S	I	N	I	T	S	P
36-3587	Untyped dart	7	D	S	S	N	S	T	S	T
36-3886	Untyped dart	7	D	E	I	N	S	T	S	P
41-0098	Untyped dart	7	D	E	I	N	S	T	S	P
40-1300	Untyped dart	7	D	E	I	N	S	T	S	P
36-3617	Untyped dart	7	D	E	S	N	S	T	I	C
36-3072	Untyped dart	7	D	E	S	N	S	T	I	C
35-2201	Untyped dart	7	D	E	S	N	I	H	I	E
41-0114	Untyped dart	7	D	I	S	N	S	H	I	E
36-3062	Untyped dart	7	D	S	S	N	S	T	S	E
40-1304	Untyped dart	7	D	S	S	N	S	T	S	E
40-0846	Untyped dart	7	D	S	S	N	S	T	S	E
35-2933	Untyped dart	7	D	S	E	N	I	T	I	C
36-3716	Untyped dart	7	D	S	I	N	I	H	S	E
35-3020	Untyped dart	7	D	S	S	N	I	T	A	E
36-3693	Untyped dart	7	D	E	I	N	S	T	E	V
36-3242	Untyped dart	3	X	E	A	I	X	X	X	X
41-0117	Untyped dart	7	D	S	R	N	I	H	S	E
41-0177	Untyped dart	7	D	S	R	N	I	H	S	E
36-3239	Untyped dart	7	D	E	S	N	I	B	S	E
37-0492	Untyped dart	7	D	I	I	N	S	T	S	P
37-0380	Untyped dart	7	D	E	I	N	S	T	S	E
37-0378	Untyped dart	7	D	S	S	N	I	B	S	E
37-0491	Untyped dart	7	D	E	I	N	S	B	E	V
37-0723	Untyped dart	7	D	S	I	N	I	T	I	E
37-0716	Untyped dart	7	D	E	S	N	S	T	S	T
38-0856	Untyped dart	7	D	R	S	N	S	T	S	P
40-0988	Untyped dart	7	D	S	S	N	E	T	I	E
40-1311	Untyped dart	7	D	S	E	N	I	T	E	V
40-0368	Untyped dart	7	D	S	I	N	I	B	S	P
40-0163	Untyped dart	7	D	S	S	N	I	T	S	E
40-0532	Untyped dart	7	D	S	E	N	I	T	S	P
40-0367	Untyped dart	7	D	S	S	N	I	B	I	E
40-0356	Untyped dart	7	D	E	S	N	S	T	R	E
40-0062	Untyped dart	7	D	S	E	N	S	T	E	V
40-0531	Untyped dart	5	L	S	E	N	X	X	I	E
40-1206	Untyped dart	7	D	S	I	N	I	H	I	E
43-0121	Untyped dart	7	D	S	R	N	S	T	I	E
43-0239	Untyped dart	7	L	S	E	N	I	T	I	E
43-0105	Untyped dart	7	D	S	E	N	E	T	S	P
43-0351	Untyped dart	7	D	E	I	N	I	H	S	P
44-0147	Untyped dart	7	D	S	I	N	I	B	S	E
44-0183	Untyped dart	7	D	E	I	N	S	T	R	E
44-0534	Untyped dart	7	D	R	R	N	I	B	I	E
44-0186	Untyped dart	7	D	R	R	N	I	B	I	E
44-0188	Untyped dart	7	D	R	R	N	I	T	I	E
44-0192	Untyped dart	7	D	E	S	N	S	T	I	E
44-0297	Untyped dart	7	D	E	I	N	E	T	R	P
44-0710	Untyped dart	7	L	S	S	N	I	T	R	E
44-0724	Untyped dart	3	X	S	R	N	X	X	X	X
35-2314	Untyped dart	0								
35-2447	Untyped dart	0								
35-0156	Untyped dart	0								
36-3002	Untyped dart	0								
36-3007	Untyped dart	0								
35-2150	Untyped dart	0								
41-0212	Untyped dart	0								
35-2455	Untyped dart	0								
35-2345	Untyped dart	0								
35-2347	Untyped dart	0								
35-2911	Untyped dart	0								
35-0153	Untyped dart	0								
35-3138	Untyped dart	0								
35-2355	Untyped dart	0								
35-3127	Untyped dart	0								
41-0460	Untyped dart	0								
35-2853	Untyped dart	0								
41-0339	Untyped dart	0								
41-0223	Untyped dart	0								
35-2153	Untyped dart	0								
35-2460	Untyped dart	0								
35-2640	Untyped dart	0								
35-2389	Untyped dart	0								
35-2835	Untyped dart	0								
35-2688	Untyped dart	0								
35-2316	Untyped dart	0								
35-2857	Untyped dart	0								
35-2200	Untyped dart	0								
35-2869	Untyped dart	0								
41-0436	Untyped dart	0								
35-2106	Untyped dart	0								

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
36-0007	Untyped dart	0								
35-2904	Untyped dart	0								
41-0179	Untyped dart	0								
35-0176	Untyped dart	0								
36-3084	Untyped dart	0								
36-3698	Untyped dart	0								
35-2155	Untyped dart	0								
41-0119	Untyped dart	0								
41-0194	Untyped dart	0								
35-2638	Untyped dart	0								
35-0181	Untyped dart	0								
36-4256	Untyped dart	0								
35-2450	Untyped dart	0								
35-2644	Untyped dart	0								
41-0193	Untyped dart	0								
36-3933	Untyped dart	0								
35-2651	Untyped dart	0								
35-2643	Untyped dart	0								
41-0090	Untyped dart	0								
36-3528	Untyped dart	0								
36-3420	Untyped dart	0								
36-3489	Untyped dart	0								
36-3086	Untyped dart	0								
35-3158	Untyped dart	0								
35-0184	Untyped dart	0								
36-3080	Untyped dart	0								
36-3568	Untyped dart	0								
36-4260	Untyped dart	0								
36-3566	Untyped dart	0								
35-3081	Untyped dart	0								
36-3694	Untyped dart	0								
41-0274	Untyped dart	0								
36-4339	Untyped dart	0								
41-0215	Untyped dart	0								
35-3122	Untyped dart	0								
36-4350	Untyped dart	0								
35-3087	Untyped dart	0								
36-3421	Untyped dart	0								
35-3150	Untyped dart	0								
36-3525	Untyped dart	0								
36-3556	Untyped dart	0								
35-3153	Untyped dart	0								
36-3033	Untyped dart	0								
41-0052	Untyped dart	0								
36-3809	Untyped dart	0								
35-2962	Untyped dart	0								
36-3890	Untyped dart	0								
35-2915	Untyped dart	0								
36-4025	Untyped dart	0								
35-2929	Untyped dart	0								
41-0108	Untyped dart	0								
36-3097	Untyped dart	0								
36-3078	Untyped dart	0								
35-2006	Untyped dart	0								
36-3946	Untyped dart	0								
36-3967	Untyped dart	0								
36-3356	Untyped dart	0								
36-3106	Untyped dart	0								
41-0107	Untyped dart	0								
36-3607	Untyped dart	0								
41-0353	Untyped dart	0								
41-0253	Untyped dart	0								
36-4044	Untyped dart	0								
36-3636	Untyped dart	0								
36-4211	Untyped dart	0								
35-2919	Untyped dart	0								
41-0100	Untyped dart	0								
36-3599	Untyped dart	0								
36-3098	Untyped dart	0								
35-2003	Untyped dart	0								
36-3651	Untyped dart	0								
36-3606	Untyped dart	0								
41-0387	Untyped dart	0								
36-3492	Untyped dart	0								
35-2932	Untyped dart	0								
36-3609	Untyped dart	0								
35-2950	Untyped dart	0								
35-3025	Untyped dart	0								
36-3013	Untyped dart	0								
36-3627	Untyped dart	0								
36-3689	Untyped dart	0								
36-3094	Untyped dart	0								
41-0180	Untyped dart	0								
36-3626	Untyped dart	0								
36-4321	Untyped dart	0								
35-2002	Untyped dart	0								

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
36-4303	Untyped dart	0								
36-3610	Untyped dart	0								
35-2462	Untyped dart	0								
36-3228	Untyped dart	0								
35-3156	Untyped dart	0								
36-3621	Untyped dart	0								
35-3161	Untyped dart	0								
35-2952	Untyped dart	0								
41-0029	Untyped dart	0								
36-3630	Untyped dart	0								
36-3570	Untyped dart	0								
36-3435	Untyped dart	0								
41-0270	Untyped dart	0								
36-3628	Untyped dart	0								
35-3029	Untyped dart	0								
41-0135	Untyped dart	0								
36-3502	Untyped dart	0								
36-3635	Untyped dart	0								
36-3940	Untyped dart	0								
36-4334	Untyped dart	0								
36-3523	Untyped dart	0								
36-3687	Untyped dart	0								
41-0320	Untyped dart	0								
36-3877	Untyped dart	0								
36-3697	Untyped dart	0								
35-2973	Untyped dart	0								
36-3612	Untyped dart	0								
36-3944	Untyped dart	0								
36-3594	Untyped dart	0								
41-0136	Untyped dart	0								
41-0082	Untyped dart	0								
36-4050	Untyped dart	0								
41-0101	Untyped dart	0								
36-4284	Untyped dart	0								
37-0049	Untyped dart	0								
37-0053	Untyped dart	0								
35-3039	Untyped dart	0								
37-0055	Untyped dart	0								
36-3030	Untyped dart	0								
37-0058	Untyped dart	0								
36-3501	Untyped dart	0								
37-0059	Untyped dart	0								
35-2008	Untyped dart	0								
37-0361	Untyped dart	0								
36-3532	Untyped dart	0								
37-0362	Untyped dart	0								
41-0166	Untyped dart	0								
37-0365	Untyped dart	0								
36-3895	Untyped dart	0								
41-0222	Untyped dart	0								
41-0134	Untyped dart	0								
36-3022	Untyped dart	0								
36-4175	Untyped dart	0								
37-0460	Untyped dart	0								
35-2943	Untyped dart	0								
35-2351	Untyped dart	0								
36-3109	Untyped dart	0								
37-0490	Untyped dart	0								
35-3145	Untyped dart	0								
41-0338	Untyped dart	0								
35-3097	Untyped dart	0								
36-3029	Untyped dart	0								
35-2935	Untyped dart	0								
37-0505	Untyped dart	0								
35-2986	Untyped dart	0								
37-0630	Untyped dart	0								
36-4276	Untyped dart	0								
37-0664	Untyped dart	0								
36-3301	Untyped dart	0								
37-0665	Untyped dart	0								
36-3717	Untyped dart	0								
37-0668	Untyped dart	0								
36-3099	Untyped dart	0								
37-0672	Untyped dart	0								
36-3899	Untyped dart	0								
41-0192	Untyped dart	0								
36-3966	Untyped dart	0								
37-0720	Untyped dart	0								
36-4305	Untyped dart	0								
35-2461	Untyped dart	0								
36-4113	Untyped dart	0								
37-0727	Untyped dart	0								
36-4307	Untyped dart	0								
37-0728	Untyped dart	0								
41-0038	Untyped dart	0								
37-0738	Untyped dart	0								

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
36-4342	Untyped dart	0								
37-0739	Untyped dart	0								
36-4024	Untyped dart	0								
37-0746	Untyped dart	0								
36-4331	Untyped dart	0								
37-0747	Untyped dart	0								
41-0036	Untyped dart	0								
37-0763	Untyped dart	0								
36-4316	Untyped dart	0								
36-3691	Untyped dart	0								
36-4318	Untyped dart	0								
38-0020	Untyped dart	0								
36-3079	Untyped dart	0								
38-0174	Untyped dart	0								
36-4277	Untyped dart	0								
38-0193	Untyped dart	0								
36-4275	Untyped dart	0								
38-0235	Untyped dart	0								
36-3713	Untyped dart	0								
38-0328	Untyped dart	0								
36-3712	Untyped dart	0								
38-0329	Untyped dart	0								
36-3714	Untyped dart	0								
38-0331	Untyped dart	0								
36-3482	Untyped dart	0								
38-0340	Untyped dart	0								
36-3622	Untyped dart	0								
38-0393	Untyped dart	0								
36-4328	Untyped dart	0								
38-0404	Untyped dart	0								
41-0004	Untyped dart	0								
38-0468	Untyped dart	0								
41-0383	Untyped dart	0								
38-0470	Untyped dart	0								
36-3476	Untyped dart	0								
41-0400	Untyped dart	0								
36-3949	Untyped dart	0								
38-0473	Untyped dart	0								
41-0030	Untyped dart	0								
38-0474	Untyped dart	0								
35-3089	Untyped dart	0								
38-0476	Untyped dart	0								
41-0167	Untyped dart	0								
38-0478	Untyped dart	0								
35-2967	Untyped dart	0								
38-0481	Untyped dart	0								
41-0064	Untyped dart	0								
38-0731	Untyped dart	0								
36-4242	Untyped dart	0								
38-0737	Untyped dart	0								
36-4345	Untyped dart	0								
38-0740	Untyped dart	0								
36-4319	Untyped dart	0								
38-0801	Untyped dart	0								
36-3512	Untyped dart	0								
38-0805	Untyped dart	0								
36-3231	Untyped dart	0								
38-0808	Untyped dart	0								
36-3876	Untyped dart	0								
38-0810	Untyped dart	0								
41-0380	Untyped dart	0								
38-0815	Untyped dart	0								
36-4325	Untyped dart	0								
38-0822	Untyped dart	0								
36-4314	Untyped dart	0								
38-0824	Untyped dart	0								
41-0059	Untyped dart	0								
38-0827	Untyped dart	0								
35-3033	Untyped dart	0								
38-0841	Untyped dart	0								
35-2005	Untyped dart	0								
38-0851	Untyped dart	0								
35-2483	Untyped dart	0								
38-0855	Untyped dart	0								
36-3474	Untyped dart	0								
41-0199	Untyped dart	0								
35-3078	Untyped dart	0								
38-0859	Untyped dart	0								
36-3475	Untyped dart	0								
40-0031	Untyped dart	0								
41-0367	Untyped dart	0								
40-0033	Untyped dart	0								
37-0048	Untyped dart	0								
36-3961	Untyped dart	0								
41-0147	Untyped dart	0								
41-0164	Untyped dart	0								

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
36-3076	Untyped dart	0								
40-0037	Untyped dart	0								
40-0038	Untyped dart	0								
40-0041	Untyped dart	0								
41-0369	Untyped dart	0								
40-0061	Untyped dart	0								
36-3514	Untyped dart	0								
40-0067	Untyped dart	0								
41-0243	Untyped dart	0								
40-0180	Untyped dart	0								
40-0183	Untyped dart	0								
40-0193	Untyped dart	0								
40-0330	Untyped dart	0								
40-0346	Untyped dart	0								
35-2964	Untyped dart	0								
40-0358	Untyped dart	0								
41-0159	Untyped dart	0								
35-3112	Untyped dart	0								
40-0402	Untyped dart	0								
40-0408	Untyped dart	0								
40-0518	Untyped dart	0								
40-0519	Untyped dart	0								
40-0523	Untyped dart	0								
40-0524	Untyped dart	0								
40-0525	Untyped dart	0								
35-2912	Untyped dart	0								
35-2208	Untyped dart	0								
40-0534	Untyped dart	0								
40-0535	Untyped dart	0								
40-0536	Untyped dart	0								
40-0572	Untyped dart	0								
40-1287	Untyped dart	0								
40-0718	Untyped dart	0								
40-1268	Untyped dart	0								
40-0719	Untyped dart	0								
40-1285	Untyped dart	0								
40-0666	Untyped dart	0								
40-1288	Untyped dart	0								
40-1292	Untyped dart	0								
40-0759	Untyped dart	0								
40-0837	Untyped dart	0								
40-0660	Untyped dart	0								
40-1277	Untyped dart	0								
40-1299	Untyped dart	0								
40-1312	Untyped dart	0								
40-1132	Untyped dart	0								
43-0033	Untyped dart	0								
43-0038	Untyped dart	0								
43-0040	Untyped dart	0								
43-0042	Untyped dart	0								
43-0045	Untyped dart	0								
40-1266	Untyped dart	0								
40-1083	Untyped dart	0								
40-0921	Untyped dart	0								
40-0838	Untyped dart	0								
40-1302	Untyped dart	0								
43-0232	Untyped dart	0								
43-0236	Untyped dart	0								
40-0987	Untyped dart	0								
40-1086	Untyped dart	0								
43-0312	Untyped dart	0								
43-0117	Untyped dart	0								
43-0401	Untyped dart	0								
43-0402	Untyped dart	0								
40-0943	Untyped dart	0								
43-0408	Untyped dart	0								
43-0354	Untyped dart	0								
43-0410	Untyped dart	0								
43-0361	Untyped dart	0								
43-0413	Untyped dart	0								
43-0389	Untyped dart	0								
43-0416	Untyped dart	0								
43-0317	Untyped dart	0								
43-0355	Untyped dart	0								
40-1203	Untyped dart	0								
43-0399	Untyped dart	0								
43-0352	Untyped dart	0								
44-0028	Untyped dart	0								
44-0035	Untyped dart	0								
44-0113	Untyped dart	0								
40-0979	Untyped dart	0								
40-0984	Untyped dart	0								
43-0075	Untyped dart	0								
43-0104	Untyped dart	0								
44-0189	Untyped dart	0								
40-1181	Untyped dart	0								

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
44-0248	Untyped dart	0								
44-0250	Untyped dart	0								
44-0275	Untyped dart	0								
44-0291	Untyped dart	0								
44-0295	Untyped dart	0								
40-1183	Untyped dart	0								
44-0299	Untyped dart	0								
44-0326	Untyped dart	0								
44-0329	Untyped dart	0								
44-0475	Untyped dart	0								
43-0310	Untyped dart	0								
44-0558	Untyped dart	0								
44-0535	Untyped dart	0								
44-0554	Untyped dart	0								
44-0555	Untyped dart	0								
44-0556	Untyped dart	0								
44-0552	Untyped dart	0								
44-0562	Untyped dart	0								
44-0629	Untyped dart	0								
44-0630	Untyped dart	0								
44-0697	Untyped dart	0								
44-0709	Untyped dart	0								
43-0316	Untyped dart	0								
44-0721	Untyped dart	0								
44-0722	Untyped dart	0								
44-0723	Untyped dart	0								
43-0369	Untyped dart	0								
44-0778	Untyped dart	0								
44-0734	Untyped dart	0								
44-0780	Untyped dart	0								
44-0753	Untyped dart	0								
44-0772	Untyped dart	0								
44-0773	Untyped dart	0								
44-0738	Untyped dart	0								
44-0758	Untyped dart	0								
44-0781	Untyped dart	0								
44-0784	Untyped dart	0								
44-0787	Untyped dart	0								
44-0788	Untyped dart	0								
44-0793	Untyped dart	0								
44-0644	Untyped dart	0								
44-0642	Untyped dart	0								
44-1413M	Untyped dart	0								
44-1341M	Untyped dart	0								
44-1205M	Untyped dart	0								
44-1619M	Untyped dart	0								
44-1450M	Untyped dart	0								
44-1287M	Untyped dart	0								
44-1628M	Untyped dart	0								
44-1408M	Untyped dart	0								
44-1441M	Untyped dart	0								
44-1015M	Untyped dart	0								
44-1059M	Untyped dart	0								
44-1252M	Untyped dart	0								
44-1513M	Untyped dart	0								
44-1213M	Untyped dart	0								
44-1490M	Untyped dart	0								
44-1493M	Untyped dart	0								
44-1084M	Untyped dart	0								
44-1323M	Untyped dart	0								
44-1204M	Untyped dart	0								
44-1630M	Untyped dart	0								
44-1206M	Untyped dart	0								
44-1451M	Untyped dart	0								
44-1622M	Untyped dart	7	D	E	R	N	I	H	I	E
44-1516M	Untyped dart	7	D	S	S	N	S	T	S	P
44-1640M	Untyped dart	0								
44-0794	Untyped dart	0								
44-0820	Untyped dart	0								
44-0823	Untyped dart	0								
44-0824	Untyped dart	0								
44-0826	Untyped dart	0								
44-0848	Untyped dart	0								
44-0849	Untyped dart	7	D	S	S	N	I	B	S	P
44-0894	Untyped dart	0								
44-0896	Untyped dart	0								
44-0899	Untyped dart	7	D	S	I	N	I	T	I	E
44-0905	Untyped dart	0								
44-0907	Untyped dart	0								
44-0923	Untyped dart	3	X	R	I	N	X	X	X	X
44-0924	Untyped dart	0								
47-0034	Untyped dart	3	X	E	I	N	X	X	X	X
47-0036	Untyped dart	0								
47-0037	Untyped dart	0								
47-0042	Untyped dart	0								
47-0043	Untyped dart	0								

(Table continues on the following page.)

Nominal Data. Continued.

CATALOG	NAME	VERTEX	HE_MOD	BLADE_SH	BASE_SH	BASE_OR	SHOLD_SH	SHOLD_OR	LATHF_SH	LATHF_OR
47-0108	Untyped dart	0								
47-0110	Untyped dart	0								
47-0111	Untyped dart	0								
50-0001	Untyped dart	0								
50-0002	Untyped dart	7	D	S	I	N	S	T	E	V
50-0005	Untyped dart	7	D	S	S	N	I	T	I	E
50-0039	Untyped dart	0								
50-0041	Untyped dart	0								
50-0098	Untyped dart	0								
50-0099	Untyped dart	0								
36-3008	Uvalde	7	D	S	I	N	I	B	I	E
36-3015	Uvalde	7	D	S	I	N	I	B	I	E
36-3613	Uvalde	7	D	S	I	N	I	B	I	E
35-2111	Uvalde	7	D	S	I	N	I	B	S	E
37-0736	Uvalde	7	D	S	I	N	I	B	S	E
40-0530	Uvalde	7	D	S	I	N	I	B	S	E
41-0381	Uvalde	7	D	S	I	N	I	B	S	E
41-0236	Uvalde	7	D	S	I	N	I	B	S	E
35-3140	Uvalde	7	D	S	I	N	I	B	R	E
36-3010	Uvalde	7	D	S	I	N	I	B	R	E
36-3018	Uvalde	7	D	S	I	N	S	B	S	E
40-0983	Uvalde	7	D	S	R	N	I	H	I	E
40-1298	Uvalde	7	D	E	I	N	I	H	S	E
43-0115	Uvalde	7	D	S	R	N	I	B	I	E
44-0286	Uvalde	7	D	S	I	N	I	T	I	E
44-0711	Uvalde	7	D	S	R	N	I	T	S	E
36-4341	Uvalde	0								
35-2113	Uvalde	0								
36-3419	Uvalde	0								
35-2923	Uvalde	0								
35-2944	Uvalde	0								
36-3016	Uvalde	0								
44-0715	Uvalde	0								
44-0895	Uvalde	0								
47-0113	Uvalde	0								
36-3588	Wells	7	D	E	S	N	I	H	S	T
35-0162	Wells	7	D	E	S	N	I	H	S	T
37-0022	Wells	7	D	S	S	N	S	T	S	T
35-2014	Wells	7	D	S	S	N	S	T	S	T
36-3586	Wells	7	D	S	S	N	S	T	S	T
35-2001	Wells	7	D	S	S	N	S	T	S	T
35-0161	Wells	7	D	S	S	N	S	T	S	T
41-0140	Wells	7	D	S	S	N	S	T	S	T
35-2977	Wells	7	D	S	S	N	S	T	S	T
37-0762	Wells	7	D	S	S	N	S	T	S	T
37-0051	Wells	7	D	S	S	N	S	T	S	T
37-0050	Wells	7	D	S	S	N	S	T	S	T
36-3038	Wells	7	D	S	S	N	S	T	S	T
36-3088	Wells	7	D	S	S	N	S	T	S	T
36-3230	Wells	7	D	S	S	N	S	T	S	T
35-2978	Wells	7	D	E	E	N	S	T	E	T
36-3887	Wells	7	D	S	I	N	S	T	E	V
35-2690	Wells	7	D	E	I	N	I	T	S	T
35-3079	Wells	7	D	E	I	N	I	T	E	T
35-2348	Wells	7	D	E	E	N	S	T	S	P
35-2148	Wells	7	D	E	E	N	S	T	S	P
35-2898	Wells	7	D	E	S	N	I	T	S	T
35-2458	Wells	7	D	S	E	N	S	T	S	P
35-3012	Wells	7	D	S	E	N	S	T	S	P
41-0348	Wells	7	D	S	E	N	S	T	S	P
36-3473	Wells	7	D	S	S	N	S	T	S	P
38-0749	Wells	7	D	S	S	N	S	T	S	P
36-3488	Wells	7	D	S	S	N	S	T	S	P
38-0728	Wells	7	D	S	S	N	S	T	S	P
38-0392	Wells	7	D	S	S	N	S	T	S	P
35-2893	Wells	7	D	S	S	N	S	T	S	P
38-0330	Wells	5	D	E	S	N	X	X	S	T
44-0732	Wells	7	D	S	E	N	S	T	S	T
43-0123	Wells	7	D	S	E	N	S	T	S	T
35-2457	Wells	0								
41-0340	Wells	0								
41-0120	Wells	0								
35-2920	Wells	0								
40-1265	Wells	0								
43-0031	Wells	0								
36-4043	Wells	0								
44-1322M	Wells	7	D	E	S	N	S	T	S	P
44-1091M	Wells	7	D	S	S	N	I	T	S	P
44-1621M	Wells	7	D	S	S	N	I	T	S	P

Individual Metric Data by Type and Catalog Number.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
35-3120	Alba	31.2	0.0	3.5	5.8	6.2	0.0	5.9
35-2972	Alba	0.0	0.0	4.2	6.4	5.9	0.0	6.4
36-3535	Alba	0.0	6.4	2.9	6.4	6.4	18.7	5.4
41-0266	Alba	0.0	20.2	3.0	5.5	4.7	20.2	6.8
36-3639	Alba	0.0	0.0	3.5	5.6	6.2	0.0	6.5
41-0093	Angostura	0.0	22.6	6.0	12.6	17.3	22.6	15.1
35-2900	Angostura	0.0	17.3	8.0	13.3	17.3	0.0	19.5
35-0178	Angostura	0.0	20.1	5.4	11.5	20.1	20.1	15.8
40-1025	Angostura	0.0	0.0	5.9	10.0	0.0	0.0	0.0
36-4324	Angostura	0.0	21.2	8.1	0.0	21.2	21.2	16.5
41-0013	Angostura	0.0	0.0	8.9	0.0	0.0	0.0	0.0
44-0741	Angostura	0.0	0.0	7.0	0.0	0.0	0.0	0.0
36-3006	Angostura	0.0	0.0	6.0	0.0	18.7	0.0	14.5
35-2108	Angostura	0.0	0.0	6.2	0.0	16.0	0.0	0.0
44-0476	Angostura	0.0	0.0	6.0	19.1	20.8	0.0	13.2
40-1043	Angostura	0.0	30.8	10.5	13.1	0.0	0.0	0.0
37-0717	Angostura	0.0	0.0	9.4	15.0	17.1	0.0	0.0
40-1205	Angostura	0.0	0.0	7.1	0.0	0.0	0.0	0.0
40-1081	Angostura	0.0	0.0	7.3	11.8	0.0	0.0	0.0
43-0233	Angostura	0.0	0.0	10.2	19.9	0.0	0.0	0.0
40-0982	Angostura	0.0	0.0	8.7	0.0	0.0	0.0	0.0
44-1632M	Angostura	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41-0250	Bulverde	54.9	26.3	8.2	0.0	18.0	28.0	12.9
40-1286	Bulverde	0.0	0.0	7.6	9.6	0.0	0.0	16.2
40-0404	Bulverde	0.0	0.0	7.6	11.8	16.0	0.0	16.7
40-0410	Bulverde	0.0	0.0	8.5	13.1	17.8	0.0	21.2
40-0841	Bulverde	0.0	0.0	9.6	12.4	17.9	0.0	17.6
41-0132	Bulverde	0.0	0.0	7.6	12.7	0.0	0.0	15.5
35-2914	Bulverde	0.0	29.2	8.6	12.4	16.3	29.2	18.4
35-2888	Bulverde	0.0	0.0	7.0	14.0	14.8	0.0	13.0
35-2896	Bulverde	59.1	26.1	8.3	14.8	15.5	26.1	16.6
36-3499	Bulverde	47.8	29.0	9.0	0.0	18.2	29.0	16.1
36-3471	Bulverde	0.0	35.2	7.1	0.0	20.2	35.2	17.2
36-3547	Bulverde	52.5	30.2	8.5	0.0	18.9	30.2	16.3
35-2924	Bulverde	0.0	0.0	8.9	0.0	18.9	0.0	19.8
35-2107	Bulverde	0.0	29.5	9.7	16.3	19.3	29.5	21.7
37-0458	Bulverde	0.0	0.0	6.5	12.0	15.5	31.5	17.0
37-0761	Bulverde	0.0	27.3	7.0	11.8	15.0	27.3	19.5
40-0520	Bulverde	56.7	0.0	9.6	13.5	18.2	0.0	19.4
38-0472	Bulverde	0.0	0.0	8.6	0.0	20.0	0.0	16.9
38-0814	Bulverde	0.0	30.9	9.4	0.0	18.0	30.9	15.5
40-0069	Bulverde	0.0	0.0	9.8	15.1	19.2	0.0	20.9
40-1041	Bulverde	43.2	0.0	6.9	0.0	16.5	0.0	18.1
40-1042	Bulverde	57.1	0.0	8.1	11.6	16.4	0.0	14.6
43-0106	Bulverde	0.0	30.9	8.7	0.0	16.4	30.9	0.0
44-0725	Bulverde	0.0	24.7	6.0	0.0	14.9	24.7	9.1
38-0852	Bulverde	45.2	0.0	7.0	0.0	19.0	0.0	17.1
37-0366	Bulverde	0.0	0.0	7.3	17.8	19.6	0.0	15.2
37-0636	Bulverde	0.0	0.0	8.2	0.0	15.5	0.0	17.0
40-1274	Bulverde	0.0	0.0	8.3	0.0	16.4	0.0	0.0
44-0359	Bulverde	0.0	0.0	6.1	16.2	18.0	0.0	17.8
35-3129	Bulverde	44.9	26.4	7.7	13.0	14.9	26.4	13.0
37-0004	Bulverde	0.0	0.0	8.6	0.0	19.6	0.0	16.2
35-2752	Bulverde	0.0	33.9	7.1	16.5	17.3	33.9	13.2
41-0094	Bulverde	0.0	25.2	9.5	0.0	14.2	25.2	15.7
35-2349	Bulverde	0.0	29.9	9.6	14.8	21.6	29.9	21.6
44-1016M	Bulverde	62.5	0.0	8.6	11.2	18.1	0.0	15.8
44-0904	Bulverde	0.0	27.3	0.0	16.3	18.1	0.0	16.8
37-0359	Castroville	0.0	0.0	7.0	26.5	24.4	0.0	14.0
35-2649	Castroville	0.0	0.0	9.6	24.9	23.1	0.0	12.5
35-0150	Castroville	0.0	51.8	7.8	26.4	23.5	51.8	11.5
41-0384	Castroville	0.0	0.0	6.5	22.8	21.3	0.0	14.9
38-0479	Castroville	0.0	0.0	7.0	21.7	20.5	0.0	12.4
35-2396	Castroville	0.0	0.0	8.3	0.0	21.1	0.0	10.3
41-0219	Castroville	0.0	36.0	7.2	21.8	20.6	36.0	11.4
35-0147	Castroville	0.0	0.0	7.5	23.8	21.5	0.0	9.1
36-3680	Castroville	0.0	0.0	8.6	23.3	21.2	0.0	13.5
35-0151	Castroville	0.0	0.0	8.0	23.5	22.8	0.0	11.5
36-3031	Castroville	0.0	0.0	6.5	21.0	17.8	0.0	9.5
38-0469	Castroville	0.0	34.1	6.7	22.9	18.8	34.1	13.8
41-0037	Castroville	0.0	0.0	7.4	26.7	24.0	0.0	13.5
37-0056	Castroville	0.0	0.0	6.6	19.4	13.8	0.0	9.4
41-0006	Castroville	53.1	0.0	6.2	24.6	20.0	0.0	12.1
41-0065	Castroville	0.0	31.5	7.1	21.5	18.8	31.5	10.4
36-3711	Castroville	0.0	0.0	6.7	0.0	20.5	0.0	12.0
36-3057	Castroville	0.0	0.0	6.5	24.5	22.1	0.0	10.2
40-0331	Castroville	0.0	0.0	7.3	0.0	21.5	0.0	15.4
36-4317	Castroville	0.0	0.0	7.0	21.1	20.0	0.0	13.5
40-0840	Castroville	0.0	0.0	7.8	0.0	19.2	0.0	10.7
36-3304	Castroville	0.0	0.0	4.9	21.9	17.7	0.0	13.5
40-0406	Castroville	0.0	0.0	7.0	0.0	0.0	0.0	10.8
37-0627	Castroville	0.0	0.0	7.5	0.0	17.2	0.0	10.8
36-3069	Castroville	0.0	0.0	6.4	19.6	18.0	0.0	13.4

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
41-0221	Castroville	0.0	0.0	5.7	22.2	16.8	0.0	9.0
41-0213	Castroville	0.0	30.0	7.5	23.2	20.8	30.0	10.1
36-4049	Castroville	0.0	0.0	7.8	22.2	19.6	0.0	12.7
40-0517	Castroville	0.0	0.0	8.9	25.1	21.5	0.0	12.6
43-0034	Castroville	43.0	0.0	7.5	22.8	19.5	0.0	12.8
44-0770	Castroville	0.0	0.0	6.6	24.0	21.6	0.0	12.0
35-3099	Castroville	0.0	0.0	5.2	18.3	16.5	0.0	13.5
40-1084	Castroville	0.0	0.0	5.7	0.0	0.0	0.0	0.0
43-0406	Castroville	0.0	0.0	7.1	19.5	16.4	0.0	12.2
35-3165	Castroville	0.0	0.0	6.0	21.5	18.2	0.0	10.9
35-2390	Castroville	0.0	0.0	6.3	23.6	20.4	0.0	10.6
44-0284	Castroville	0.0	0.0	9.8	21.7	19.7	0.0	10.7
35-3022	Castroville	0.0	0.0	6.2	16.6	17.7	0.0	12.2
36-4268	Castroville	0.0	0.0	6.2	21.7	18.9	0.0	10.3
35-2152	Castroville	0.0	0.0	5.9	21.3	20.1	0.0	10.9
35-2323	Castroville	0.0	0.0	5.0	21.3	18.7	0.0	11.9
40-0068	Castroville	0.0	0.0	6.7	0.0	0.0	0.0	11.2
35-3047	Castroville	42.8	0.0	5.4	20.7	18.4	0.0	11.0
35-2147	Castroville	0.0	0.0	6.6	20.3	18.6	0.0	11.3
36-3025	Castroville	0.0	35.5	8.5	0.0	20.2	35.5	12.1
35-2385	Castroville	49.0	34.0	7.6	0.0	17.9	34.0	10.6
36-4252	Castroville	40.3	0.0	5.8	19.1	16.0	0.0	11.7
36-3922	Castroville	0.0	0.0	7.4	21.5	18.5	0.0	11.5
40-0034	Castroville	0.0	0.0	8.1	0.0	17.9	0.0	10.3
44-0020	Castroville	0.0	0.0	6.2	24.0	19.1	0.0	11.5
37-0726	Castroville	0.0	0.0	8.1	0.0	18.4	0.0	11.5
38-0238	Castroville	52.0	0.0	6.3	19.3	21.2	0.0	11.7
35-2212	Castroville	0.0	0.0	4.9	24.3	21.6	0.0	14.2
36-3925	Castroville	0.0	0.0	7.0	23.5	21.4	0.0	11.7
44-1410M	Castroville	0.0	0.0	0.0	0.0	22.1	0.0	0.0
44-1014M	Castroville	0.0	0.0	6.5	20.6	0.0	0.0	9.2
44-0822	Castroville	0.0	0.0	6.9	22.0	17.1	0.0	11.1
47-0035	Castroville	48.1	0.0	7.0	0.0	0.0	0.0	11.1
37-0369	Darl	0.0	0.0	5.9	13.8	12.9	18.1	12.5
41-0001	Darl	0.0	17.8	4.5	10.8	10.8	17.8	9.2
37-0356	Darl	0.0	0.0	6.4	12.7	13.5	0.0	9.4
36-3484	Darl	0.0	14.3	5.1	12.1	11.1	14.3	11.0
41-0322	Darl	42.8	15.8	5.8	11.3	10.6	15.8	11.6
41-0264	Darl	0.0	15.4	6.0	13.6	13.2	15.4	14.8
36-3055	Darl	0.0	17.0	6.3	14.4	13.6	17.0	10.0
38-0806	Darl	0.0	0.0	5.2	0.0	0.0	0.0	0.0
35-2946	Darl	40.5	17.4	5.8	0.0	13.7	17.4	12.9
35-2921	Darl	37.5	16.3	6.1	12.1	11.3	16.3	8.2
35-2639	Darl	0.0	0.0	5.2	0.0	0.0	0.0	0.0
36-3896	Darl	0.0	16.7	5.6	15.6	15.1	16.7	10.8
36-3487	Darl	40.3	16.1	6.3	13.5	11.7	16.5	8.3
35-2429	Darl	0.0	14.7	5.2	11.5	10.2	14.7	11.0
36-3531	Darl	0.0	17.8	6.5	16.7	14.4	17.8	9.3
36-3321	Darl	30.6	17.1	4.0	12.6	11.2	17.2	8.9
41-0032	Darl	0.0	19.5	5.2	13.5	13.7	19.5	11.8
43-0032	Darl	0.0	0.0	5.2	0.0	12.0	0.0	9.0
35-2959	Darl	41.8	16.8	4.1	12.7	11.5	17.1	11.0
35-2866	Darl	40.3	20.7	5.9	11.7	11.4	20.7	7.6
41-0116	Darl	0.0	16.7	6.3	14.0	15.0	16.6	8.8
41-0258	Darl	0.0	15.2	5.4	13.1	12.8	15.3	10.8
38-0326	Darl	0.0	20.4	8.4	15.7	15.8	20.4	13.9
41-0323	Darl	48.5	18.7	6.9	14.7	13.4	18.7	9.2
35-2325	Darl	47.7	17.5	7.2	14.3	11.8	17.5	8.9
40-0847	Darl	33.6	15.8	5.1	0.0	12.5	15.8	11.5
36-3520	Darl	32.4	14.5	5.2	11.2	11.4	14.5	11.7
38-0736	Darl	42.2	14.6	6.6	0.0	13.2	14.6	12.5
41-0257	Darl	33.5	16.6	4.9	12.4	12.9	16.6	10.5
35-2905	Darl	41.8	16.7	5.1	14.2	14.3	16.7	10.5
36-3898	Darl	38.0	16.5	5.4	14.5	15.2	16.5	13.7
35-2871	Darl	35.5	16.3	5.5	15.5	14.6	16.3	11.5
40-0370	Darl	0.0	19.6	5.2	0.0	12.1	19.6	8.8
35-2382	Darl	31.2	15.6	5.1	16.1	12.8	15.6	10.0
41-0268	Darl	0.0	16.3	6.4	0.0	14.7	16.3	13.7
35-3026	Darl	34.5	15.9	4.8	15.9	13.9	15.3	7.2
36-3699	Darl	0.0	18.2	5.2	13.9	15.4	18.2	8.8
36-4247	Darl	33.1	17.4	7.0	15.9	16.3	17.4	8.7
37-0363	Darl	0.0	18.0	5.6	17.5	15.5	18.0	8.1
37-0719	Darl	0.0	0.0	9.5	0.0	12.5	0.0	13.5
41-0203	Darl	0.0	19.0	6.2	15.9	14.0	19.0	15.5
41-0115	Darl	0.0	17.2	6.0	14.4	13.5	17.2	10.9
41-0241	Darl	0.0	16.5	6.5	13.9	12.4	16.5	17.0
36-3619	Darl	32.0	16.0	5.4	13.7	12.0	16.0	15.7
35-2431	Darl	0.0	17.5	8.1	13.3	12.7	18.9	13.9
41-0162	Darl	0.0	21.8	6.5	15.3	14.0	20.7	14.4
36-3068	Darl	0.0	23.6	8.1	14.8	14.9	23.6	15.7
41-0368	Darl	0.0	24.1	5.6	0.0	14.5	24.1	8.8
35-2445	Darl	0.0	0.0	6.7	0.0	0.0	0.0	10.5
36-3608	Darl	0.0	11.8	7.7	12.2	12.2	22.4	9.1
36-3036	Darl	38.1	19.8	5.2	13.6	11.5	19.8	8.7

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
36-3513	Darl	0.0	22.2	7.2	14.6	14.6	22.2	11.3
35-2326	Darl	0.0	22.3	6.9	15.8	14.4	22.3	9.1
36-3437	Darl	0.0	26.3	5.6	16.0	14.3	26.3	9.5
36-3534	Darl	0.0	21.1	5.5	0.0	15.8	21.3	10.9
35-3103	Darl	0.0	0.0	7.9	20.1	15.6	0.0	12.0
35-3163	Darl	0.0	21.3	5.1	19.1	14.3	21.3	10.1
35-2976	Darl	0.0	25.9	7.8	18.8	16.8	26.5	12.2
36-3302	Darl	0.0	21.5	7.6	17.7	15.3	21.5	11.0
35-2004	Darl	47.6	20.3	8.1	17.0	14 7	20.3	12.3
40-0529	Darl	0.0	0.0	7.1	14.0	12.3	0.0	13.1
35-3126	Darl	0.0	20.0	8.1	15.8	13.9	20.0	10.6
36-3023	Darl	0.0	16.7	6.2	16.7	12.5	16.7	9.7
36-4257	Darl	0.0	18.0	8.8	14.1	12.4	18.0	14.1
35-2021	Darl	0.0	18.7	7.3	15.8	13.5	18.7	13.1
35-0164	Darl	42.3	19.2	7.7	0.0	11.6	19.2	11.5
36-3965	Darl	0.0	19.9	6.0	14.4	13.0	19.9	13.9
36-3584	Darl	0.0	19.7	8.9	15.9	12.4	19.7	13.3
35-3024	Darl	0.0	21.9	8.0	18.1	13.9	21.9	12.2
35-3023	Darl	0.0	23.8	9.6	18.8	16.8	23.3	13.4
36-3754	Darl	0.0	19.0	7.1	15.9	12.2	18.4	10.2
36-3059	Darl	38.3	20.4	7.2	14.8	12.6	20.4	10.9
35-3072	Darl	0.0	20.2	7.7	15.2	12.7	20.2	11.1
35-2960	Darl	50.6	20.3	6.8	15.1	14.1	20.3	9.1
37-0371	Darl	0.0	0.0	5.5	0.0	14.1	19.6	8.2
40-0366	Darl	0.0	0.0	6.8	0.0	15.2	0.0	10.6
41-0237	Darl	54.2	21.0	8.0	17.2	13.1	21.0	11.5
35-3043	Darl	44.2	23.3	7.2	15.3	12.1	23.3	12.2
35-2966	Darl	59.8	0.0	7.4	13.1	13.6	0.0	11.1
35-2899	Darl	0.0	20.0	6.6	0.0	11.7	20.0	12.2
37-0625	Darl	0.0	21.2	7.5	14.6	13.5	21.0	13.9
37-0054	Darl	0.0	0.0	7.0	14.6	12.6	0.0	14.1
37-0357	Darl	0.0	18.2	5.6	0.0	11.5	18.2	10.8
38-0739	Darl	0.0	13.0	5.2	10.3	0.0	0.0	0.0
40-0715	Darl	0.0	15.9	6.0	0.0	13.3	15.9	0.0
40-0662	Darl	0.0	0.0	6.2	12.5	14.1	0.0	11.4
40-0974	Darl	0.0	0.0	6.3	0.0	14.9	0.0	10.5
43-0311	Darl	0.0	0.0	7.8	17.5	15.5	0.0	11.6
43-0258	Darl	0.0	15.4	5.6	0.0	13.2	15.4	10.9
44-0025	Darl	0.0	0.0	5.1	9.8	10.5	0.0	9.3
37-0497	Darl	0.0	0.0	6.0	17.1	0.0	0.0	0.0
38-0019	Darl	0.0	0.0	6.0	0.0	12.3	0.0	0.0
44-0727	Darl	0.0	0.0	4.4	12.4	0.0	0.0	0.0
36-3494	Darl	0.0	19.8	6.0	0.0	12.5	19.8	0.0
36-3423	Darl	0.0	20.5	6.1	0.0	15.0	20.5	10.4
41-0211	Darl	0.0	0.0	6.7	15.6	15.2	0.0	10.2
35-2928	Darl	40.0	18.2	6.3	0.0	13.0	18.2	13.4
41-0337	Darl	0.0	0.0	5.6	9.2	13.8	0.0	14.7
41-0137	Darl	37.6	0.0	6.8	0.0	13.0	0.0	11.3
41-0438	Darl	0.0	18.6	7.4	0.0	15.5	18.6	12.4
36-4278	Darl	0.0	0.0	7.2	11.5	11.4	0.0	8.7
36-3433	Darl	0.0	17.8	5.4	0.0	14.6	17.8	7.5
36-3454	Darl	0.0	20.5	5.8	0.0	14.4	20.5	0.0
36-3434	Darl	0.0	0.0	6.5	0.0	14.0	0.0	9.0
36-4251	Darl	0.0	18.4	5.1	0.0	15.2	18.4	8.8
36-3432	Darl	0.0	0.0	4.6	11.2	9.5	0.0	9.3
44-1271M	Darl	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-0891	Darl	0.0	15.4	5.5	12.0	12.0	0.0	6.7
44-0892	Darl	0.0	0.0	6.8	0.0	0.0	0.0	0.0
44-0893	Darl	0.0	0.0	6.5	0.0	0.0	0.0	0.0
47-0044	Darl	0.0	22.8	5.5	0.0	17.5	22.8	12.7
47-0114	Darl	0.0	0.0	5.3	0.0	13.4	0.0	13.2
50-0008	Darl	0.0	0.0	0.0	0.0	13.3	0.0	11.7
43-0235	Dawson	0.0	19.5	6.6	11.1	10.3	19.5	14.8
36-3110	Ellis	35.8	20.3	5.0	17.8	14.8	20.1	6.7
40-0977	Ellis	0.0	23.6	6.8	0.0	17.5	23.6	7.0
36-3063	Ellis	30.3	22.5	5.8	16.8	16.1	23.4	9.2
36-3655	Ellis	0.0	24.9	6.0	17.6	14.0	24.9	7.4
36-3595	Ellis	0.0	20.7	5.8	0.0	15.1	20.7	6.4
44-0696	Ellis	0.0	22.8	7.6	0.0	11.4	22.9	11.1
35-2931	Ellis	42.6	23.1	5.4	19.7	16.3	23.7	10.0
36-3483	Ellis	0.0	21.3	6.4	17.2	13.1	22.8	6.9
37-0749	Ellis	0.0	23.4	6.3	0.0	15.0	23.4	10.7
38-0466	Ellis	0.0	20.6	5.2	14.6	13.4	20.6	8.4
40-0184	Ellis	0.0	0.0	6.5	16.5	12.7	0.0	7.4
43-0357	Ellis	31.0	22.3	7.0	0.0	14.6	22.3	11.3
44-0191	Ellis	0.0	26.3	7.3	19.2	15.0	26.3	13.4
44-0559	Ellis	0.0	0.0	6.7	16.9	13.4	0.0	8.8
44-0726	Ellis	0.0	23.3	6.5	0.0	12.1	23.3	10.8
37-0751	Ellis	0.0	20.5	5.2	0.0	12.3	20.5	6.8
41-0319	Ellis	33.2	28.6	6.5	17.1	14.8	28.6	8.0
37-0759	Ellis	0.0	0.0	6.1	0.0	13.9	0.0	6.5
38-0752	Ellis	0.0	26.7	5.0	0.0	16.0	26.7	8.5
35-0157	Ellis	0.0	21.9	6.2	15.6	13.2	21.9	8.9
36-3614	Ellis	41.7	23.9	6.6	0.0	14.6	23.8	10.6

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
36-3065	Ellis	32.9	27.5	5.5	16.1	13.8	28.5	9.8
35-2971	Ellis	0.0	22.0	5.9	0.0	13.9	22.0	7.8
35-3106	Ellis	0.0	0.0	5.2	0.0	11.4	0.0	8.5
35-3027	Ellis	0.0	22.7	5.6	14.4	12.5	22.7	7.1
44-1458M	Ellis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-1517M	Ellis	0.0	0.0	5.0	14.8	12.8	0.0	8.2
44-1011M	Ellis	0.0	0.0	5.8	17.5	0.0	0.0	10.0
50-0096	Ellis	0.0	26.2	6.6	20.2	17.5	27.0	10.0
36-3703	Ensor	0.0	24.3	6.5	20.4	14.8	24.3	7.2
35-2970	Ensor	0.0	0.0	5.4	19.2	14.4	0.0	8.5
36-3934	Ensor	0.0	20.8	7.4	22.2	14.1	20.8	8.1
35-3132	Ensor	0.0	0.0	5.0	0.0	13.4	0.0	8.5
36-3357	Ensor	0.0	24.5	6.5	0.0	15.5	24.5	9.0
35-3131	Ensor	0.0	0.0	4.9	23.0	14.1	0.0	8.3
35-3038	Ensor	0.0	0.0	5.1	13.2	11.0	0.0	8.5
36-3524	Ensor	0.0	24.0	4.8	16.0	12.0	24.2	6.6
41-0088	Ensor	0.0	0.0	5.6	0.0	16.2	0.0	7.9
36-3457	Ensor	0.0	22.4	6.1	19.4	12.6	23.1	7.7
36-4184	Ensor	31.2	0.0	3.8	13.9	11.1	0.0	6.9
36-4244	Ensor	0.0	0.0	5.8	21.2	14.5	0.0	7.7
41-0216	Ensor	0.0	0.0	6.1	23.9	15.7	0.0	8.2
36-3554	Ensor	0.0	0.0	6.6	22.3	14.6	0.0	7.9
35-2880	Ensor	0.0	0.0	6.3	24.4	15.2	0.0	8.2
35-2393	Ensor	0.0	22.8	5.5	16.0	12.5	22.8	8.0
41-0109	Ensor	0.0	0.0	6.3	7.5	12.6	0.0	8.0
36-3358	Ensor	0.0	22.9	5.5	0.0	16.0	22.9	7.7
36-3019	Ensor	43.5	20.1	6.0	15.2	11.2	22.7	5.8
37-0670	Ensor	0.0	0.0	5.7	16.2	11.5	0.0	8.7
37-0370	Ensor	0.0	25.1	7.2	0.0	15.4	25.1	10.1
43-0409	Ensor	0.0	0.0	5.4	0.0	10.7	0.0	7.4
36-3810	Ensor	0.0	25.1	5.6	0.0	13.2	25.1	7.7
44-0714	Ensor	0.0	0.0	5.7	18.4	13.0	0.0	8.9
38-0018	Ensor	0.0	0.0	5.1	14.4	11.3	0.0	9.0
36-3111	Ensor	0.0	0.0	6.0	0.0	0.0	0.0	9.0
35-3149	Ensor	0.0	0.0	5.8	18.1	13.9	0.0	7.2
35-2958	Ensor	42.1	20.8	6.4	21.1	14.8	20.8	8.3
36-3527	Ensor	0.0	20.8	6.7	0.0	13.0	20.8	7.3
35-2954	Ensor	0.0	0.0	5.7	21.5	14.4	20.7	7.0
36-4272	Ensor	0.0	26.3	7.5	0.0	16.9	26.3	9.5
35-3133	Ensor	0.0	20.1	5.0	18.2	11.9	20.1	7.5
40-0976	Ensor	0.0	0.0	6.5	0.0	19.1	0.0	7.5
35-2174	Ensor	42.1	25.1	5.9	19.7	16.7	25.1	7.2
36-3571	Ensor	0.0	20.2	6.2	18.8	12.8	20.2	8.9
35-2922	Ensor	0.0	0.0	5.3	21.8	15.6	0.0	7.2
35-2353	Ensor	0.0	22.3	7.4	24.7	17.5	22.3	8.1
36-3020	Ensor	30.8	0.0	5.8	20.0	12.5	0.0	7.3
37-0060	Ensor	0.0	23.1	5.6	0.0	14.1	23.1	8.0
35-2213	Ensor	0.0	22.2	5.4	22.1	15.4	22.2	7.7
36-3453	Ensor	0.0	0.0	5.7	24.1	15.8	0.0	8.5
36-4033	Ensor	0.0	24.5	5.6	23.5	15.0	24.5	8.0
35-3134	Ensor	0.0	0.0	5.7	0.0	0.0	0.0	6.4
37-0760	Ensor	41.7	0.0	6.0	0.0	14.9	0.0	8.0
35-2448	Ensor	37.7	0.0	5.5	20.8	15.6	0.0	6.0
35-2154	Ensor	0.0	22.9	5.4	23.0	15.1	22.7	8.4
35-2158	Ensor	0.0	19.6	5.2	0.0	16.5	19.2	7.8
35-2354	Ensor	0.0	18.8	6.4	0.0	15.2	19.4	8.1
41-0321	Ensor	43.1	20.0	5.8	19.9	16.2	20.3	7.3
36-3005	Ensor	0.0	0.0	5.3	0.0	13.6	0.0	7.5
35-3157	Ensor	0.0	0.0	6.0	19.4	14.2	0.0	6.2
36-3056	Ensor	0.0	22.0	5.6	20.1	14.0	21.6	7.6
38-0407	Ensor	0.0	0.0	5.7	0.0	18.7	22.1	6.7
36-3493	Ensor	37.5	21.8	6.2	20.8	16.3	20.5	8.9
38-0024	Ensor	0.0	0.0	6.2	20.8	15.8	0.0	8.4
36-4246	Ensor	0.0	0.0	6.1	0.0	14.2	0.0	8.4
36-3565	Ensor	0.0	22.6	6.0	19.7	14.0	22.6	8.0
36-3526	Ensor	55.2	22.5	7.0	0.0	13.2	22.5	10.4
41-0087	Ensor	0.0	23.1	7.4	0.0	16.9	23.1	8.1
41-0365	Ensor	0.0	28.5	7.3	21.7	15.2	28.5	9.8
41-0214	Ensor	0.0	25.8	5.8	20.0	14.0	25.8	8.5
41-0461	Ensor	0.0	0.0	5.9	0.0	13.8	20.0	8.2
35-2176	Ensor	38.0	17.5	5.0	15.6	21.1	17.5	7.4
35-2206	Ensor	0.0	0.0	6.4	18.4	16.5	0.0	7.7
35-2953	Ensor	0.0	24.5	5.8	0.0	12.9	24.5	8.4
40-1297	Ensor	0.0	0.0	8.0	21.5	14.2	0.0	9.1
43-0036	Ensor	0.0	0.0	8.1	0.0	11.0	0.0	8.2
40-0716	Ensor	0.0	0.0	5.2	0.0	12.1	0.0	8.0
44-0032	Ensor	0.0	24.5	5.8	15.8	11.5	24.5	8.0
36-4046	Ensor	0.0	0.0	5.7	19.0	13.4	0.0	9.5
44-0783	Ensor	0.0	25.6	5.5	0.0	12.1	25.6	10.0
36-4253	Ensor	0.0	27.3	5.5	0.0	17.7	27.3	7.5
35-2917	Ensor	0.0	22.5	6.4	0.0	15.6	22.5	10.6
35-2979	Ensor	42.5	18.6	6.3	0.0	13.9	18.6	8.5
35-2645	Ensor	34.9	21.4	7.0	21.2	12.8	18.2	10.0
35-0182	Ensor	0.0	17.1	5.5	15.5	12.7	17.1	7.7

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
38-0389	Ensor	0.0	28.8	7.5	0.0	21.6	28.8	9.1
38-0734	Ensor	0.0	0.0	4.6	17.7	12.7	0.0	6.1
38-0819	Ensor	0.0	0.0	7.0	20.5	15.4	0.0	9.3
40-0717	Ensor	0.0	0.0	6.1	0.0	12.1	0.0	12.9
40-0942	Ensor	0.0	0.0	5.8	0.0	14.5	0.0	9.7
40-1077	Ensor	0.0	0.0	6.8	21.8	0.0	0.0	0.0
40-0944	Ensor	0.0	0.0	5.5	0.0	12.5	0.0	6.7
40-0405	Ensor	0.0	25.2	5.4	0.0	15.6	25.2	7.8
43-0030	Ensor	0.0	20.7	6.6	0.0	16.3	20.7	12.0
43-0400	Ensor	46.9	0.0	6.4	21.1	14.1	0.0	10.4
44-0716	Ensor	0.0	27.7	6.3	0.0	12.9	27.7	9.0
35-2175	Ensor	0.0	0.0	5.7	14.2	12.0	0.0	8.6
36-3000	Ensor	0.0	0.0	5.9	0.0	12.8	0.0	8.4
35-2908	Ensor	0.0	0.0	6.3	21.0	15.4	0.0	7.5
41-0435	Ensor	0.0	0.0	5.4	0.0	13.1	0.0	8.0
35-2637	Ensor	0.0	0.0	5.6	0.0	18.4	0.0	10.3
35-2451	Ensor	0.0	0.0	5.0	19.2	0.0	0.0	7.6
36-3597	Ensor	0.0	0.0	6.8	0.0	14.0	0.0	9.0
36-3551	Ensor	0.0	0.0	5.5	23.8	16.2	0.0	8.1
36-4212	Ensor	0.0	19.6	6.3	16.8	13.7	19.6	7.2
36-3066	Ensor	40.7	0.0	6.3	0.0	0.0	0.0	7.0
35-2356	Ensor	0.0	24.8	6.7	18.1	15.1	24.8	9.1
35-2654	Ensor	0.0	0.0	7.0	0.0	14.0	0.0	6.8
41-0210	Ensor	48.5	27.3	7.8	0.0	19.1	27.3	10.5
36-3503	Ensor	0.0	0.0	6.9	17.8	14.5	0.0	8.4
35-2889	Ensor	0.0	25.8	6.2	0.0	13.6	25.8	0.0
41-0099	Ensor	0.0	0.0	6.0	20.7	15.4	0.0	8.1
38-0023	Ensor	0.0	0.0	4.3	22.0	17.5	0.0	7.4
40-0186	Ensor	0.0	0.0	5.5	18.8	13.2	0.0	9.5
41-0056	Ensor	0.0	0.0	6.0	18.2	13.6	0.0	8.5
44-0190	Ensor	0.0	0.0	5.8	20.2	14.0	0.0	7.5
36-4249	Ensor	0.0	0.0	4.9	0.0	0.0	0.0	7.6
38-0811	Ensor	0.0	0.0	5.9	0.0	15.1	0.0	7.5
41-0355	Ensor	0.0	0.0	5.2	0.0	14.4	0.0	7.3
37-0663	Ensor	0.0	0.0	6.2	18.2	11.5	0.0	9.0
36-3422	Ensor	0.0	23.7	6.5	0.0	12.2	23.7	6.6
40-0573	Ensor	0.0	0.0	5.3	0.0	0.0	0.0	0.0
44-0712	Ensor	0.0	0.0	5.8	0.0	15.2	0.0	8.2
44-0790	Ensor	0.0	0.0	5.5	0.0	14.7	0.0	10.6
40-1038	Ensor	0.0	0.0	5.3	0.0	0.0	0.0	0.0
44-0148	Ensor	0.0	0.0	5.6	0.0	12.5	0.0	0.0
37-0778	Ensor	0.0	0.0	6.1	0.0	0.0	0.0	7.5
36-3652	Ensor	0.0	0.0	5.6	19.2	12.7	0.0	11.6
37-0774	Ensor	0.0	22.4	6.2	0.0	12.5	22.4	8.5
36-3455	Ensor	0.0	25.5	6.2	0.0	14.4	25.5	0.0
44-1494M	Ensor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-1041M	Ensor	0.0	21.3	5.7	21.1	15.8	21.3	8.5
44-1407M	Ensor	0.0	21.8	5.2	21.8	15.1	21.8	7.3
44-0844	Ensor	0.0	22.2	6.8	15.2	11.3	0.0	8.7
44-0926	Ensor	0.0	0.0	0.0	18.5	0.0	0.0	0.0
50-0010	Ensor	0.0	22.5	7.3	23.2	16.5	23.2	8.0
50-0011	Ensor	0.0	18.7	6.7	0.0	15.8	0.0	7.9
35-2956	Fresno	0.0	19.5	3.2	0.0	0.0	0.0	0.0
41-0031	Fresno	0.0	20.0	3.7	20.0	0.0	0.0	0.0
38-0483	Fresno	0.0	0.0	4.5	0.0	0.0	0.0	0.0
35-3141	Frio	0.0	0.0	5.1	0.0	13.5	0.0	8.5
36-3102	Frio	0.0	21.5	6.3	0.0	16.1	21.5	7.9
36-4182	Frio	55.2	24.0	6.7	24.0	14.7	22.6	9.3
36-4027	Frio	31.0	19.2	6.1	15.8	10.8	19.7	5.3
35-3148	Frio	0.0	18.3	6.2	20.5	13.7	18.3	9.8
36-3632	Frio	0.0	20.2	6.7	18.1	4.8	0.0	6.0
35-2446	Frio	0.0	0.0	9.3	23.5	17.7	0.0	8.0
36-3882	Frio	0.0	20.5	7.6	9.2	13.5	20.5	9.3
41-0089	Frio	0.0	19.0	5.5	19.3	13.3	19.0	6.6
35-2149	Frio	0.0	19.1	5.8	17.7	12.0	19.1	7.7
35-3073	Frio	0.0	0.0	6.3	18.2	13.5	0.0	6.4
41-0003	Frio	39.5	21.2	6.0	21.2	15.6	18.3	9.0
38-0046	Frio	0.0	0.0	7.2	0.0	17.7	0.0	17.2
40-1282	Frio	0.0	0.0	5.7	0.0	16.2	0.0	9.4
40-0978	Frio	0.0	23.3	5.6	0.0	12.4	23.3	8.9
36-3889	Frio	0.0	0.0	5.8	0.0	0.0	0.0	0.0
38-0001	Frio	0.0	0.0	5.4	17.4	12.6	0.0	0.0
38-0194	Frio	52.0	0.0	5.9	0.0	17.2	0.0	13.5
36-3962	Frio	0.0	0.0	6.1	0.0	13.9	0.0	8.0
50-0093	Frio	0.0	16.0	5.3	0.0	13.5	0.0	8.0
35-2635	Godley	51.2	17.3	8.2	14.8	13.1	17.3	12.3
36-3507	Godley	0.0	24.2	8.1	16.7	15.8	24.2	11.6
35-2009	Godley	0.0	19.5	8.1	19.3	15.2	19.5	11.5
35-3068	Godley	47.0	21.2	6.9	16.0	13.6	21.8	12.3
36-3509	Godley	0.0	20.9	7.5	17.8	15.8	20.9	11.7
41-0103	Godley	0.0	0.0	7.2	16.3	14.5	0.0	9.2
35-2018	Godley	46.4	18.4	9.0	12.9	12.3	18.4	10.9
35-2886	Godley	48.2	18.0	7.6	6.9	13.0	17.3	12.0
37-0631	Godley	0.0	0.0	6.8	16.4	12.6	[illegible]	16.6

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
36-4258	Godley	0.0	21.2	6.0	14.1	13.6	21.3	14.9
35-3032	Godley	0.0	18.6	7.3	15.0	12.5	18.6	12.0
35-3128	Godley	44.0	19.8	7.1	16.4	13.3	19.8	14.6
35-3142	Godley	0.0	17.9	8.1	19.2	15.3	17.9	13.0
40-0164	Godley	38.6	18.7	6.7	15.6	11.4	18.7	12.4
43-0046	Godley	0.0	20.1	8.8	15.1	13.1	20.1	13.4
44-0825	Godley	0.0	0.0	0.0	19.2	12.8	0.0	11.2
38-0854	Golondrina	0.0	0.0	5.1	22.1	0.0	0.0	0.0
36-4297	Golondrina	0.0	0.0	6.0	25.2	0.0	28.9	0.0
40-0980	Golondrina	0.0	0.0	7.3	0.0	0.0	0.0	0.0
35-2214	Gower	49.8	32.1	18.9	14.4	20.3	32.1	18.4
35-2890	Gower	0.0	0.0	6.7	15.3	21.0	0.0	14.6
35-3121	Gower	0.0	0.0	6.1	0.0	18.0	0.0	7.5
36-3924	Gower	0.0	0.0	7.3	0.0	18.0	0.0	13.6
35-3159	Gower	0.0	0.0	7.1	10.8	16.0	0.0	15.1
36-3481	Gower	0.0	20.7	9.5	0.0	15.1	20.7	19.4
36-3009	Gower	0.0	0.0	6.8	0.0	15.4	0.0	17.1
41-0366	Gower	0.0	0.0	6.7	0.0	18.3	0.0	13.9
36-3495	Gower	0.0	0.0	8.8	0.0	15.7	0.0	0.0
37-0673	Gower	0.0	18.6	7.4	0.0	15.2	18.6	15.1
40-1309	Gower	44.7	23.6	7.4	18.0	20.1	23.6	12.1
40-1161	Gower	0.0	24.1	6.5	12.0	15.4	24.1	12.9
40-1306	Gower	57.2	0.0	8.9	19.2	18.4	0.0	14.4
43-0359	Gower	0.0	24.2	7.3	0.0	17.6	24.2	13.8
43-0076	Gower	0.0	0.0	7.7	0.0	19.1	23.2	14.9
43-0349	Gower	0.0	25.7	8.5	0.0	22.7	0.0	0.0
43-0124	Gower	0.0	23.8	9.0	0.0	18.7	23.8	14.3
44-0287	Gower	47.6	22.5	7.5	0.0	16.5	22.5	14.4
44-0276	Gower	0.0	0.0	7.9	0.0	0.0	0.0	0.0
44-0776	Gower	0.0	0.0	6.2	18.0	17.1	0.0	17.5
38-0844	Gower	0.0	0.0	8.9	12.2	17.3	0.0	16.7
44-0833	Gower	0.0	0.0	7.6	0.0	0.0	0.0	0.0
35-3052	Lange	43.3	27.2	6.3	23.7	17.6	28.5	9.4
35-2854	Lange	71.5	36.0	8.1	20.2	18.4	36.2	16.5
35-3090	Lange	53.7	28.3	7.5	19.2	17.0	28.2	15.1
41-0388	Lange	0.0	26.3	9.4	22.6	18.6	25.3	11.4
35-2985	Lange	56.3	0.0	7.2	22.5	19.1	0.0	12.8
36-3508	Lange	0.0	35.7	7.8	19.2	19.5	38.1	13.4
36-4330	Lange	0.0	28.2	7.1	25.2	17.3	32.3	14.5
41-0057	Lange	64.3	33.1	10.6	25.7	18.9	33.1	15.1
35-3083	Lange	0.0	35.5	8.1	24.2	21.9	35.8	12.3
36-3542	Lange	0.0	33.0	9.3	22.5	16.8	33.1	11.2
35-2388	Lange	0.0	33.6	8.7	19.8	18.8	33.6	12.8
38-0858	Lange	0.0	0.0	8.1	0.0	22.5	0.0	10.4
40-0185	Lange	0.0	30.2	9.3	0.0	15.7	30.2	14.5
37-0057	Lange	0.0	30.7	6.8	23.4	22.0	30.7	13.2
44-1043M	Lange	0.0	0.0	5.1	19.6	0.0	0.0	15.1
44-1320M	Lange	0.0	0.0	8.9	25.0	23.2	0.0	15.8
35-3034	Marcos	55.6	0.0	6.7	17.1	15.2	0.0	7.2
44-0440	Marcos	0.0	27.8	4.6	26.3	15.5	27.8	9.4
41-0062	Marcos	0.0	37.7	5.4	25.4	18.1	37.7	8.9
35-3123	Marcos	54.5	32.4	6.3	24.1	19.1	32.4	19.5
36-3575	Marcos	0.0	0.0	7.0	0.0	13.2	0.0	9.1
35-2394	Marcos	32.7	0.0	6.1	20.9	15.8	0.0	9.6
37-0734	Marcos	0.0	0.0	4.9	21.5	13.4	0.0	7.3
35-2938	Marshall	0.0	0.0	7.0	19.1	17.9	0.0	10.3
35-2464	Marshall	0.0	0.0	6.2	16.5	11.8	0.0	10.5
35-2858	Marshall	0.0	0.0	8.3	0.0	17.9	0.0	15.4
43-0295	Marshall	0.0	0.0	8.1	21.2	18.5	0.0	10.4
35-2157	Marshall	0.0	28.1	8.1	0.0	15.1	28.1	10.8
36-3104	Marshall	0.0	0.0	8.2	15.5	15.1	0.0	7.8
35-3013	Marshall	41.2	31.4	7.3	0.0	18.2	31.4	9.1
36-4282	Marshall	0.0	0.0	7.2	18.1	14.0	0.0	9.2
35-3144	Marshall	48.6	0.0	6.8	0.0	13.9	0.0	9.0
35-2430	Marshall	35.7	26.8	6.8	0.0	14.6	26.8	8.3
37-0503	Marshall	0.0	0.0	7.6	0.0	16.9	0.0	12.2
36-4174	Marshall	0.0	0.0	8.8	0.0	17.2	0.0	12.4
41-0002	Marshall	0.0	27.0	6.2	16.9	13.4	27.0	8.4
35-0166	Marshall	0.0	39.6	8.4	20.2	16.1	39.6	14.8
35-2636	Marshall	0.0	0.0	6.9	17.8	16.3	0.0	10.5
36-4271	Marshall	0.0	0.0	8.8	17.3	16.8	41.5	13.4
37-0633	Marshall	0.0	0.0	7.0	0.0	17.0	0.0	10.9
37-0628	Marshall	39.8	0.0	5.5	0.0	13.4	0.0	9.7
35-3155	Marshall	0.0	36.9	6.3	18.9	17.9	36.9	10.9
40-1275	Marshall	0.0	0.0	5.5	16.1	13.5	0.0	9.4
36-4291	Marshall	0.0	0.0	6.0	18.2	15.2	0.0	7.3
35-3055	Marshall	0.0	37.2	8.2	22.8	21.3	37.2	13.9
35-2874	Marshall	0.0	44.6	7.6	16.2	15.0	44.6	12.2
38-0099	Marshall	0.0	0.0	5.4	0.0	16.4	0.0	8.4
40-0353	Marshall	0.0	0.0	7.6	0.0	14.1	0.0	9.2
40-0527	Marshall	0.0	0.0	8.0	0.0	14.0	0.0	8.5
36-3692	Marshall	0.0	0.0	7.2	18.9	14.3	0.0	8.8
41-0426	Marshall	0.0	0.0	7.1	21.6	15.2	0.0	9.2
44-0473	Marshall	0.0	0.0	7.2	18.0	17.0	0.0	10.1

(Table continues on the following page.)

Metric Data. Continued.

CAT# OG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
35-2887	Marshall	0.0	32.3	7.6	19.6	19.9	32.3	10.2
35-3014	Marshall	0.0	29.8	7.2	18.4	14.4	29.8	9.6
36-3074	Marshall	0.0	32.8	7.8	0.0	14.9	32.8	8.5
35-3104	Marshall	0.0	0.0	5.7	0.0	18.1	0.0	7.8
37-0756	Marshall	49.8	35.9	8.1	16.5	16.3	35.9	9.7
43-0405	Marshall	50.6	28.9	5.5	0.0	16.9	28.9	8.7
44-0296	Marshall	0.0	0.0	7.1	21.9	18.2	0.0	10.0
44-0472	Marshall	0.0	0.0	7.1	0.0	18.8	0.0	7.5
35-2988	Marshall	46.5	0.0	5.7	0.0	16.1	0.0	9.9
35-2156	Marshall	0.0	0.0	8.2	0.0	19.0	0.0	0.0
41-0242	Marshall	0.0	27.2	6.4	0.0	14.3	27.2	9.1
35-2965	Marshall	0.0	0.0	7.6	0.0	18.4	0.0	9.8
37-0504	Marshall	0.0	0.0	5.1	0.0	14.5	0.0	10.2
35-0152	Marshall	47.5	29.3	7.1	0.0	15.6	29.3	9.3
35-2159	Marshall	0.0	36.7	7.6	0.0	21.2	36.7	12.9
37-0753	Marshall	0.0	0.0	9.8	0.0	0.0	0.0	0.0
40-0071	Marshall	0.0	0.0	7.4	0.0	16.0	0.0	13.6
41-0434	Marshall	0.0	0.0	6.6	0.0	16.1	0.0	12.7
44-1286M	Marshall	0.0	0.0	8.1	17.7	0.0	0.0	9.8
44-1710M	Marshall	0.0	0.0	8.6	23.1	20.0	0.0	12.3
44-1482M	Marshall	0.0	37.5	6.5	18.1	15.8	37.5	15.5
44-1096M	Marshall	0.0	30.8	8.2	0.0	18.2	30.8	9.8
40-0070	Martindale	32.7	0.0	5.7	0.0	13.1	0.0	9.5
36-3505	Martindale	0.0	30.6	7.8	23.8	19.2	30.6	13.7
35-0177	Martindale	0.0	31.1	8.5	20.5	16.6	31.1	15.2
36-3480	Martindale	0.0	28.1	6.3	20.9	19.4	28.1	14.6
38-0738	Martindale	0.0	0.0	6.4	27.1	0.0	0.0	13.0
36-4337	Martindale	0.0	0.0	6.4	18.2	14.6	0.0	10.5
35-2975	Martindale	0.0	0.0	6.2	20.5	15.2	0.0	12.5
43-0119	Martindale	0.0	0.0	5.6	0.0	14.7	0.0	9.4
40-1310	Martindale	0.0	0.0	6.2	0.0	16.7	0.0	0.0
35-3151	Martindale	54.8	26.4	8.4	16.8	15.8	26.4	10.0
35-0179	Martindale	48.6	29.6	6.0	28.6	17.7	29.6	12.8
36-3884	Martindale	0.0	0.0	7.0	24.3	19.4	0.0	10.6
36-3087	Martindale	0.0	0.0	6.6	26.5	16.7	0.0	13.1
36-3012	Martindale	38.6	0.0	8.4	0.0	14.4	0.0	11.9
36-4183	Martindale	0.0	0.0	6.7	0.0	17.4	0.0	11.4
41-0238	Martindale	0.0	0.0	8.0	0.0	16.0	0.0	11.4
37-0724	Martindale	0.0	0.0	7.1	19.7	16.6	0.0	12.2
37-0735	Martindale	0.0	0.0	7.2	20.2	14.7	0.0	9.5
40-1307	Martindale	0.0	0.0	6.0	0.0	0.0	0.0	11.4
43-0107	Martindale	36.5	0.0	7.8	9.7	13.9	0.0	10.7
44-0146	Martindale	0.0	0.0	6.1	20.5	14.7	0.0	7.9
44-0735	Martindale	35.3	0.0	7.3	25.2	17.6	0.0	12.6
36-4261	Martindale	42.2	0.0	7.4	0.0	16.9	0.0	10.7
35-2459	Martindale	42.3	0.0	7.0	0.0	16.5	0.0	11.7
37-0360	Martindale	0.0	0.0	6.9	22.9	17.1	0.0	12.4
37-0329	Martindale	0.0	0.0	5.4	23.4	0.0	0.0	0.0
36-3519	Martindale	38.4	24.4	8.9	23.0	16.8	24.4	11.9
44-1324M	Martindale	0.0	0.0	6.1	0.0	0.0	0.0	10.1
44-1342M	Martindale	0.0	0.0	6.8	20.1	0.0	0.0	9.9
44-1455M	Martindale	0.0	0.0	6.5	0.0	0.0	0.0	0.0
35-2207	Montell	0.0	0.0	5.5	23.2	20.1	0.0	10.0
35-3139	Montell	0.0	33.9	4.8	21.4	20.4	33.9	11.6
36-4298	Montell	0.0	0.0	6.7	16.5	17.8	0.0	11.8
36-3555	Montell	0.0	0.0	6.1	26.1	22.4	35.6	9.6
35-2146	Montell	0.0	0.0	6.6	23.2	18.9	0.0	9.8
37-0439	Montell	0.0	0.0	6.1	0.0	0.0	0.0	8.7
40-0962	Montell	0.0	0.0	7.4	21.8	20.5	0.0	10.3
36-3592	Montell	0.0	0.0	5.6	21.5	17.7	0.0	11.9
41-0061	Montell	0.0	33.3	5.7	23.6	20.4	33.3	9.7
35-2691	Montell	0.0	22.1	6.2	22.1	19.8	21.4	9.2
35-2948	Montell	0.0	0.0	7.7	23.5	23.2	0.0	14.9
40-0066	Montell	0.0	0.0	4.9	0.0	15.3	0.0	11.5
37-0731	Montell	0.0	0.0	6.1	0.0	21.8	0.0	14.2
38-0750	Montell	0.0	0.0	6.6	20.5	16.3	0.0	13.7
40-0401	Montell	0.0	0.0	6.4	23.8	22.5	0.0	11.5
40-0537	Montell	0.0	36.1	6.9	20.1	18.7	36.1	13.1
44-0749	Montell	0.0	0.0	5.6	0.0	19.0	0.0	10.6
41-0240	Montell	0.0	0.0	7.0	20.6	16.5	0.0	14.5
40-0064	Montell	0.0	0.0	6.3	22.1	18.7	0.0	11.5
36-4245	Montell	0.0	0.0	8.2	20.5	16.3	0.0	9.7
35-2937	Montell	0.0	0.0	5.2	20.6	20.2	0.0	9.4
40-0533	Montell	0.0	0.0	5.1	24.1	0.0	0.0	0.0
36-4335	Montell	0.0	31.5	7.1	21.6	23.2	31.5	12.4
40-0722	Montell	0.0	0.0	6.9	0.0	19.9	0.0	0.0
44-0560	Montell	0.0	0.0	5.6	0.0	17.6	0.0	0.0
38-0467	Montell	0.0	0.0	5.6	0.0	16.3	0.0	12.0
41-0424	Montell	0.0	0.0	8.2	21.5	21.4	31.6	10.0
44-1507M	Montell	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37-0666	Morrill	0.0	0.0	8.5	0.0	16.8	0.0	12.3
37-0671	Morrill	0.0	0.0	7.5	0.0	0.0	0.0	11.0
40-0664	Morrill	0.0	0.0	9.0	0.0	15.2	0.0	20.3
35-2894	Morrill	0.0	0.0	8.6	18.2	17.4	0.0	17.5

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
41-0398	Morrill	0.0	21.7	7.6	13.5	15.9	21.7	20.5
37-0005	Morrill	0.0	0.0	8.6	12.6	17.2	0.0	16.5
40-0162	Morrill	0.0	0.0	7.5	0.0	15.0	0.0	16.4
35-2864	Morrill	0.0	0.0	7.2	10.3	15.1	0.0	17.6
36-3641	Morrill	77.7	0.0	9.3	0.0	20.1	0.0	26.5
40-1082	Morrill	0.0	0.0	7.5	14.1	16.0	0.0	17.4
35-2892	Morrill	0.0	22.2	8.2	15.0	18.1	22.2	14.5
50-0097	Morrill	0.0	0.0	0.0	16.0	19.6	0.0	18.5
35-0169	Nolan	59.9	29.1	8.2	14.6	19.3	29.1	17.7
44-1691M	Nolan	0.0	18.9	8.1	17.4	14.1	0.0	13.2
44-1321M	Nolan	0.0	19.2	7.1	16.8	13.4	19.2	15.5
44-1708M	Nolan	0.0	23.0	8.1	19.1	14.5	23.0	12.8
44-1292M	Nolan	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41-0122	Palmillas	41.8	23.0	7.0	0.0	15.5	23.0	11.8
41-0437	Palmillas	0.0	26.5	8.6	21.2	19.2	26.5	16.7
35-2010	Palmillas	0.0	0.0	7.7	15.4	16.3	0.0	15.0
35-2903	Palmillas	55.1	24.0	8.4	14.6	16.3	24.0	15.1
35-3154	Palmillas	0.0	27.8	8.4	19.8	14.3	27.8	15.6
35-3125	Palmillas	66.6	22.7	9.4	11.7	11.6	22.7	14.2
35-3077	Palmillas	0.0	21.8	7.7	14.6	11.2	21.8	12.0
38-0026	Palmillas	38.5	24.4	6.8	16.4	14.8	24.4	14.6
35-2987	Palmillas	0.0	0.0	6.2	0.0	16.8	0.0	9.8
35-2456	Palmillas	0.0	17.1	5.7	16.1	16.4	27.4	10.6
35-2957	Palmillas	0.0	0.0	8.7	0.0	19.1	0.0	0.0
35-0183	Palmillas	0.0	0.0	7.5	0.0	14.7	0.0	9.4
35-0175	Palmillas	0.0	24.0	7.3	0.0	13.9	24.0	15.4
36-4308	Palmillas	48.4	24.2	5.2	13.2	14.1	24.2	9.5
36-3061	Pedernales	0.0	25.6	8.4	11.0	18.2	25.6	17.5
41-0399	Pedernales	0.0	0.0	6.6	10.3	18.5	0.0	17.9
36-3560	Pedernales	0.0	26.2	7.1	14.3	17.6	26.2	18.5
35-2204	Pedernales	0.0	24.5	7.0	9.4	16.4	24.5	13.5
36-3883	Pedernales	0.0	24.2	6.4	0.0	17.9	24.2	15.1
35-3109	Pedernales	0.0	27.7	9.5	10.4	19.4	27.7	21.6
40-1037	Pedernales	0.0	0.0	7.1	0.0	16.9	0.0	14.8
37-0669	Pedernales	0.0	0.0	9.2	0.0	16.7	0.0	0.0
36-3085	Pedernales	0.0	25.6	8.2	0.0	18.1	25.3	14.7
36-4273	Pedernales	0.0	22.7	8.8	12.5	16.1	21.7	15.5
37-0718	Pedernales	0.0	19.3	5.6	0.0	14.9	0.0	11.5
36-4285	Pedernales	0.0	26.9	6.7	0.0	19.0	26.9	15.5
35-2867	Pedernales	0.0	27.1	7.8	9.0	17.0	0.0	15.1
41-0204	Pedernales	0.0	23.7	8.6	11.4	15.9	23.7	14.1
35-3019	Pedernales	0.0	21.8	8.1	0.0	18.4	21.7	11.4
36-3026	Pedernales	53.5	27.8	7.2	0.0	20.2	0.0	16.2
35-2391	Pedernales	66.0	27.2	8.0	10.0	16.7	27.2	16.9
43-0102	Pedernales	0.0	26.9	7.5	0.0	16.9	26.9	13.1
35-2895	Pedernales	0.0	27.7	8.8	13.5	18.0	27.7	16.4
35-2951	Pedernales	64.5	28.5	8.2	14.1	20.0	28.5	17.5
35-2875	Pedernales	59.0	22.8	9.1	11.7	18.9	22.8	15.3
35-2868	Pedernales	0.0	23.3	9.6	11.4	17.3	23.3	12.7
41-0104	Pedernales	0.0	28.9	9.3	0.0	18.2	28.9	21.7
35-2901	Pedernales	60.0	27.9	1.0	8.3	21.2	27.9	20.2
36-3681	Pedernales	65.9	0.0	7.2	14.1	20.3	0.0	13.6
35-2855	Pedernales	109.5	49.3	7.5	12.9	20.9	49.3	16.4
36-4180	Pedernales	0.0	0.0	7.7	6.9	23.1	0.0	17.4
38-0733	Pedernales	0.0	25.9	6.9	0.0	17.3	25.9	17.7
36-3322	Pedernales	0.0	25.0	9.3	11.9	15.4	25.0	16.1
36-3491	Pedernales	0.0	36.2	6.7	0.0	17.5	36.2	0.0
36-3431	Pedernales	0.0	27.9	9.2	12.2	16.4	27.9	20.6
43-0294	Pedernales	0.0	0.0	6.8	0.0	17.1	0.0	14.3
35-2384	Pedernales	59.8	31.7	10.7	0.0	18.2	31.7	17.0
36-3003	Pedernales	0.0	34.9	7.4	0.0	20.5	34.4	19.7
36-3034	Pedernales	0.0	28.9	9.1	0.0	19.4	28.9	21.9
35-2357	Pedernales	0.0	30.1	10.3	13.8	15.9	29.5	14.9
38-0333	Pedernales	0.0	0.0	7.3	13.5	17.8	0.0	12.9
41-0054	Pedernales	52.8	25.3	7.1	13.0	16.6	25.3	16.6
36-3642	Pedernales	0.0	27.2	9.0	17.4	22.0	27.2	17.5
36-3549	Pedernales	43.7	21.0	6.8	9.1	14.0	21.0	14.1
35-2891	Pedernales	0.0	0.0	10.4	12.4	18.3	0.0	11.5
35-2873	Pedernales	43.2	23.1	8.0	12.1	16.4	23.1	14.1
36-3486	Pedernales	0.0	30.4	8.0	14.4	17.3	30.4	14.3
35-2648	Pedernales	0.0	23.1	8.1	13.5	16.7	23.1	13.7
41-0133	Pedernales	0.0	23.8	7.6	0.0	16.3	23.8	15.2
35-2350	Pedernales	0.0	24.3	7.5	0.0	17.9	24.3	15.4
40-1160	Pedernales	0.0	0.0	7.4	0.0	16.6	0.0	12.5
40-1182	Pedernales	55.9	0.0	8.9	0.0	13.4	0.0	16.9
35-2647	Pedernales	0.0	0.0	7.2	13.7	19.4	0.0	18.6
36-3539	Pedernales	0.0	26.5	7.5	0.0	17.1	26.5	15.0
44-0328	Pedernales	0.0	24.8	10.1	0.0	15.7	24.8	16.0
41-0220	Pedernales	49.0	24.4	7.6	0.0	16.2	24.4	13.0
35-2653	Pedernales	0.0	22.9	8.2	10.8	17.5	22.9	14.5
36-3229	Pedernales	55.3	27.3	9.5	8.8	18.6	27.3	15.2
35-2876	Pedernales	46.7	0.0	7.9	12.4	17.1	0.0	14.1
36-3879	Pedernales	84.0	21.2	10.2	16.9	18.0	21.2	11.9
35-3011	Pedernales	0.0	23.7	7.4	13.6	15.0	23.7	14.3

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
36-3081	Pedernales	48.0	26.9	8.9	14.9	19.7	27.9	17.9
35-0173	Pedernales	78.3	28.1	8.5	10.5	15.5	28.1	21.2
35-2884	Pedernales	0.0	33.8	10.0	10.1	18.9	33.8	15.1
36-3095	Pedernales	0.0	25.7	9.1	12.8	18.2	0.0	16.5
41-0218	Pedernales	0.0	0.0	6.4	11.9	15.9	0.0	13.9
40-0065	Pedernales	0.0	0.0	10.1	16.4	25.7	0.0	19.6
41-0051	Pedernales	0.0	28.1	9.1	12.1	20.8	28.1	14.6
35-2205	Pedernales	0.0	0.0	7.7	9.8	16.4	0.0	15.5
36-3456	Pedernales	0.0	33.6	9.7	12.4	19.7	33.6	17.2
36-3880	Pedernales	57.2	26.9	7.6	14.2	19.5	26.9	17.3
36-3683	Pedernales	0.0	27.8	8.2	9.1	16.8	27.8	13.8
41-0251	Pedernales	0.0	31.5	7.7	0.0	20.0	31.5	19.5
41-0275	Pedernales	0.0	26.7	8.5	0.0	17.7	0.0	10.9
41-0191	Pedernales	0.0	24.7	8.3	10.8	17.4	24.7	13.3
41-0007	Pedernales	0.0	36.7	7.9	11.5	18.5	36.7	17.4
36-3897	Pedernales	52.0	29.6	9.8	11.8	17.6	29.6	15.8
41-0058	Pedernales	61.1	25.2	8.0	12.2	17.0	25.2	11.4
38-0098	Pedernales	70.4	30.4	6.6	12.5	16.1	30.4	19.2
35-0185	Pedernales	0.0	38.4	7.3	8.9	21.8	38.4	17.4
35-2007	Pedernales	0.0	29.0	9.8	7.4	16.7	29.0	17.7
35-2392	Pedernales	0.0	32.0	9.6	11.2	20.8	32.0	18.1
41-0008	Pedernales	48.1	20.9	7.6	0.0	14.2	20.9	11.7
41-0129	Pedernales	0.0	25.0	8.4	0.0	15.5	25.0	12.2
36-4323	Pedernales	0.0	28.1	7.7	0.0	20.4	28.1	15.4
41-1294	Pedernales	0.0	28.1	7.7	0.0	20.4	28.1	15.4
36-3035	Pedernales	0.0	26.8	9.0	14.7	16.9	26.8	20.3
35-2863	Pedernales	46.4	24.3	8.7	0.0	16.8	24.3	10.7
35-2650	Pedernales	56.2	22.6	18.5	13.5	18.4	22.6	18.3
36-3096	Pedernales	0.0	23.4	7.5	16.3	17.3	23.4	12.2
36-4290	Pedernales	0.0	0.0	8.2	12.2	15.4	0.0	16.5
36-4320	Pedernales	47.1	20.9	7.5	13.6	18.2	20.9	18.5
41-0092	Pedernales	0.0	0.0	0.0	14.6	17.1	0.0	16.9
35-2395	Pedernales	0.0	28.3	8.3	0.0	17.3	0.0	13.9
41-0239	Pedernales	67.2	27.1	10.2	0.0	15.9	27.1	10.3
41-0017	Pedernales	0.0	0.0	6.7	14.2	15.3	0.0	12.7
41-0060	Pedernales	0.0	29.2	8.8	0.0	17.0	28.8	18.0
41-0139	Pedernales	0.0	0.0	6.9	13.3	16.0	20.0	17.8
41-0272	Pedernales	0.0	0.0	9.0	0.0	16.9	0.0	13.8
36-3479	Pedernales	0.0	24.8	9.3	13.7	19.2	25.0	12.6
36-4266	Pedernales	64.1	27.2	10.2	13.2	17.0	27.2	15.5
35-0180	Pedernales	0.0	20.0	7.8	14.8	16.4	21.2	17.5
40-0407	Pedernales	0.0	25.1	8.2	15.5	18.9	25.1	16.2
37-0626	Pedernales	0.0	23.3	8.5	0.0	15.0	0.0	0.0
37-0368	Pedernales	0.0	0.0	6.0	12.1	15.9	0.0	10.5
37-0721	Pedernales	0.0	0.0	10.3	12.1	12.6	0.0	14.7
37-0358	Pedernales	0.0	0.0	8.5	14.7	17.0	0.0	16.1
38-0021	Pedernales	0.0	0.0	8.5	12.1	16.8	0.0	16.5
38-0403	Pedernales	0.0	0.0	5.6	12.5	13.7	0.0	12.6
40-0981	Pedernales	0.0	0.0	10.0	14.4	21.1	0.0	22.6
43-0108	Pedernales	0.0	22.4	7.5	0.0	17.2	22.4	17.6
43-0110	Pedernales	65.0	31.6	10.1	10.9	17.7	31.6	23.0
44-0021	Pedernales	0.0	0.0	8.3	0.0	17.5	0.0	16.7
44-0247	Pedernales	62.3	0.0	7.9	13.7	12.8	0.0	17.4
44-0549	Pedernales	0.0	0.0	6.7	0.0	17.5	0.0	13.9
44-0643	Pedernales	35.4	18.5	6.4	0.0	17.1	18.5	16.8
40-0964	Pedernales	0.0	0.0	8.0	12.2	0.0	0.0	0.0
37-0032	Pedernales	0.0	0.0	8.3	0.0	16.4	0.0	19.4
41-0325	Pedernales	0.0	0.0	7.5	12.6	14.8	0.0	16.3
36-3947	Pedernales	0.0	0.0	7.0	13.7	18.2	0.0	14.5
40-1269	Pedernales	0.0	0.0	7.5	0.0	0.0	0.0	0.0
36-3100	Pedernales	0.0	31.1	8.7	0.0	21.2	31.1	18.5
40-1295	Pedernales	0.0	0.0	7.1	0.0	16.8	0.0	16.0
38-0816	Pedernales	0.0	0.0	6.8	13.9	22.7	0.0	22.5
40-1303	Pedernales	0.0	0.0	5.8	0.0	0.0	0.0	0.0
40-0403	Pedernales	0.0	0.0	7.8	15.6	0.0	0.0	0.0
36-3873	Pedernales	0.0	0.0	6.5	15.6	0.0	0.0	0.0
40-0918	Pedernales	0.0	0.0	8.3	0.0	0.0	0.0	0.0
35-2949	Pedernales	0.0	0.0	7.5	15.7	18.7	0.0	19.1
36-3001	Pedernales	0.0	0.0	7.6	17.2	21.7	33.2	20.3
43-0122	Pedernales	0.0	0.0	7.0	14.4	17.6	0.0	13.4
36-3436	Pedernales	0.0	0.0	8.5	16.5	14.9	0.0	15.0
35-3136	Pedernales	0.0	0.0	7.4	14.8	18.1	0.0	15.3
40-0961	Pedernales	0.0	0.0	6.7	13.4	16.2	0.0	18.5
35-2652	Pedernales	0.0	0.0	7.4	0.0	0.0	0.0	15.4
38-0842	Pedernales	0.0	0.0	7.3	0.0	19.8	0.0	10.8
43-0240	Pedernales	0.0	0.0	6.9	18.3	16.7	0.0	15.8
36-3696	Pedernales	0.0	0.0	7.0	13.6	18.7	0.0	19.6
35-2909	Pedernales	0.0	0.0	6.2	14.9	17.0	0.0	17.7
44-0441	Pedernales	0.0	0.0	8.5	0.0	14.2	0.0	15.7
44-0471	Pedernales	0.0	0.0	8.5	0.0	18.0	0.0	18.5
38-0408	Pedernales	0.0	0.0	7.2	0.0	17.5	0.0	10.3
41-0190	Pedernales	0.0	0.0	8.5	15.7	19.6	0.0	19.5
44-1620M	Pedernales	0.0	21.6	8.5	0.0	14.1	21.6	16.2
44-1253M	Pedernales	61.3	28.1	7.1	0.0	18.2	28.1	20.0

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
44-1492M	Pedernales	55.0	22.0	9.1	0.0	14.6	22.0	12.1
44-1315M	Pedernales	45.2	22.8	7.2	14.4	0.0	22.8	17.0
44-1629M	Pedernales	0.0	27.1	8.2	17.2	19.1	0.0	15.8
44-1319M	Pedernales	0.0	0.0	7.1	18.2	17.4	0.0	15.7
44-1010M	Pedernales	0.0	0.0	0.0	15.1	0.0	0.0	16.3
44-1442M	Pedernales	0.0	0.0	0.0	13.7	16.1	0.0	14.1
44-1443M	Pedernales	0.0	0.0	14.0	0.0	19.2	0.0	16.9
44-1614M	Pedernales	0.0	0.0	12.2	15.8	0.0	0.0	16.1
44-1409M	Pedernales	0.0	38.0	6.0	16.0	19.6	38.0	15.5
44-0821	Pedernales	0.0	0.0	0.0	16.4	0.0	0.0	0.0
44-0862	Pedernales	0.0	0.0	8.3	19.8	18.6	0.0	21.4
47-0041	Pedernales	44.8	26.8	7.8	0.0	20.0	26.8	11.2
50-0027	Pedernales	0.0	0.0	7.9	0.0	18.2	0.0	16.5
50-0092	Pedernales	49.1	25.8	8.2	0.0	20.4	25.8	11.7
36-3892	Perdiz	0.0	22.0	4.4	6.8	8.3	22.3	6.2
41-0350	Perdiz	0.0	15.6	3.2	3.0	5.2	17.1	7.4
35-3046	Perdiz	0.0	17.0	3.2	4.5	5.9	17.0	6.5
36-4285	Perdiz	22.6	18.0	2.5	5.7	6.9	18.2	8.8
41-0085	Perdiz	26.8	18.0	3.0	6.5	7.4	18.2	4.3
36-4241	Perdiz	30.2	0.0	2.9	5.5	6.5	0.0	7.9
36-4181	Perdiz	0.0	0.0	4.5	5.4	7.1	0.0	9.5
37-0758	Plainview	0.0	0.0	6.0	19.6	0.0	0.0	0.0
36-3107	Plainview	0.0	0.0	5.3	18.6	0.0	0.0	0.0
36-3092	Plainview	0.0	0.0	6.8	18.5	0.0	0.0	0.0
35-2882	Plainview	0.0	0.0	6.8	0.0	0.0	0.0	0.0
41-0155	Plainview	0.0	0.0	5.6	16.6	0.0	0.0	0.0
36-3511	Plainview	0.0	0.0	6.9	16.4	0.0	0.0	0.0
44-0713	Plainview	0.0	27.2	6.8	0.0	0.0	0.0	0.0
35-2881	Plainview	0.0	0.0	5.0	18.5	0.0	0.0	0.0
35-3076	Plainview	0.0	0.0	4.6	0.0	0.0	0.0	0.0
36-3688	Plainview	0.0	0.0	6.1	17.6	0.0	0.0	0.0
44-0093	Plainview	0.0	21.7	5.1	1.8	0.0	0.0	0.0
44-0553	Plainview	0.0	0.0	5.8	0.0	0.0	0.0	0.0
43-0114	Plainview	0.0	0.0	5.9	0.0	0.0	0.0	0.0
43-0370	Plainview	0.0	0.0	6.5	0.0	0.0	0.0	0.0
36-3305	Plainview	0.0	0.0	5.0	0.0	0.0	0.0	0.0
35-2860	Plainview	0.0	0.0	5.0	18.0	0.0	0.0	0.0
44-1631M	Plainview	0.0	0.0	6.8	0.0	0.0	0.0	0.0
35-2324	Scallorn	20.6	0.0	4.0	0.0	7.0	0.0	4.2
35-3018	Scallorn	21.4	0.0	3.1	8.8	7.0	0.0	4.3
41-0349	Scallorn	0.0	0.0	4.0	7.5	4.5	0.0	5.4
40-1133	Scallorn	0.0	0.0	3.0	0.0	5.2	13.0	5.3
41-0385	Scallorn	0.0	0.0	4.3	9.2	6.3	0.0	4.8
40-0509	Scallorn	23.2	12.3	3.1	10.2	4.5	12.3	6.7
38-0475	Scallorn	0.0	12.7	3.2	7.9	5.4	12.7	4.6
41-0269	Scallorn	0.0	10.4	3.4	10.4	6.7	9.9	6.5
41-0262	Scallorn	19.1	10.2	3.0	10.2	5.1	9.5	4.5
41-0200	Scallorn	26.9	12.5	2.8	9.2	6.7	12.5	3.8
35-2202	Scallorn	30.4	14.2	2.7	10.9	6.3	14.0	6.0
36-3529	Scallorn	0.0	13.5	3.4	11.0	6.1	13.7	7.1
37-0732	Scallorn	0.0	15.8	4.0	12.5	6.7	15.8	7.0
36-3937	Scallorn	0.0	13.7	3.1	9.5	5.1	13.7	5.2
35-2754	Scallorn	0.0	17.0	3.5	11.0	5.6	17.2	7.0
40-0510	Scallorn	17.8	12.6	2.2	8.4	5.7	12.6	4.7
35-3017	Scallorn	27.4	16.1	3.4	6.5	5.5	16.1	5.3
35-2981	Scallorn	25.7	15.0	3.0	8.6	5.7	15.2	6.8
37-0502	Scallorn	2.5	14.4	3.1	8.9	6.3	14.5	4.9
44-0548	Scallorn	0.0	0.0	3.7	8.3	5.6	0.0	6.4
35-3080	Scallorn	0.0	0.0	3.8	7.5	5.5	0.0	6.5
36-3936	Scallorn	0.0	12.0	2.5	7.9	5.2	12.3	4.7
43-0257	Scallorn	0.0	15.2	2.9	8.9	5.7	15.2	8.0
38-0342	Scallorn	0.0	0.0	3.0	8.3	6.1	0.0	6.2
44-0030	Scallorn	0.0	0.0	3.6	8.6	5.8	0.0	6.0
44-0737	Scallorn	0.0	13.2	3.8	0.0	4.5	13.2	0.0
37-0367	Scallorn	14.2	11.1	3.0	9.2	6.9	11.1	3.8
43-0037	Scallorn	0.0	0.0	3.4	0.0	5.7	0.0	9.5
36-3553	Scallorn	0.0	0.0	3.1	9.2	5.7	0.0	4.4
36-3518	Scallorn	0.0	11.7	2.7	9.7	6.2	11.7	4.9
40-1283	Scallorn	25.0	0.0	2.6	8.0	5.0	0.0	4.4
40-0845	Scallorn	0.0	0.0	3.3	0.0	0.0	0.0	5.1
44-0029	Scallorn	0.0	0.0	4.1	0.0	6.6	0.0	0.0
44-1462M	Scallorn	0.0	0.0	0.0	0.0	7.1	0.0	7.1
44-0903	Scallorn	0.0	0.0	0.0	11.7	6.1	0.0	7.7
40-1305	Tortugas	0.0	0.0	8.1	0.0	0.0	0.0	0.0
35-3164	Travis	56.5	21.1	8.1	16.2	16.9	21.3	14.3
41-0163	Travis	54.6	22.4	8.7	15.5	16.9	22.0	14.9
35-2897	Travis	46.3	21.3	7.1	16.3	17.9	21.3	11.7
35-2019	Travis	0.0	25.5	6.5	14.0	19.2	25.5	14.0
35-2017	Travis	0.0	23.1	8.9	18.5	15.6	22.9	15.0
40-1294	Travis	0.0	0.0	6.7	15.7	11.9	0.0	13.0
35-2916	Travis	0.0	20.9	7.7	0.0	14.1	21.0	14.8
35-3075	Travis	57.6	18.9	8.8	15.5	15.6	18.9	19.7
41-0160	Travis	49.1	21.4	7.0	12.4	15.8	21.4	15.8
35-2346	Travis	0.0	23.7	9.1	18.0	18.8	23.7	18.6

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
35-2015	Travis	0.0	25.0	7.6	11.9	11.5	25.0	15.2
36-0006	Travis	64.6	21.5	9.6	11.2	13.7	19.3	11.3
43-0044	Travis	0.0	0.0	9.0	15.1	12.5	0.0	13.4
36-3472	Travis	0.0	18.5	8.2	0.0	13.9	18.8	14.1
40-0521	Travis	0.0	0.0	9.3	0.0	15.5	0.0	14.0
36-3875	Travis	0.0	23.9	7.3	17.0	14.2	22.4	20.0
43-0112	Travis	69.0	20.9	7.8	16.4	12.8	20.9	13.8
38-0100	Travis	33.9	0.0	8.1	15.9	16.8	0.0	10.0
37-0752	Travis	40.1	18.4	9.3	16.6	14.2	18.4	15.5
38-0802	Travis	41.5	19.2	8.8	0.0	16.5	19.2	12.5
40-0409	Travis	0.0	19.5	8.3	0.0	0.0	19.5	21.0
40-0661	Travis	46.3	17.9	8.3	11.2	13.3	17.9	17.1
38-0025	Travis	0.0	17.6	7.4	17.6	15.4	17.6	12.2
40-0032	Travis	43.6	0.0	7.9	19.0	0.0	0.0	15.3
43-0353	Travis	0.0	24.7	7.5	0.0	16.6	24.7	13.8
43-0111	Travis	0.0	21.2	9.5	0.0	13.0	21.2	16.7
43-0360	Travis	0.0	0.0	6.2	18.7	15.4	0.0	11.2
43-0256	Travis	0.0	23.3	9.5	0.0	11.5	23.3	16.9
44-0031	Travis	39.6	21.5	6.4	0.0	17.0	21.5	11.8
44-0187	Travis	0.0	0.0	8.4	12.8	14.4	0.0	18.5
44-0736	Travis	0.0	25.5	11.2	23.4	20.6	0.0	22.3
44-0298	Travis	0.0	0.0	8.5	0.0	17.8	0.0	16.4
44-0708	Travis	0.0	0.0	9.2	0.0	14.6	0.0	14.5
37-0784	Untyped arrow	0.0	0.0	3.7	0.0	0.0	0.0	0.0
41-0201	Untyped arrow	0.0	0.0	3.9	0.0	0.0	0.0	0.0
36-4280	Untyped arrow	21.1	12.5	5.2	12.5	0.0	0.0	0.0
36-3537	Untyped arrow	0.0	0.0	3.5	0.0	0.0	0.0	0.0
36-4142	Untyped arrow	0.0	0.0	3.5	0.0	4.9	0.0	0.0
36-3027	Untyped arrow	23.7	20.2	0.0	0.0	14.3	20.2	6.7
41-0165	Untyped arrow	0.0	0.0	3.2	0.0	0.0	0.0	0.0
40-0133	Untyped arrow	0.0	0.0	4.4	0.0	0.0	0.0	0.0
41-0260	Untyped arrow	0.0	0.0	3.6	0.0	4.5	0.0	0.0
36-3303	Untyped arrow	0.0	0.0	2.3	0.0	5.2	0.0	0.0
35-2968	Untyped arrow	0.0	0.0	2.3	0.0	4.6	0.0	0.0
37-0729	Untyped arrow	0.0	0.0	3.9	0.0	0.0	0.0	0.0
40-0665	Untyped arrow	0.0	0.0	2.9	9.0	5.6	0.0	0.0
40-0842	Untyped arrow	0.0	13.3	2.6	0.0	0.0	13.3	0.0
40-1284	Untyped arrow	0.0	0.0	3.2	0.0	4.6	0.0	0.0
43-0035	Untyped arrow	0.0	0.0	3.5	0.0	0.0	0.0	0.0
41-0086	Untyped arrow	0.0	0.0	3.9	0.0	0.0	0.0	0.0
41-0111	Untyped arrow	0.0	0.0	3.4	0.0	5.5	0.0	0.0
35-2942	Untyped arrow	0.0	0.0	2.3	0.0	0.0	0.0	0.0
37-0637	Untyped arrow	0.0	0.0	3.3	0.0	6.6	0.0	0.0
38-0477	Untyped arrow	0.0	20.6	3.3	0.0	0.0	20.6	0.0
36-3559	Untyped arrow	0.0	0.0	3.4	0.0	0.0	0.0	0.0
43-0407	Untyped arrow	0.0	0.0	3.5	0.0	0.0	0.0	0.0
41-0091	Untyped arrow	0.0	0.0	3.5	0.0	0.0	0.0	0.0
37-0459	Untyped arrow	0.0	0.0	3.8	0.0	0.0	0.0	0.0
37-0029	Untyped arrow	0.0	11.2	3.3	0.0	0.0	0.0	0.0
35-0155	Untyped arrow	0.0	0.0	3.7	0.0	5.6	0.0	0.0
36-3103	Untyped arrow	0.0	0.0	3.0	0.0	6.1	0.0	0.0
41-0015	Untyped arrow	0.0	0.0	4.3	0.0	6.4	0.0	5.7
36-3108	Untyped arrow	0.0	11.8	3.4	0.0	4.2	11.8	0.0
36-3538	Untyped arrow	0.0	12.3	3.7	0.0	6.7	12.3	0.0
35-2969	Untyped arrow	0.0	0.0	3.1	0.0	0.0	0.0	0.0
36-4250	Untyped arrow	0.0	15.7	3.9	0.0	7.4	15.7	0.0
41-0444	Untyped arrow	0.0	0.0	3.9	0.0	5.9	0.0	0.0
41-0083	Untyped arrow	0.0	0.0	3.6	4.2	4.1	0.0	4.4
35-2961	Untyped arrow	0.0	0.0	2.8	0.0	5.0	0.0	0.0
44-0797	Untyped arrow	0.0	13.1	3.4	0.0	3.4	0.0	0.0
44-0898	Untyped arrow	0.0	0.0	0.0	6.5	4.1	0.0	7.5
44-0901	Untyped arrow	0.0	0.0	3.3	0.0	0.0	0.0	0.0
44-0902	Untyped arrow	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37-0764	Untyped dart	0.0	0.0	8.5	14.2	16.3	0.0	14.5
36-3894	Untyped dart	0.0	30.7	9.8	12.3	20.7	30.7	14.8
44-0631	Untyped dart	0.0	22.9	7.3	0.0	14.7	22.9	17.2
35-3146	Untyped dart	0.0	26.1	8.4	17.5	15.7	26.1	9.6
35-2315	Untyped dart	0.0	28.8	7.3	18.5	17.1	28.8	12.0
36-3686	Untyped dart	44.3	31.9	7.5	20.9	19.9	31.9	14.3
35-2104	Untyped dart	0.0	32.1	6.9	21.0	20.5	32.1	14.0
41-0102	Untyped dart	0.0	29.0	7.2	21.4	21.9	29.0	14.2
41-0271	Untyped dart	58.2	27.3	7.1	17.2	16.5	27.9	15.3
36-3490	Untyped dart	0.0	28.1	12.0	15.6	14.8	28.1	13.3
35-3085	Untyped dart	0.0	26.7	7.1	15.0	15.6	26.9	11.3
36-3021	Untyped dart	68.5	21.4	7.6	14.2	11.6	21.4	11.3
35-2011	Untyped dart	0.0	30.3	8.9	16.2	14.3	30.3	12.8
35-2203	Untyped dart	0.0	22.6	8.3	16.4	13.8	22.6	12.0
35-2013	Untyped dart	0.0	24.8	7.0	13.9	14.2	24.8	14.1
36-3585	Untyped dart	0.0	22.9	8.2	17.1	18.2	22.9	16.2
36-3510	Untyped dart	0.0	28.1	8.3	16.3	13.2	27.1	11.2
35-2927	Untyped dart	0.0	25.6	8.3	18.1	14.6	25.6	12.9
35-3117	Untyped dart	0.0	23.3	8.5	15.2	14.0	23.3	17.2
36-3596	Untyped dart	0.0	18.0	4.6	14.7	14.1	18.4	9.7
36-3093	Untyped dart	0.0	25.4	5.9	19.3	16.4	25.4	10.5

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
36-3014	Untyped dart	0.0	25.5	5.4	16.4	15.5	25.6	9.8
41-0389	Untyped dart	0.0	28.7	5.5	17.9	14.5	28.7	9.2
41-0175	Untyped dart	0.0	25.4	5.2	14.1	13.0	25.4	6.9
38-0471	Untyped dart	58.5	21.9	7.2	0.0	14.2	21.9	13.7
36-3948	Untyped dart	68.8	19.9	7.3	12.5	12.9	19.9	15.4
43-0356	Untyped dart	0.0	20.8	8.2	0.0	14.8	20.8	15.9
37-0461	Untyped dart	0.0	0.0	9.3	0.0	15.1	0.0	11.4
36-3105	Untyped dart	0.0	22.6	9.6	18.8	19.8	22.6	16.6
35-2352	Untyped dart	0.0	25.4	7.4	16.8	18.5	25.4	16.3
35-3084	Untyped dart	0.0	20.2	6.8	15.2	15.7	20.2	15.0
36-3241	Untyped dart	55.2	20.2	7.8	13.6	15.5	20.2	16.7
35-3111	Untyped dart	0.0	21.6	10.9	0.0	14.0	20.1	11.5
36-3881	Untyped dart	39.0	17.0	8.1	11.7	12.7	17.0	13.7
36-3089	Untyped dart	0.0	32.2	8.6	14.3	15.5	32.2	19.3
36-4340	Untyped dart	47.2	26.5	5.6	14.2	15.3	26.5	15.7
41-0161	Untyped dart	48.4	23.6	5.3	12.0	12.7	23.6	16.9
35-2963	Untyped dart	0.0	22.0	7.2	13.5	14.0	22.0	11.9
35-2211	Untyped dart	56.4	24.7	6.3	11.1	11.6	20.6	13.0
35-2934	Untyped dart	0.0	24.9	7.8	15.5	15.8	24.9	13.5
41-0121	Untyped dart	46.1	22.9	8.0	14.1	15.1	24.7	12.7
40-0059	Untyped dart	62.4	0.0	9.8	0.0	16.2	0.0	16.1
40-1296	Untyped dart	0.0	21.3	7.8	0.0	13.4	0.0	13.5
40-1079	Untyped dart	0.0	0.0	9.4	11.3	17.0	0.0	17.5
41-0352	Untyped dart	0.0	22.1	8.1	17.3	15.5	22.2	11.1
35-3135	Untyped dart	0.0	23.5	8.7	14.5	15.4	23.5	14.6
40-1290	Untyped dart	0.0	0.0	7.9	0.0	15.4	0.0	0.0
36-3587	Untyped dart	0.0	20.7	8.7	14.0	16.1	23.1	12.2
36-3886	Untyped dart	0.0	21.7	6.6	13.6	15.2	21.7	15.1
41-0098	Untyped dart	0.0	0.0	7.8	12.8	13.3	0.0	14.3
40-1300	Untyped dart	0.0	21.2	7.8	9.9	6.2	21.2	14.6
36-3617	Untyped dart	0.0	21.0	8.8	10.7	12.4	21.0	11.8
36-3072	Untyped dart	0.0	26.5	5.7	15.4	15.3	26.5	9.0
35-2201	Untyped dart	0.0	21.6	6.0	14.2	13.5	19.5	5.9
41-0114	Untyped dart	0.0	26.0	6.8	18.4	17.2	26.4	4.3
36-3062	Untyped dart	38.5	18.5	6.9	16.0	14.6	18.5	13.6
40-1304	Untyped dart	52.2	22.7	9.3	18.0	13.9	22.7	12.5
40-0846	Untyped dart	0.0	0.0	7.5	0.0	15.8	0.0	12.4
35-2933	Untyped dart	34.7	20.2	7.4	14.3	14.7	20.2	13.0
36-3716	Untyped dart	0.0	0.0	6.8	18.1	16.5	0.0	9.9
35-3020	Untyped dart	0.0	30.9	7.5	28.3	22.8	30.9	13.6
36-3693	Untyped dart	40.1	24.5	9.6	16.7	19.2	24.5	18.0
36-3242	Untyped dart	48.8	22.0	5.1	22.0	0.0	0.0	0.0
41-0117	Untyped dart	0.0	0.0	7.8	15.5	16.8	0.0	17.0
41-0177	Untyped dart	0.0	0.0	7.8	15.5	16.8	0.0	17.0
36-3239	Untyped dart	42.3	0.0	9.1	23.3	18.7	0.0	14.5
37-0492	Untyped dart	0.0	23.6	5.9	9.4	12.2	23.6	10.6
37-0380	Untyped dart	0.0	0.0	6.6	17.2	15.1	0.0	16.4
37-0378	Untyped dart	0.0	28.6	6.1	17.5	15.0	28.6	7.4
37-0491	Untyped dart	0.0	0.0	6.6	0.0	14.4	0.0	11.7
37-0723	Untyped dart	0.0	0.0	8.2	0.0	14.8	0.0	10.7
37-0716	Untyped dart	0.0	0.0	8.8	0.0	12.6	0.0	12.5
38-0856	Untyped dart	0.0	0.0	8.6	14.7	15.1	0.0	15.8
40-0988	Untyped dart	49.1	24.7	7.7	0.0	15.1	24.7	15.2
40-1311	Untyped dart	0.0	0.0	9.2	17.8	17.7	0.0	18.6
40-0368	Untyped dart	0.0	0.0	5.8	0.0	13.6	0.0	13.4
40-0163	Untyped dart	0.0	0.0	9.3	12.9	10.5	0.0	16.2
40-0532	Untyped dart	0.0	0.0	8.2	0.0	19.5	0.0	0.0
40-0367	Untyped dart	0.0	0.0	5.0	17.2	0.0	0.0	11.5
40-0356	Untyped dart	49.2	23.5	7.5	0.0	14.5	23.5	11.5
40-0062	Untyped dart	44.4	23.0	7.0	11.5	12.9	23.0	11.7
40-0531	Untyped dart	0.0	0.0	7.4	15.7	14.0	0.0	11.7
40-1206	Untyped dart	0.0	0.0	9.9	0.0	15.5	0.0	0.0
43-0121	Untyped dart	0.0	0.0	7.1	0.0	16.8	0.0	11.3
43-0239	Untyped dart	0.0	26.1	8.6	23.9	16.5	26.1	16.5
43-0105	Untyped dart	0.0	29.1	9.8	0.0	21.8	0.0	20.7
43-0351	Untyped dart	57.7	24.0	6.8	0.0	18.9	24.0	17.7
44-0147	Untyped dart	0.0	0.0	5.7	3.9	17.9	0.0	7.0
44-0183	Untyped dart	0.0	0.0	7.2	0.0	16.5	0.0	11.0
44-0534	Untyped dart	0.0	0.0	5.6	0.0	16.3	0.0	0.0
44-0186	Untyped dart	0.0	0.0	4.1	0.0	12.0	0.0	7.5
44-0188	Untyped dart	43.2	22.2	6.3	0.0	11.3	22.2	8.4
44-0192	Untyped dart	55.0	0.0	9.7	0.0	14.4	0.0	10.1
44-0297	Untyped dart	0.0	0.0	8.1	15.6	16.4	21.5	16.4
44-0710	Untyped dart	0.0	19.8	9.5	0.0	15.1	19.8	11.9
44-0724	Untyped dart	0.0	0.0	5.9	0.0	0.0	0.0	0.0
35-2314	Untyped dart	0.0	21.1	6.3	17.9	16.9	21.1	8.4
35-2447	Untyped dart	0.0	15.8	4.4	0.0	13.6	15.8	0.0
35-0156	Untyped dart	0.0	24.3	5.7	17.6	14.6	0.0	10.4
36-3002	Untyped dart	0.0	0.0	8.5	16.0	18.4	0.0	10.6
36-3007	Untyped dart	0.0	0.0	6.7	0.0	18.0	0.0	16.7
35-2150	Untyped dart	0.0	0.0	4.6	0.0	0.0	0.0	8.3
41-0212	Untyped dart	0.0	0.0	4.7	24.0	0.0	0.0	10.7
35-2455	Untyped dart	35.0	25.0	7.5	16.7	17.4	25.0	13.0
35-2345	Untyped dart	48.2	19.6	6.8	0.0	14.3	19.6	13.8

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
35-2347	Untyped dart	0.0	25.5	11.0	0.0	19.5	28.1	0.0
35-2911	Untyped dart	0.0	19.1	5.3	0.0	12.8	19.1	8.6
35-0153	Untyped dart	0.0	22.7	5.4	0.0	10.7	22.7	0.0
35-3138	Untyped dart	0.0	0.0	6.4	0.0	0.0	0.0	0.0
35-2355	Untyped dart	0.0	23.1	5.0	13.7	15.3	23.1	15.5
35-3127	Untyped dart	0.0	21.8	6.2	0.0	14.6	21.8	0.0
41-0460	Untyped dart	0.0	0.0	5.5	0.0	15.1	0.0	19.5
35-2853	Untyped dart	0.0	0.0	7.0	15.4	16.9	0.0	13.9
41-0339	Untyped dart	0.0	31.3	7.7	23.0	20.9	31.3	12.1
41-0223	Untyped dart	0.0	0.0	5.4	15.9	14.4	0.0	10.9
35-2153	Untyped dart	0.0	23.0	8.0	18.5	17.0	23.0	12.4
35-2460	Untyped dart	0.0	0.0	7.1	22.5	0.0	0.0	3.6
35-2640	Untyped dart	0.0	0.0	8.1	24.8	24.9	43.5	12.4
35-2389	Untyped dart	0.0	36.0	7.7	0.0	22.4	36.0	16.5
35-2835	Untyped dart	0.0	22.8	8.5	0.0	14.5	22.8	12.1
35-2688	Untyped dart	0.0	0.0	7.0	19.8	17.2	0.0	0.0
35-2316	Untyped dart	0.0	23.8	7.1	0.0	12.5	23.8	0.0
35-2857	Untyped dart	0.0	0.0	5.5	20.5	0.0	0.0	0.0
35-2200	Untyped dart	0.0	24.7	5.8	10.0	11.7	21.3	4.7
35-2869	Untyped dart	0.0	0.0	5.5	19.5	16.8	0.0	12.0
41-0436	Untyped dart	0.0	0.0	7.5	10.9	0.0	0.0	17.4
35-2106	Untyped dart	0.0	24.3	7.0	13.7	15.0	24.3	9.6
36-0007	Untyped dart	0.0	0.0	7.3	24.9	0.0	0.0	0.0
35-2904	Untyped dart	0.0	0.0	83.3	21.6	19.5	0.0	11.5
41-0179	Untyped dart	0.0	22.3	6.8	0.0	0.0	0.0	0.0
35-0176	Untyped dart	0.0	21.4	8.3	3.7	16.5	21.4	22.8
36-3084	Untyped dart	0.0	0.0	6.8	0.0	0.0	0.0	0.0
36-3698	Untyped dart	30.5	19.8	7.7	21.5	17.3	19.8	7.5
35-2155	Untyped dart	0.0	0.0	6.3	20.9	20.6	0.0	8.8
41-0119	Untyped dart	0.0	0.0	6.2	0.0	0.0	0.0	0.0
41-0194	Untyped dart	0.0	0.0	7.9	0.0	14.7	0.0	0.0
35-2638	Untyped dart	0.0	22.2	6.1	15.5	14.6	22.2	8.0
35-0181	Untyped dart	0.0	0.0	7.8	0.0	0.0	0.0	13.3
36-4256	Untyped dart	0.0	0.0	6.4	14.2	0.0	0.0	0.0
35-2450	Untyped dart	0.0	0.0	6.9	21.4	21.4	0.0	14.3
35-2644	Untyped dart	44.9	21.0	8.0	13.4	12.8	21.0	10.9
41-0193	Untyped dart	0.0	0.0	6.3	12.3	13.3	0.0	16.1
36-3933	Untyped dart	0.0	0.0	5.7	0.0	0.0	0.0	0.0
35-2651	Untyped dart	0.0	29.7	7.5	0.0	20.7	29.7	10.5
35-2643	Untyped dart	0.0	16.8	7.3	0.0	13.1	16.8	11.1
41-0090	Untyped dart	0.0	0.0	7.5	0.0	18.0	31.4	13.8
36-3528	Untyped dart	0.0	0.0	6.2	13.5	15.6	0.0	12.3
36-3420	Untyped dart	0.0	0.0	6.9	0.0	12.8	0.0	6.5
36-3489	Untyped dart	0.0	0.0	6.7	0.0	14.0	0.0	0.0
36-3086	Untyped dart	0.0	0.0	5.8	9.8	9.6	0.0	11.1
35-3158	Untyped dart	0.0	19.6	10.7	0.0	15.2	19.6	0.0
35-0184	Untyped dart	0.0	0.0	7.0	14.9	16.5	0.0	12.2
36-3080	Untyped dart	0.0	0.0	7.1	0.0	0.0	0.0	0.0
36-3568	Untyped dart	0.0	0.0	7.8	0.0	0.0	0.0	0.0
36-4260	Untyped dart	0.0	0.0	7.2	0.0	0.0	0.0	14.5
36-3566	Untyped dart	0.0	0.0	6.7	0.0	14.0	0.0	0.0
35-3081	Untyped dart	38.3	0.0	6.4	0.0	15.6	0.0	17.9
36-3694	Untyped dart	0.0	0.0	5.4	13.7	12.6	0.0	12.5
41-0274	Untyped dart	0.0	0.0	6.1	13.0	17.2	0.0	17.8
36-4339	Untyped dart	0.0	0.0	9.0	0.0	0.0	0.0	0.0
41-0215	Untyped dart	0.0	0.0	6.7	22.1	19.2	0.0	9.6
35-3122	Untyped dart	0.0	0.0	6.6	0.0	0.0	0.0	0.0
36-4350	Untyped dart	0.0	0.0	7.1	0.0	0.0	0.0	8.4
35-3087	Untyped dart	0.0	26.6	9.7	0.0	14.1	26.6	0.0
36-3421	Untyped dart	0.0	0.0	6.4	0.0	0.0	0.0	0.0
35-3150	Untyped dart	0.0	33.7	6.5	0.0	16.2	33.7	0.0
36-3525	Untyped dart	43.2	0.0	5.6	0.0	0.0	0.0	6.2
36-3556	Untyped dart	0.0	0.0	5.8	0.0	0.0	22.0	7.5
35-3153	Untyped dart	0.0	0.0	7.2	19.2	19.1	0.0	19.2
36-3033	Untyped dart	0.0	0.0	7.7	0.0	20.2	0.0	0.0
41-0052	Untyped dart	0.0	0.0	5.9	0.0	12.4	0.0	8.2
36-3809	Untyped dart	0.0	21.7	6.6	0.0	11.4	21.7	9.2
35-2962	Untyped dart	0.0	0.0	5.8	18.2	15.2	0.0	11.9
36-3890	Untyped dart	0.0	0.0	6.0	0.0	15.8	0.0	0.0
35-2915	Untyped dart	0.0	0.0	7.2	16.2	17.9	0.0	0.0
36-4025	Untyped dart	0.0	0.0	6.1	0.0	13.6	0.0	7.5
35-2929	Untyped dart	0.0	0.0	6.1	0.0	13.9	0.0	12.4
41-0108	Untyped dart	0.0	0.0	5.7	15.1	16.5	0.0	17.7
36-3097	Untyped dart	0.0	0.0	6.5	0.0	18.0	0.0	0.0
36-3078	Untyped dart	0.0	0.0	6.2	0.0	0.0	0.0	0.0
35-2006	Untyped dart	0.0	0.0	9.2	14.8	15.8	0.0	14.8
36-3946	Untyped dart	0.0	0.0	5.2	0.0	14.5	0.0	0.0
36-3967	Untyped dart	0.0	0.0	5.0	0.0	12.6	0.0	9.0
36-3356	Untyped dart	0.0	0.0	6.5	0.0	0.0	0.0	0.0
36-3106	Untyped dart	0.0	0.0	6.0	0.0	16.1	20.4	9.0
41-0107	Untyped dart	0.0	0.0	6.3	0.0	17.2	0.0	11.2
36-3607	Untyped dart	0.0	39.7	9.4	0.0	19.8	38.6	0.0
41-0353	Untyped dart	0.0	0.0	6.9	0.0	0.0	0.0	0.0
41-0253	Untyped dart	0.0	0.0	7.8	0.0	0.0	0.0	18.5

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
36-4044	Untyped dart	0.0	0.0	4.0	0.0	0.0	0.0	7.4
36-3636	Untyped dart	0.0	0.0	6.5	0.0	16.2	0.0	18.4
36-4211	Untyped dart	0.0	0.0	6.2	12.7	15.3	0.0	12.4
35-2919	Untyped dart	0.0	0.0	5.9	17.5	0.0	0.0	17.2
41-0100	Untyped dart	0.0	0.0	5.8	0.0	12.7	0.0	0.0
36-3599	Untyped dart	0.0	0.0	7.8	0.0	0.0	0.0	0.0
36-3098	Untyped dart	0.0	0.0	6.3	21.0	19.1	0.0	10.5
35-2003	Untyped dart	0.0	0.0	8.2	0.0	16.7	0.0	0.0
36-3651	Untyped dart	0.0	23.6	8.1	0.0	12.2	23.6	9.6
36-3606	Untyped dart	0.0	0.0	6.2	0.0	17.3	0.0	9.0
41-0387	Untyped dart	0.0	0.0	7.4	14.2	16.5	0.0	18.5
36-3492	Untyped dart	0.0	0.0	6.9	0.0	0.0	0.0	0.0
35-2932	Untyped dart	0.0	19.9	9.0	0.0	14.2	20.2	0.0
36-3609	Untyped dart	0.0	0.0	4.6	0.0	0.0	0.0	0.0
35-2950	Untyped dart	0.0	0.0	5.3	0.0	0.0	0.0	0.0
35-3025	Untyped dart	0.0	19.0	6.9	12.5	14.3	19.0	13.5
36-3013	Untyped dart	0.0	0.0	7.1	0.0	17.3	0.0	19.1
36-3627	Untyped dart	0.0	0.0	5.9	0.0	16.7	0.0	0.0
36-3689	Untyped dart	0.0	0.0	7.8	0.0	0.0	0.0	0.0
36-3094	Untyped dart	0.0	0.0	9.7	0.0	0.0	0.0	0.0
41-0180	Untyped dart	0.0	32.0	5.0	0.0	20.4	32.0	8.6
36-3626	Untyped dart	0.0	0.0	6.4	19.7	0.0	0.0	12.7
36-4321	Untyped dart	0.0	0.0	4.9	0.0	0.0	0.0	0.0
35-2002	Untyped dart	0.0	0.0	7.3	0.0	15.2	0.0	0.0
36-4303	Untyped dart	0.0	0.0	4.8	14.7	0.0	0.0	0.0
36-3610	Untyped dart	0.0	0.0	7.9	0.0	14.7	0.0	0.0
35-2462	Untyped dart	0.0	24.3	6.9	0.0	14.1	24.3	10.7
36-3228	Untyped dart	0.0	0.0	7.3	0.0	0.0	0.0	0.0
35-3156	Untyped dart	0.0	0.0	6.6	19.0	0.0	0.0	0.0
36-3621	Untyped dart	0.0	20.0	5.6	17.7	16.9	20.0	5.0
35-3161	Untyped dart	0.0	0.0	7.7	0.0	0.0	0.0	0.0
35-2952	Untyped dart	0.0	0.0	4.7	13.2	12.3	0.0	6.5
41-0029	Untyped dart	0.0	19.4	7.1	0.0	10.4	17.9	0.0
36-3630	Untyped dart	33.0	16.7	6.8	16.7	13.5	15.1	13.4
36-3570	Untyped dart	0.0	0.0	7.7	14.6	0.0	0.0	17.7
36-3435	Untyped dart	0.0	0.0	8.8	0.0	15.6	0.0	0.0
41-0270	Untyped dart	0.0	21.1	8.2	18.8	14.4	21.1	9.3
36-3628	Untyped dart	0.0	21.7	8.7	0.0	18.6	21.7	0.0
35-3029	Untyped dart	0.0	0.0	5.7	0.0	19.2	0.0	12.4
41-0135	Untyped dart	0.0	18.3	8.1	0.0	12.5	17.8	0.0
36-3502	Untyped dart	38.0	17.2	7.5	0.0	14.4	17.2	17.1
36-3635	Untyped dart	0.0	0.0	4.9	0.0	0.0	0.0	0.0
36-3940	Untyped dart	0.0	0.0	6.5	0.0	12.7	0.0	0.0
36-4334	Untyped dart	0.0	0.0	6.1	20.9	19.3	0.0	11.6
36-3523	Untyped dart	0.0	0.0	7.5	23.8	20.9	0.0	11.5
36-3687	Untyped dart	0.0	0.0	7.5	19.2	0.0	0.0	0.0
41-0320	Untyped dart	0.0	0.0	7.5	14.0	16.5	0.0	14.1
36-3877	Untyped dart	0.0	27.1	10.5	0.0	18.3	28.0	0.0
36-3697	Untyped dart	0.0	0.0	6.2	0.0	0.0	0.0	9.0
35-2973	Untyped dart	0.0	0.0	4.7	11.9	0.0	0.0	0.0
36-3612	Untyped dart	39.0	27.0	7.0	10.4	14.9	25.8	7.0
36-3944	Untyped dart	0.0	24.9	7.0	0.0	14.5	26.5	0.0
36-3594	Untyped dart	0.0	0.0	5.9	14.5	13.2	0.0	11.5
41-0136	Untyped dart	0.0	19.8	7.1	13.2	16.0	19.8	13.4
41-0082	Untyped dart	0.0	30.2	5.5	15.2	20.4	30.2	5.4
36-4050	Untyped dart	0.0	0.0	5.0	0.0	16.6	0.0	17.9
41-0101	Untyped dart	0.0	0.0	6.6	0.0	0.0	0.0	0.0
36-4284	Untyped dart	0.0	0.0	7.0	0.0	15.6	0.0	16.7
37-0049	Untyped dart	0.0	0.0	7.0	0.0	0.0	0.0	0.0
37-0053	Untyped dart	0.0	0.0	7.5	17.5	18.2	0.0	11.5
35-3039	Untyped dart	0.0	0.0	6.4	0.0	0.0	0.0	0.0
37-0055	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36-3030	Untyped dart	0.0	19.4	9.2	0.0	13.0	19.4	0.0
37-0058	Untyped dart	0.0	0.0	6.4	0.0	0.0	0.0	0.0
36-3501	Untyped dart	0.0	21.0	7.0	0.0	0.0	0.0	0.0
37-0059	Untyped dart	0.0	0.0	7.4	0.0	0.0	0.0	0.0
35-2008	Untyped dart	0.0	0.0	8.0	15.5	16.8	0.0	14.1
37-0361	Untyped dart	0.0	0.0	4.7	20.8	17.7	0.0	8.9
36-3532	Untyped dart	0.0	0.0	5.3	20.3	13.0	0.0	9.2
37-0362	Untyped dart	0.0	0.0	8.0	0.0	0.0	0.0	0.0
41-0166	Untyped dart	0.0	23.9	7.0	0.0	15.6	23.9	0.0
37-0365	Untyped dart	0.0	0.0	6.9	0.0	0.0	0.0	14.7
36-3895	Untyped dart	0.0	23.2	8.4	0.0	16.4	23.2	0.0
41-0222	Untyped dart	0.0	0.0	9.5	21.3	0.0	0.0	0.0
41-0134	Untyped dart	0.0	20.3	6.9	12.8	11.1	20.3	13.8
36-3022	Untyped dart	0.0	0.0	4.7	10.9	0.0	0.0	11.5
36-4175	Untyped dart	0.0	0.0	10.7	0.0	0.0	0.0	0.0
37-0460	Untyped dart	0.0	0.0	7.7	10.1	0.0	0.0	0.0
35-2943	Untyped dart	0.0	0.0	0.0	24.5	15.6	0.0	5.2
35-2351	Untyped dart	0.0	0.0	6.1	16.5	16.8	0.0	14.0
36-3109	Untyped dart	0.0	20.9	5.4	0.0	14.4	20.9	7.8
37-0490	Untyped dart	0.0	0.0	9.3	0.0	17.0	0.0	0.0
35-3145	Untyped dart	0.0	24.5	7.2	15.1	15.5	24.5	10.2
41-0338	Untyped dart	0.0	25.4	8.4	14.5	16.2	26.5	13.1

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
35-3097	Untyped dart	0.0	0.0	6.9	17.3	18.6	0.0	12.8
36-3029	Untyped dart	0.0	0.0	5.7	0.0	0.0	0.0	10.4
35-2935	Untyped dart	0.0	0.0	6.0	0.0	0.0	0.0	0.0
37-0505	Untyped dart	0.0	0.0	5.0	18.2	14.2	0.0	12.1
35-2986	Untyped dart	0.0	0.0	7.4	14.1	13.5	0.0	8.6
37-0630	Untyped dart	0.0	0.0	6.5	0.0	13.9	0.0	0.0
36-4276	Untyped dart	0.0	0.0	6.3	0.0	0.0	0.0	0.0
37-0664	Untyped dart	0.0	0.0	6.9	0.0	15.5	0.0	0.0
36-3301	Untyped dart	0.0	29.5	8.4	20.9	18.4	29.5	15.3
37-0665	Untyped dart	0.0	0.0	6.0	0.0	0.0	0.0	0.0
36-3717	Untyped dart	0.0	0.0	5.6	0.0	12.1	0.0	7.8
37-0668	Untyped dart	0.0	0.0	6.4	0.0	0.0	0.0	0.0
36-3099	Untyped dart	0.0	0.0	6.3	17.6	0.0	0.0	12.3
37-0672	Untyped dart	0.0	0.0	8.3	0.0	18.1	0.0	11.6
36-3899	Untyped dart	0.0	0.0	6.2	0.0	14.2	0.0	0.0
41-0192	Untyped dart	0.0	0.0	7.1	0.0	0.0	0.0	0.0
36-3966	Untyped dart	0.0	23.2	6.2	14.2	11.0	23.2	7.0
37-0720	Untyped dart	0.0	0.0	7.0	18.0	19.3	0.0	8.6
36-4305	Untyped dart	0.0	23.8	0.0	0.0	13.2	23.8	0.0
35-2461	Untyped dart	0.0	30.8	8.8	0.0	17.2	30.8	0.0
36-4113	Untyped dart	0.0	0.0	6.7	16.2	13.0	0.0	8.2
37-0727	Untyped dart	0.0	0.0	7.2	20.1	0.0	0.0	0.0
36-4307	Untyped dart	0.0	26.0	7.1	0.0	14.2	26.0	0.0
37-0728	Untyped dart	0.0	0.0	6.5	0.0	0.0	0.0	0.0
41-0038	Untyped dart	0.0	0.0	5.2	14.5	0.0	0.0	0.0
37-0738	Untyped dart	0.0	0.0	7.0	0.0	15.0	0.0	10.5
36-4342	Untyped dart	0.0	0.0	4.5	0.0	14.5	0.0	0.0
37-0739	Untyped dart	0.0	0.0	7.3	0.0	0.0	0.0	0.0
36-4024	Untyped dart	38.4	22.6	5.5	11.7	12.7	23.5	6.1
37-0746	Untyped dart	0.0	0.0	7.5	0.0	0.0	0.0	0.0
36-4331	Untyped dart	0.0	0.0	5.6	0.0	0.0	0.0	0.0
37-0747	Untyped dart	0.0	0.0	5.8	0.0	0.0	0.0	0.0
41-0036	Untyped dart	0.0	0.0	5.7	0.0	16.9	0.0	14.5
37-0763	Untyped dart	0.0	0.0	6.2	0.0	0.0	0.0	0.0
36-4316	Untyped dart	0.0	0.0	6.4	0.0	0.0	0.0	0.0
36-3691	Untyped dart	0.0	0.0	8.7	0.0	0.0	0.0	4.8
36-4318	Untyped dart	0.0	0.0	6.0	19.7	19.1	0.0	15.0
38-0020	Untyped dart	0.0	25.7	6.4	0.0	19.0	25.7	14.9
36-3079	Untyped dart	0.0	32.4	10.2	0.0	22.9	32.4	0.0
38-0174	Untyped dart	0.0	0.0	8.1	0.0	15.6	0.0	13.5
36-4277	Untyped dart	0.0	0.0	7.6	0.0	0.0	0.0	0.0
38-0193	Untyped dart	0.0	0.0	9.8	0.0	0.0	0.0	13.5
36-4275	Untyped dart	0.0	0.0	6.5	13.8	0.0	0.0	0.0
38-0235	Untyped dart	0.0	0.0	7.4	21.8	17.5	0.0	11.5
36-3713	Untyped dart	0.0	26.5	6.4	0.0	15.2	26.5	0.0
38-0328	Untyped dart	0.0	0.0	6.8	15.4	0.0	0.0	16.7
36-3712	Untyped dart	0.0	0.0	5.1	0.0	0.0	0.0	0.0
38-0329	Untyped dart	0.0	0.0	6.4	19.3	16.4	0.0	11.3
36-3714	Untyped dart	0.0	22.0	7.8	0.0	14.2	22.0	0.0
38-0331	Untyped dart	0.0	0.0	7.8	0.0	0.0	0.0	0.0
36-3482	Untyped dart	0.0	20.7	7.3	0.0	17.5	20.7	0.0
38-0340	Untyped dart	0.0	0.0	6.7	16.1	15.5	0.0	12.5
36-3622	Untyped dart	0.0	0.0	5.2	0.0	13.6	0.0	0.0
38-0393	Untyped dart	0.0	0.0	5.9	0.0	0.0	0.0	0.0
36-4328	Untyped dart	41.2	29.1	5.8	20.5	22.2	29.1	12.5
38-0404	Untyped dart	0.0	0.0	5.8	0.0	0.0	0.0	0.0
41-0004	Untyped dart	0.0	0.0	5.6	0.0	11.6	0.0	7.6
38-0468	Untyped dart	0.0	0.0	7.8	0.0	15.8	0.0	13.2
41-0383	Untyped dart	0.0	22.5	9.0	17.2	18.1	22.5	14.5
38-0470	Untyped dart	0.0	0.0	6.8	0.0	0.0	0.0	0.0
36-3476	Untyped dart	0.0	0.0	8.5	0.0	15.2	0.0	0.0
41-0400	Untyped dart	0.0	16.4	5.9	16.4	0.0	0.0	0.0
36-3949	Untyped dart	0.0	0.0	5.6	0.0	0.0	0.0	0.0
38-0473	Untyped dart	0.0	0.0	6.6	12.9	0.0	0.0	0.0
41-0030	Untyped dart	0.0	21.4	7.6	0.0	0.0	0.0	8.4
38-0474	Untyped dart	0.0	0.0	8.7	0.0	0.0	0.0	0.0
35-3089	Untyped dart	0.0	0.0	5.4	0.0	0.0	0.0	0.0
38-0476	Untyped dart	39.0	0.0	8.3	14.8	15.3	0.0	14.1
41-0167	Untyped dart	0.0	0.0	6.3	0.0	21.3	0.0	13.4
38-0478	Untyped dart	0.0	23.9	8.5	0.0	18.1	23.9	10.6
35-2967	Untyped dart	0.0	31.7	9.1	16.4	24.4	0.0	23.5
38-0481	Untyped dart	0.0	36.6	6.2	0.0	18.8	36.6	0.0
41-0064	Untyped dart	0.0	0.0	5.6	0.0	0.0	0.0	0.0
38-0731	Untyped dart	0.0	0.0	7.6	0.0	14.9	0.0	0.0
36-4242	Untyped dart	0.0	0.0	8.3	19.7	0.0	0.0	9.3
38-0737	Untyped dart	0.0	26.8	5.7	0.0	17.8	26.8	9.0
36-4345	Untyped dart	0.0	0.0	6.7	0.0	0.0	0.0	0.0
38-0740	Untyped dart	0.0	25.6	6.5	14.9	15.6	25.6	7.4
36-4319	Untyped dart	0.0	0.0	4.3	0.0	0.0	0.0	0.0
38-0801	Untyped dart	0.0	0.0	6.9	0.0	21.1	0.0	10.0
36-3512	Untyped dart	0.0	24.5	7.8	19.1	16.3	25.4	12.6
38-0805	Untyped dart	55.9	0.0	7.2	16.3	17.2	0.0	14.5
36-3231	Untyped dart	0.0	0.0	6.9	0.0	0.0	0.0	0.0
38-0808	Untyped dart	0.0	0.0	6.4	13.6	16.4	0.0	13.6

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
36-3876	Untyped dart	0.0	0.0	5.1	0.0	0.0	0.0	0.0
38-0810	Untyped dart	0.0	0.0	6.0	10.2	0.0	0.0	0.0
41-0380	Untyped dart	0.0	23.4	6.7	14.6	16.3	24.0	16.5
38-0815	Untyped dart	0.0	0.0	8.2	0.0	21.5	0.0	0.0
36-4325	Untyped dart	0.0	0.0	6.5	0.0	0.0	0.0	14.1
38-0822	Untyped dart	49.7	25.2	9.6	18.8	17.8	25.2	11.0
36-4314	Untyped dart	0.0	0.0	7.5	0.0	25.0	0.0	0.0
38-0824	Untyped dart	0.0	0.0	9.1	0.0	0.0	0.0	14.7
41-0059	Untyped dart	47.8	0.0	6.3	0.0	17.1	0.0	9.6
38-0827	Untyped dart	0.0	0.0	7.7	11.6	14.4	0.0	11.8
35-3033	Untyped dart	0.0	23.3	8.0	0.0	17.6	0.0	0.0
38-0841	Untyped dart	0.0	0.0	6.3	9.4	11.7	0.0	9.3
35-2005	Untyped dart	0.0	27.9	8.3	13.5	15.3	28.2	16.0
38-0851	Untyped dart	0.0	27.4	6.5	12.7	16.1	27.4	15.9
35-2483	Untyped dart	0.0	29.1	6.2	0.0	18.8	0.0	0.0
38-0855	Untyped dart	36.2	0.0	4.9	13.0	17.1	0.0	11.5
36-3474	Untyped dart	0.0	0.0	8.3	19.3	18.7	0.0	12.3
41-0199	Untyped dart	0.0	17.0	7.0	17.0	0.0	0.0	0.0
35-3078	Untyped dart	0.0	0.0	5.0	0.0	19.2	0.0	12.5
38-0859	Untyped dart	0.0	0.0	8.6	0.0	15.8	0.0	15.4
36-3475	Untyped dart	37.0	19.1	6.5	0.0	12.2	19.1	9.3
40-0031	Untyped dart	0.0	0.0	7.2	0.0	16.5	0.0	11.4
41-0367	Untyped dart	0.0	0.0	7.0	0.0	18.7	0.0	0.0
40-0033	Untyped dart	0.0	0.0	7.4	0.0	0.0	0.0	0.0
37-0048	Untyped dart	0.0	0.0	7.1	0.0	0.0	0.0	0.0
36-3961	Untyped dart	0.0	0.0	7.7	13.7	16.5	0.0	15.9
41-0147	Untyped dart	0.0	0.0	7.0	17.4	20.0	0.0	9.8
41-0164	Untyped dart	0.0	20.2	6.2	0.0	0.0	0.0	12.1
36-3076	Untyped dart	0.0	22.6	9.0	0.0	0.0	22.6	11.1
40-0037	Untyped dart	0.0	0.0	7.2	0.0	14.7	0.0	11.2
40-0038	Untyped dart	0.0	0.0	6.7	0.0	0.0	0.0	0.0
40-0041	Untyped dart	0.0	0.0	5.7	0.0	0.0	0.0	0.0
41-0369	Untyped dart	0.0	0.0	6.6	0.0	0.0	0.0	0.0
40-0061	Untyped dart	0.0	0.0	8.8	0.0	15.5	0.0	0.0
36-3514	Untyped dart	0.0	0.0	6.8	0.0	0.0	0.0	0.0
40-0067	Untyped dart	0.0	0.0	8.3	0.0	0.0	0.0	0.0
41-0243	Untyped dart	0.0	0.0	7.4	0.0	0.0	0.0	0.0
40-0180	Untyped dart	34.2	0.0	6.7	0.0	14.8	22.4	9.1
40-0183	Untyped dart	0.0	0.0	7.5	0.0	24.2	0.0	10.9
40-0193	Untyped dart	35.9	0.0	7.2	0.0	0.0	0.0	13.7
40-0330	Untyped dart	0.0	0.0	7.5	15.8	0.0	0.0	0.0
40-0346	Untyped dart	0.0	0.0	5.2	9.8	0.0	0.0	0.0
35-2964	Untyped dart	0.0	0.0	7.2	0.0	0.0	0.0	0.0
40-0358	Untyped dart	31.9	0.0	5.6	14.5	13.6	0.0	9.4
41-0159	Untyped dart	0.0	22.6	8.9	12.9	14.7	22.6	12.7
35-3112	Untyped dart	0.0	0.0	6.1	0.0	0.0	0.0	12.0
40-0402	Untyped dart	0.0	0.0	8.2	0.0	18.5	0.0	0.0
40-0408	Untyped dart	0.0	29.2	7.7	0.0	16.3	29.2	0.0
40-0518	Untyped dart	0.0	0.0	7.0	0.0	0.0	0.0	0.0
40-0519	Untyped dart	0.0	0.0	6.2	0.0	0.0	0.0	0.0
40-0523	Untyped dart	0.0	0.0	7.5	0.0	0.0	0.0	0.0
40-0524	Untyped dart	0.0	0.0	6.1	0.0	0.0	0.0	0.0
40-0525	Untyped dart	0.0	0.0	5.1	21.8	0.0	0.0	0.0
35-2912	Untyped dart	0.0	0.0	6.1	14.1	11.8	0.0	8.4
35-2208	Untyped dart	0.0	21.0	7.3	0.0	14.8	21.0	12.4
40-0534	Untyped dart	35.1	0.0	7.8	0.0	0.0	0.0	12.8
40-0535	Untyped dart	0.0	0.0	6.9	0.0	12.2	0.0	14.6
40-0536	Untyped dart	0.0	0.0	8.2	0.0	19.6	0.0	0.0
40-0572	Untyped dart	0.0	0.0	5.8	0.0	15.2	0.0	0.0
40-1287	Untyped dart	0.0	0.0	4.6	13.7	0.0	0.0	0.0
40-0718	Untyped dart	0.0	0.0	4.9	0.0	0.0	0.0	0.0
40-1268	Untyped dart	0.0	0.0	5.4	0.0	0.0	0.0	0.0
40-0719	Untyped dart	0.0	0.0	5.4	0.0	14.1	0.0	0.0
40-1285	Untyped dart	0.0	0.0	6.3	0.0	0.0	0.0	0.0
40-0666	Untyped dart	0.0	0.0	8.1	0.0	0.0	0.0	0.0
40-1288	Untyped dart	0.0	26.3	11.7	0.0	17.9	26.3	18.5
40-1292	Untyped dart	0.0	0.0	4.8	0.0	0.0	0.0	0.0
40-0759	Untyped dart	0.0	0.0	9.8	0.0	12.6	0.0	16.4
40-0837	Untyped dart	0.0	0.0	7.5	0.0	17.6	0.0	13.2
40-0660	Untyped dart	0.0	18.7	8.8	0.0	14.7	18.7	17.0
40-1277	Untyped dart	0.0	0.0	7.6	0.0	18.1	0.0	10.5
40-1299	Untyped dart	0.0	25.1	7.5	18.6	20.9	0.0	13.4
40-1312	Untyped dart	0.0	0.0	8.8	0.0	13.2	0.0	10.7
40-1132	Untyped dart	0.0	0.0	4.8	0.0	0.0	0.0	0.0
43-0033	Untyped dart	0.0	0.0	7.5	0.0	13.1	0.0	0.0
43-0038	Untyped dart	0.0	0.0	5.9	0.0	12.9	0.0	0.0
43-0040	Untyped dart	0.0	0.0	7.4	0.0	16.2	0.0	13.7
43-0042	Untyped dart	0.0	0.0	6.2	15.9	0.0	0.0	0.0
43-0045	Untyped dart	0.0	0.0	8.6	0.0	0.0	0.0	0.0
40-1266	Untyped dart	0.0	0.0	7.0	0.0	13.2	0.0	0.0
40-1083	Untyped dart	0.0	0.0	6.2	14.0	0.0	0.0	12.0
40-0921	Untyped dart	0.0	0.0	8.4	0.0	0.0	0.0	0.0
40-0838	Untyped dart	0.0	0.0	8.4	0.0	0.0	0.0	0.0
40-1302	Untyped dart	0.0	0.0	7.2	0.0	0.0	0.0	0.0

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
43-0232	Untyped dart	0.0	0.0	6.0	13.5	0.0	0.0	0.0
43-0236	Untyped dart	0.0	0.0	6.3	0.0	16.5	0.0	8.4
40-0987	Untyped dart	0.0	0.0	9.4	0.0	19.7	0.0	15.5
40-1086	Untyped dart	0.0	0.0	7.3	0.0	19.2	0.0	17.3
43-0312	Untyped dart	0.0	0.0	6.9	0.0	16.8	0.0	0.0
43-0117	Untyped dart	0.0	0.0	6.8	0.0	15.4	0.0	9.5
43-0401	Untyped dart	45.0	0.0	5.6	0.0	0.0	0.0	9.8
43-0402	Untyped dart	0.0	0.0	9.4	0.0	21.0	0.0	0.0
40-0943	Untyped dart	0.0	0.0	7.0	0.0	0.0	0.0	12.3
43-0408	Untyped dart	0.0	0.0	7.6	0.0	19.2	0.0	10.7
43-0354	Untyped dart	47.9	18.8	5.5	0.0	16.5	18.8	11.8
43-0410	Untyped dart	0.0	0.0	7.3	0.0	12.5	0.0	0.0
43-0361	Untyped dart	0.0	0.0	7.1	17.9	15.7	0.0	12.1
43-0413	Untyped dart	0.0	0.0	9.3	0.0	0.0	0.0	0.0
43-0389	Untyped dart	0.0	0.0	5.3	17.4	15.0	0.0	9.3
43-0416	Untyped dart	0.0	0.0	7.4	0.0	0.0	0.0	0.0
43-0317	Untyped dart	0.0	0.0	4.6	0.0	17.0	0.0	10.5
43-0355	Untyped dart	0.0	0.0	5.7	0.0	0.0	0.0	0.0
40-1203	Untyped dart	0.0	0.0	6.2	0.0	0.0	0.0	0.0
43-0399	Untyped dart	0.0	0.0	7.4	0.0	0.0	0.0	0.0
43-0352	Untyped dart	0.0	0.0	5.2	0.0	0.0	0.0	0.0
44-0028	Untyped dart	0.0	0.0	6.2	0.0	17.6	0.0	12.8
44-0035	Untyped dart	0.0	0.0	5.8	0.0	13.5	0.0	0.0
44-0113	Untyped dart	0.0	26.2	6.5	0.0	17.9	26.2	0.0
40-0979	Untyped dart	0.0	0.0	5.4	0.0	15.5	0.0	0.0
40-0984	Untyped dart	0.0	0.0	7.4	0.0	0.0	0.0	0.0
43-0075	Untyped dart	0.0	0.0	5.9	0.0	19.9	0.0	0.0
43-0104	Untyped dart	0.0	0.0	8.0	0.0	0.0	0.0	0.0
44-0189	Untyped dart	0.0	0.0	7.9	0.0	17.4	25.1	11.4
40-1181	Untyped dart	0.0	0.0	8.4	0.0	14.2	0.0	15.4
44-0248	Untyped dart	0.0	0.0	6.3	0.0	0.0	0.0	0.0
44-0250	Untyped dart	0.0	0.0	6.6	19.1	16.0	0.0	11.9
44-0275	Untyped dart	0.0	0.0	9.6	0.0	16.8	0.0	0.0
44-0291	Untyped dart	0.0	24.1	8.5	0.0	14.8	24.1	12.1
44-0295	Untyped dart	0.0	0.0	7.8	0.0	12.9	0.0	11.4
40-1183	Untyped dart	0.0	0.0	8.6	0.0	0.0	0.0	0.0
44-0299	Untyped dart	50.3	0.0	7.9	0.0	12.9	0.0	17.0
44-0326	Untyped dart	0.0	0.0	6.6	0.0	0.0	0.0	0.0
44-0329	Untyped dart	0.0	0.0	6.4	0.0	0.0	0.0	0.0
44-0475	Untyped dart	0.0	0.0	8.6	0.0	0.0	0.0	9.0
43-0310	Untyped dart	0.0	0.0	5.7	0.0	12.8	0.0	6.5
44-0558	Untyped dart	0.0	0.0	5.5	0.0	0.0	0.0	0.0
44-0535	Untyped dart	0.0	0.0	7.2	0.0	8.6	0.0	0.0
44-0554	Untyped dart	35.4	0.0	6.0	0.0	13.2	0.0	9.7
44-0555	Untyped dart	0.0	0.0	7.2	0.0	17.9	27.8	16.9
44-0556	Untyped dart	0.0	0.0	5.6	0.0	0.0	0.0	0.0
44-0552	Untyped dart	0.0	0.0	5.7	0.0	11.7	0.0	0.0
44-0562	Untyped dart	0.0	0.0	6.6	0.0	0.0	0.0	0.0
44-0629	Untyped dart	0.0	0.0	8.7	21.1	0.0	0.0	11.6
44-0630	Untyped dart	0.0	0.0	7.0	16.4	0.0	0.0	0.0
44-0697	Untyped dart	4.7	0.0	0.0	0.0	0.0	0.0	0.0
44-0709	Untyped dart	0.0	0.0	5.9	0.0	0.0	0.0	0.0
43-0316	Untyped dart	0.0	24.8	7.0	0.0	14.9	24.8	0.0
44-0721	Untyped dart	0.0	0.0	6.8	0.0	12.7	0.0	0.0
44-0722	Untyped dart	0.0	0.0	7.1	0.0	18.2	0.0	11.0
44-0723	Untyped dart	0.0	0.0	7.1	14.1	0.0	0.0	16.1
43-0369	Untyped dart	0.0	0.0	8.6	0.0	16.0	0.0	0.0
44-0778	Untyped dart	0.0	0.0	8.0	0.0	0.0	0.0	0.0
44-0734	Untyped dart	0.0	0.0	5.6	0.0	0.0	0.0	0.0
44-0780	Untyped dart	0.0	0.0	7.5	0.0	19.4	0.0	0.0
44-0753	Untyped dart	0.0	0.0	6.9	0.0	14.1	0.0	0.0
44-0772	Untyped dart	0.0	0.0	5.9	0.0	0.0	0.0	0.0
44-0773	Untyped dart	0.0	0.0	6.6	0.0	14.0	0.0	11.4
44-0738	Untyped dart	0.0	0.0	6.7	0.0	12.2	0.0	0.0
44-0758	Untyped dart	0.0	0.0	5.5	11.4	10.6	0.0	6.3
44-0781	Untyped dart	0.0	0.0	9.0	0.0	18.3	0.0	0.0
44-0784	Untyped dart	0.0	0.0	5.6	17.2	17.3	0.0	11.6
44-0787	Untyped dart	0.0	0.0	7.1	0.0	0.0	0.0	0.0
44-0788	Untyped dart	0.0	0.0	7.9	0.0	0.0	0.0	0.0
44-0793	Untyped dart	0.0	0.0	6.8	0.0	0.0	0.0	0.0
44-0644	Untyped dart	0.0	0.0	7.7	0.0	13.7	0.0	0.0
44-0642	Untyped dart	0.0	0.0	7.5	0.0	0.0	0.0	0.0
44-1413M	Untyped dart	0.0	25.0	8.1	0.0	15.7	25.0	0.0
44-1341M	Untyped dart	0.0	23.5	6.9	19.0	19.3	23.5	8.5
44-1205M	Untyped dart	0.0	0.0	8.3	0.0	0.0	0.0	0.0
44-1619M	Untyped dart	0.0	22.5	10.2	0.0	0.0	22.5	0.0
44-1450M	Untyped dart	0.0	0.0	7.1	18.6	13.6	0.0	13.5
44-1287M	Untyped dart	0.0	0.0	7.2	0.0	0.0	0.0	0.0
44-1628M	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-1408M	Untyped dart	0.0	24.1	8.1	0.0	0.0	24.1	0.0
44-1441M	Untyped dart	0.0	33.2	7.9	15.7	16.9	33.2	7.3
44-1015M	Untyped dart	0.0	23.0	7.1	0.0	16.0	23.0	0.0
44-1059M	Untyped dart	0.0	26.5	8.0	0.0	0.0	26.5	0.0
44-1252M	Untyped dart	0.0	0.0	0.0	12.5	0.0	0.0	0.0

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
44-1513M	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-1213M	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-1490M	Untyped dart	0.0	0.0	5.1	0.0	0.0	0.0	0.0
44-1493M	Untyped dart	0.0	0.0	9.0	0.0	19.4	0.0	0.0
44-1084M	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-1323M	Untyped dart	0.0	28.0	7.0	0.0	16.1	28.0	0.0
44-1204M	Untyped dart	0.0	0.0	6.0	0.0	0.0	0.0	0.0
44-1630M	Untyped dart	0.0	0.0	4.3	0.0	0.0	0.0	0.0
44-1206M	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-1451M	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-1622M	Untyped dart	0.0	27.8	7.0	0.0	13.1	26.0	9.5
44-1516M	Untyped dart	0.0	21.2	0.0	0.0	14.9	21.2	13.5
44-1640M	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-0794	Untyped dart	0.0	0.0	4.8	0.0	0.0	0.0	0.0
44-0820	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-0823	Untyped dart	0.0	0.0	0.0	18.0	0.0	0.0	0.0
44-0824	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44-0826	Untyped dart	0.0	0.0	0.0	26.0	0.0	0.0	0.0
44-0848	Untyped dart	0.0	0.0	0.0	17.3	0.0	0.0	0.0
44-0849	Untyped dart	0.0	0.0	7.3	16.2	0.0	0.0	0.0
44-0894	Untyped dart	0.0	0.0	5.7	0.0	0.0	0.0	0.0
44-0896	Untyped dart	0.0	0.0	6.7	0.0	15.2	0.0	11.7
44-0899	Untyped dart	0.0	0.0	6.7	0.0	0.0	0.0	0.0
44-0905	Untyped dart	0.0	0.0	0.0	18.8	0.0	0.0	0.0
44-0907	Untyped dart	0.0	19.4	7.3	11.2	13.9	0.0	14.2
44-0923	Untyped dart	36.3	0.0	7.9	16.2	0.0	0.0	0.0
44-0924	Untyped dart	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47-0034	Untyped dart	0.0	0.0	0.0	15.1	0.0	0.0	0.0
47-0036	Untyped dart	0.0	0.0	6.2	0.0	0.0	0.0	0.0
47-0037	Untyped dart	0.0	0.0	0.0	20.4	0.0	0.0	0.0
47-0042	Untyped dart	0.0	0.0	5.1	17.3	13.4	0.0	11.2
47-0043	Untyped dart	0.0	22.1	8.7	0.0	15.1	23.1	12.4
47-0108	Untyped dart	0.0	0.0	5.7	0.0	0.0	0.0	6.8
47-0110	Untyped dart	0.0	0.0	8.1	0.0	0.0	0.0	0.0
47-0111	Untyped dart	0.0	20.2	8.0	0.0	0.0	21.3	0.0
50-0001	Untyped dart	0.0	0.0	7.8	0.0	0.0	0.0	0.0
50-0002	Untyped dart	0.0	30.1	8.1	13.5	16.7	30.1	15.5
50-0005	Untyped dart	0.0	27.5	9.2	19.7	19.5	27.5	13.2
50-0039	Untyped dart	0.0	0.0	5.4	0.0	0.0	0.0	13.5
50-0041	Untyped dart	0.0	0.0	8.3	0.0	0.0	0.0	0.0
50-0098	Untyped dart	0.0	0.0	0.0	15.4	14.5	0.0	13.8
50-0099	Untyped dart	0.0	0.0	0.0	0.0	19.5	0.0	0.0
36-3008	Uvalde	0.0	36.6	6.9	13.8	14.9	36.6	15.8
36-3015	Uvalde	0.0	0.0	8.2	0.0	15.2	0.0	15.7
36-3613	Uvalde	0.0	28.7	5.9	15.2	14.9	29.0	12.9
35-2111	Uvalde	0.0	21.3	6.3	12.2	10.3	21.3	12.3
37-0736	Uvalde	0.0	29.5	4.9	0.0	14.1	29.5	10.9
40-0530	Uvalde	0.0	0.0	6.5	0.0	0.0	0.0	8.5
41-0381	Uvalde	50.4	0.0	5.8	0.0	14.3	0.0	10.2
41-0236	Uvalde	0.0	0.0	8.2	15.5	14.0	0.0	11.0
35-3140	Uvalde	0.0	0.0	10.0	21.3	21.3	0.0	14.5
36-3010	Uvalde	0.0	0.0	5.2	15.6	15.6	0.0	16.2
36-3018	Uvalde	0.0	0.0	8.6	0.0	17.5	0.0	15.9
40-0983	Uvalde	0.0	25.2	9.3	20.7	14.6	25.2	12.7
40-1298	Uvalde	0.0	0.0	9.5	0.0	13.2	0.0	11.3
43-0115	Uvalde	0.0	25.3	6.8	0.0	14.6	25.3	11.9
44-0286	Uvalde	0.0	23.6	10.6	0.0	13.7	23.6	8.8
44-0711	Uvalde	0.0	24.6	7.0	0.0	15.2	24.6	11.6
36-4341	Uvalde	56.9	0.0	7.8	22.5	15.7	0.0	10.1
35-2113	Uvalde	0.0	26.9	7.7	12.1	13.3	26.9	12.9
36-3419	Uvalde	0.0	0.0	7.6	0.0	13.8	0.0	14.1
35-2923	Uvalde	42.6	0.0	6.1	20.2	14.7	0.0	9.3
35-2944	Uvalde	0.0	0.0	4.9	0.0	14.1	0.0	9.6
36-3016	Uvalde	0.0	0.0	8.0	18.2	15.4	0.0	14.0
44-0715	Uvalde	0.0	0.0	7.7	0.0	0.0	0.0	15.4
44-0895	Uvalde	0.0	0.0	0.0	0.0	16.1	0.0	0.0
47-0113	Uvalde	0.0	0.0	8.1	0.0	0.0	0.0	14.1
36-3588	Wells	0.0	24.1	7.0	8.2	11.2	24.1	19.8
35-0162	Wells	53.1	29.6	7.6	10.5	16.5	29.2	18.8
37-0022	Wells	0.0	21.9	8.8	10.0	13.7	21.9	18.4
35-2014	Wells	0.0	0.0	7.5	9.7	12.7	0.0	16.9
36-3586	Wells	41.2	19.7	6.5	12.2	16.3	20.3	15.9
35-2001	Wells	0.0	19.3	7.0	11.3	12.8	19.7	17.3
35-0161	Wells	45.0	22.6	8.1	11.5	15.0	23.0	15.3
41-0140	Wells	0.0	17.1	6.8	13.6	15.4	17.1	14.4
35-2977	Wells	0.0	24.2	8.4	10.2	15.7	24.2	26.0
37-0762	Wells	54.2	26.0	8.7	0.0	17.2	26.0	20.7
37-0051	Wells	0.0	23.9	8.1	11.6	18.1	23.9	24.7
37-0050	Wells	0.0	22.2	7.2	0.0	15.2	22.2	15.1
36-3038	Wells	0.0	0.0	6.7	11.3	13.4	0.0	12.6
36-3088	Wells	65.4	25.1	8.6	7.1	15.1	25.1	16.1
36-3230	Wells	0.0	21.0	7.5	11.8	14.2	21.0	13.8
35-2978	Wells	0.0	20.8	8.3	10.0	15.0	20.8	25.5
36-3887	Wells	0.0	0.0	7.6	10.7	14.0	0.0	20.7

(Table continues on the following page.)

Metric Data. Continued.

CATALOG	NAME	LENGTH	SHOULDER WIDTH	THICKNESS	BASAL WIDTH	JUNCTURE WIDTH	MAXIMUM WIDTH	HAFT ELEMENT LENGTH
35-2690	Wells	0.0	21.0	6.8	11.7	14.9	20.1	14.4
35-3079	Wells	58.9	24.4	8.8	10.3	17.1	24.4	23.3
35-2348	Wells	0.0	22.7	8.0	12.5	14.4	22.5	19.2
35-2148	Wells	0.0	20.6	7.0	11.4	14.3	19.3	15.0
35-2898	Wells	55.4	19.3	5.3	11.3	15.6	19.3	15.2
35-2458	Wells	45.8	18.9	6.5	12.1	12.2	18.9	10.9
35-3012	Wells	49.1	21.1	6.3	14.8	15.2	21.1	16.6
41-0348	Wells	0.0	18.9	6.5	18.8	13.7	18.9	17.6
36-3473	Wells	0.0	26.3	8.0	13.5	14.2	26.3	20.5
38-0749	Wells	0.0	22.1	5.9	11.2	13.2	22.1	18.6
36-3488	Wells	0.0	25.8	8.5	11.2	15.1	25.8	18.5
38-0728	Wells	0.0	0.0	7.2	13.2	14.1	0.0	20.5
38-0392	Wells	0.0	18.8	7.5	13.4	13.5	18.8	15.6
35-2893	Wells	0.0	22.0	6.6	12.7	15.3	22.0	20.4
38-0330	Wells	0.0	20.6	7.8	8.2	0.0	0.0	18.5
44-0732	Wells	63.1	24.7	5.4	10.3	12.1	24.7	21.1
43-0123	Wells	0.0	18.4	6.7	11.2	15.1	18.4	20.3
35-2457	Wells	0.0	16.8	6.1	12.0	12.8	16.8	13.0
41-0340	Wells	39.6	39.6	6.0	12.5	14.4	8.1	19.5
41-0120	Wells	0.0	18.0	6.0	13.7	15.8	18.0	16.2
35-2920	Wells	0.0	0.0	5.0	11.9	13.6	0.0	17.1
40-1265	Wells	0.0	0.0	7.6	5.4	0.0	0.0	24.3
43-0031	Wells	0.0	0.0	6.6	0.0	0.0	0.0	0.0
36-4043	Wells	0.0	18.2	8.3	10.0	13.8	18.2	20.2
44-1322M	Wells	0.0	21.7	9.6	13.0	13.2	21.7	18.1
44-1091M	Wells	0.0	21.4	5.9	13.2	18.2	21.4	17.1
44-1621M	Wells	0.0	22.9	5.6	0.0	15.1	22.9	0.0

APPENDIX VIII

ENVIRONMENTAL AND CULTURAL DATA BY SITE

Historic Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Coarse Earthenware	Undecorated Whiteware	Decorated Whiteware	Stoneware	Porcelain	Maker's Mark	Pipes	Ceramic Toys	Other Ceramics	Bottle Glass	Brandy/Whisky Bottles
41BL0939	2085	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0940	2088	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0941	2089	Absent	Present	Present	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent
41BL0942	2090	Absent	Present	Present	Present	Present	Present	Absent	Absent	Present	Present	Absent
41BL0943	2098	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent
41CV0410	636	Absent	Present	Present	Present	Absent	Absent	Absent	Present	Absent	Present	Absent
41CV0412	353	Present	Present	Absent	Present	Present	Absent	Absent	Absent	Absent	Present	Absent
41CV0731	1016	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent
41CV1447	2080	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1448	2077	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent
41CV1449	2082	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent
41CV1450	2083	Absent	Present	Absent	Present	Present	Absent	Absent	Absent	Absent	Present	Absent
41CV1451	2086	Absent	Present	Present	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent
41CV1452	2087	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1453	2091	Absent	Present	Present	Present	Present	Absent	Absent	Absent	Present	Present	Absent
41CV1454	2095	Absent	Present	Present	Present	Absent	Present	Absent	Absent	Absent	Present	Absent
41CV1455	2096	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1456	2097	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1457	2099	Absent	Present	Absent	Present	Present	Absent	Absent	Absent	Absent	Present	Absent
41CV1370	1937	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Occupation Period	Canning Jars	Cold Cream	Condiment Jars/ Bottles	Depression Glass	Insulators	Kerosene Lamp Parts
41BL0939	2085	Early 20th Century Depression Era	Absent	Absent	Absent	Absent	Absent	Absent
41BL0940	2088	Unknown	Absent	Absent	Absent	Absent	Absent	Absent
41BL0941	2089	Depression Era	Absent	Absent	Present	Absent	Absent	Absent
41BL0942	2090	Depression Era Military Period	Present	Present	Present	Present	Absent	Absent
41BL0943	2098	Military Period	Absent	Absent	Present	Absent	Absent	Absent
41CV0410	636	Depression Era Military Period	Absent	Present	Present	Absent	Absent	Absent
41CV0412	353	Early 20th Century Depression Era	Absent	Present	Absent	Present	Absent	Absent
41CV0731	1016	Depression Era Military Period	Absent	Absent	Absent	Absent	Absent	Absent
41CV1370	1937	Depression Era Military Period	Absent	Present	Absent	Absent	Absent	Absent
41CV1447	2080	Mid-19th Century	Absent	Absent	Absent	Absent	Absent	Absent
41CV1448	2077	Early 20th Century	Absent	Absent	Absent	Absent	Absent	Absent
41CV1449	2082	Early 20th Century	Absent	Absent	Absent	Absent	Absent	Absent
41CV1450	2083	Depression Era	Absent	Absent	Absent	Present	Absent	Absent
41CV1451	2086	Early 20th Century Depression Era Military Period	Absent	Absent	Absent	Absent	Absent	Absent
41CV1452	2087	Military Period	Absent	Absent	Absent	Absent	Absent	Absent
41CV1453	2091	Early 20th Century Depression Era Military Period	Absent	Absent	Absent	Absent	Absent	Absent
41CV1454	2095	Depression Era Military Period	Absent	Absent	Absent	Absent	Absent	Absent
41CV1455	2096	Depression Era Military Period	Absent	Absent	Absent	Absent	Absent	Absent
41CV1456	2097	Mid-19th Century Late 19th Century Late 19th-Early 20th Century Depression Era Military Period	Absent	Absent	Absent	Absent	Absent	Absent
41CV1457	2099	Early 20th Century Depression Era Military Period	Absent	Absent	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Lavender Bottles	Medicine Bottles	Milk Glass Lid-liner	Softdrink Bottles	Snuff Bottles	Tableware	Tumblers	Other	Barrel Glass	Buckets Hoop	Car Parts	Chains	Clothing Items
41BL0939	2085	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent
41BL0940	2088	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0941	2089	Present	Present	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41BL0942	2090	Present	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Present	Present	Absent	Present
41BL0943	2098	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41CV0410	636	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present
41CV0412	353	Present	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent
41CV0731	1016	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent
41CV1370	1937	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent
41CV1447	2080	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1448	2077	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1449	2082	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1450	2083	Present	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41CV1451	2086	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41CV1452	2087	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41CV1453	2091	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41CV1454	2095	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent
41CV1455	2096	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41CV1456	2097	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1457	2099	Present	Absent	Absent	Absent	Absent	Present	Absent	Present	Present	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Farm Machinery	Guns and Gun Parts	Hand Tools	Horse Hardware	Household Goods	Plow Parts	Tin Cans	Metal Toys	Tractor Parts	Washtub	Other Metal	Asphalt	Bricks
41BL0939	2085	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent
41BL0940	2088	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0941	2089	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent
41BL0942	2090	Present	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent
41BL0943	2098	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present
41CV0410	636	Present	Absent	Absent	Absent	Present	Absent	Present	Present	Present	Absent	Absent	Absent	Present
41CV0412	353	Absent	Absent	Absent	Present	Present	Absent	Present	Absent	Present	Absent	Present	Absent	Absent
41CV0731	1016	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent
41CV1370	1937	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1447	2080	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1448	2077	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent
41CV1449	2082	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present
41CV1450	2083	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent
41CV1451	2086	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent	Present
41CV1452	2087	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent
41CV1453	2091	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent
41CV1454	2095	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent
41CV1455	2096	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1456	2097	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1457	2099	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent	Present

Historic Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Brick with Maker's Mark	Flat Glass	Foundation Material	Structural Hardware	Tiles	Tin Roofing Materials	Wooden Building Materials	Other Building Materials	Butchered Bones	Graphite
41BL0939	2085	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0940	2088	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0941	2089	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41BL0942	2090	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent
41BL0943	2098	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Present	Present
41CV0410	636	Absent	Absent	Present	Present	Absent	Absent	Present	Absent	Absent	Absent
41CV0412	353	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Present
41CV0731	1016	Absent	Present	Present	Present	Absent	Absent	Present	Absent	Absent	Absent
41CV1370	1937	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent
41CV1447	2080	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1448	2077	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent
41CV1449	2082	Absent	Present	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent
41CV1450	2083	Present	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent
41CV1451	2086	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent
41CV1452	2087	Absent	Absent	Present	Present	Absent	Absent	Present	Absent	Absent	Absent
41CV1453	2091	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent
41CV1454	2095	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent
41CV1455	2096	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1456	2097	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1457	2099	Absent	Present	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Leather	Plastic	Rubber	Plaster	Windmill Parts	Other Misc.Bridge Material		Chiminey Fall/ Hearth	Cistern	Concrete Foundation Pier	Concrete Foundation Slab	Concrete Water Tank
41BL0939	2085	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0940	2088	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0941	2089	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0942	2090	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0943	2098	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent
41CV0410	636	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV0412	353	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV0731	1016	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1370	1937	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1447	2080	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1448	2077	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1449	2082	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1450	2083	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1451	2086	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1452	2087	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1453	2091	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1454	2095	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1455	2096	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1456	2097	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent
41CV1457	2099	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 1 Survey (Cultural Informaiton)

TARL No.	Field No.	Corral	Depression	Dip Tank	Domestic Vegetation	Extant Structure	Fence	Foundations	Paving Stone	Root Celler	Rubble	Stock Tank	Stone Wall
41BL0939	2085	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0940	2088	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0941	2089	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0942	2090	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0943	2098	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent
41CV0410	636	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent
41CV0412	353	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV0731	1016	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent
41CV1370	1937	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41CV1447	2080	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41CV1448	2077	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1449	2082	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1450	2083	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1451	2086	Absent	Absent	Absent	Present	Absent	Present	Absent	Present	Absent	Absent	Present	Absent
41CV1452	2087	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1453	2091	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1454	2095	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1455	2096	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1456	2097	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1457	2099	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Water Tank	Well	Windmill	Other Features
41BL0939	2085	Absent	Absent	Present	Absent
41BL0940	2088	Absent	Present	Absent	Absent
41BL0941	2089	Absent	Absent	Absent	Present
41BL0942	2090	Absent	Absent	Absent	Present
41BL0943	2098	Absent	Absent	Absent	Present
41CV0410	636	Absent	Absent	Absent	Absent
41CV0412	353	Absent	Absent	Absent	Present
41CV0731	1016	Absent	Absent	Absent	Present
41CV1370	1937	Absent	Absent	Absent	Absent
41CV1447	2080	Absent	Absent	Absent	Present
41CV1448	2077	Absent	Absent	Absent	Absent
41CV1449	2082	Absent	Absent	Absent	Absent
41CV1450	2083	Absent	Absent	Absent	Absent
41CV1451	2086	Absent	Absent	Absent	Absent
41CV1452	2087	Absent	Absent	Absent	Present
41CV1453	2091	Absent	Absent	Absent	Absent
41CV1454	2095	Absent	Absent	Absent	Present
41CV1455	2096	Absent	Absent	Absent	Absent
41CV1456	2097	Absent	Absent	Absent	Absent
41CV1457	2099	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 1 Survey (Environmental Information)

TARL No.	Field No.	Eastquad	Northquad	Project	UTM Easting	UTM Northing	Drainage	Environmental Zone	Creek/Crest	Landform
41BL0410	636	10	41	FY87	1094	4124	Cowhouse Creek	Intermediate Upland	Crest	Spur
41BL0939	2085	12	42	FY87	1283	4283	Cowhouse Creek	Intermediate Upland	Crest	Spur
41BL0940	2088	12	41	FY87	1214	4114	Cowhouse Creek	Intermediate Upland	Creek	Primary Terrace
41BL0941	2089	12	41	FY87	1267	4110	Cowhouse Creek	Intermediate Upland	Creek	Bench
41BL0942	2090	13	41	FY87	1325	4117	Cowhouse Creek	Intermediate Upland	Creek	Spur
41BL0943	2098	21	48	FY87	2184	4816	Cowhouse Creek	Intermediate Upland	Crest	Slope
41CV0412	353	12	43	FY87	1269	4336	Cowhouse Creek	Intermediate Upland	Creek	Ridge/Plateau
41CV0731	1016	21	49	FY87	2187	4901	Cowhouse Creek	Intermediate Upland	Crest	Slope
41CV1370	1937	23	70	FY87	2308	7007	Leon River	Intermediate Upland	Creek	Knoll
41CV1447	2080	11	42	FY87	1186	4244	Cowhouse Creek	Intermediate Upland	Creek	Slope
41CV1448	2077	12	43	FY87	1225	4317	Cowhouse Creek	Intermediate Upland	Crest	Knoll
41CV1449	2082	12	43	FY87	1260	4382	Cowhouse Creek	Intermediate Upland	Creek	Secondary Terrace
41CV1450	2083	12	44	FY87	1249	4428	Cowhouse Creek	Intermediate Upland	Creek	Primary Terrace
41CV1451	2086	12	44	FY87	1203	4478	Cowhouse Creek	Intermediate Upland	Crest	Spur
41CV1452	2087	13	44	FY87	1329	4441	Cowhouse Creek	Intermediate Upland	Crest	Knoll
41CV1453	2091	13	46	FY87	1395	4653	Cowhouse Creek	Intermediate Upland	Crest	Slope
41CV1454	2095	14	45	FY87	1463	4510	Cowhouse Creek	Intermediate Upland	Creek	Slope
41CV1455	2096	23	70	FY87	2328	7004	Leon River	Intermediate Upland	Crest	Slope
41CV1456	2097	23	70	FY87	2322	7016	Leon River	Intermediate Upland	Creek	Outlier
41CV1457	2099	14	45	FY87	1457	4552	Cowhouse Creek	Intermediate Upland	Creek	Slope

Historic Sites Recorded in Delivery Order 1 Survey (Environmental Information)

TARL No.	Field No.	Position	Elevation	Vegetation Zone	Perennial Water	Distanceto Perennial Water	Nearest Water	Distance to Nearest Water
41BL0410	636	Top	1005	Grasslands	Clear Creek	400	Clear Creek	400
41BL0939	2085	Slope	945	Grasslands	Clear Creek	300	Clear Creek	300
41BL0940	2088	Slope	923	Wooded Area (0-25%)	Clear Creek	50	Clear Creek	50
41BL0941	2089	Slope	980	Grasslands	Clear Creek	250	Clear Creek	250
41BL0942	2090	Slope	970	Grasslands	Clear Creek	200	Clear Creek	200
41BL0943	2098	Top	900	Wooded Area (25-50%)	Cowhouse Creek	1800	Cowhouse Creek	100
41CV0412	353	Slope	900	Grasslands	Clear Creek	100	Clear Creek	100
41CV0731	1016	Slope	880	Wooded Area (50-75%)	Cowhouse Creek	1700	Cowhouse Creek	50
41CV1370	1937	Base	850	Wooded Area (0-25%)	Owl Creek	1200	Owl Creek	150
41CV1447	2080	Slope	925	Grasslands	Clear Creek	100	Clear Creek	100
41CV1448	2077	Top	900	Grasslands	Clear Creek	100	Clear Creek	100
41CV1449	2082	Top	865	Grasslands with Scattered Trees	Clear Creek	100	Clear Creek	100
41CV1450	2083	Top	865	Grasslands with Scattered Trees	Clear Creek	300	Tributary of Clear Creek	50
41CV1451	2086	Top	925	Grasslands	Clear Creek	700	Tributary of Clear Creek	100
41CV1452	2087	Top	935	Wooded Area (25-50%)	Clear Creek	500	Tributary of Clear Creek	200
41CV1453	2091	Slope	910	Wooded Area (0-25%)	Clear Creek	500	Tributary of Clear Creek	150
41CV1454	2095	Base	900	Grasslands	Clear Creek	450	Tributary of Clear Creek	50
41CV1455	2096	Top	840	Grasslands	Owl Creek	1350	Owl Creek	100
41CV1456	2097	Base	860	Wooded Area (0-25%)	Owl Creek	1200	Owl Creek	200
41CV1457	2099	Base	900	Grasslands	Clear Creek	200	Tributary of Clear Creek	50

Historic Sites Recorded in Delivery Order 1 Survey (Environmental Information)

TARL No.	Field No.	Area in Square Meters	Exposure	Condition	Percent Disturbed	Slope	Site Type
41BL0410	636	15938	Good	Fair	65	3-10%	Domestic Dwelling
41BL0939	2085	9531	Good	Destroyed	95	0-3%	Domestic Dwelling
41BL0940	2088	400	Poor	Good	30	0-3%	Well
41BL0941	2089	1000	Good	Good	40	3-10%	Dump
41BL0942	2090	6200	Good	Fair	70	3-10%	Dump
41BL0943	2098	46500	Fair	Poor	45	3-10%	Farm/Ranch
41CV0412	353	45625	Fair	Good	20	3-10%	Dump
41CV0731	1016	9000	Poor	Fair	45	0-3%	Dump
41CV1370	1937	12300	Fair	Poor	90	3-10%	Dump
41CV1447	2080	3438	Good	Fair	21	0-3%	Cemetery
41CV1448	2077	1406	Fair	Destroyed	90	0-3%	Domestic Dwelling
41CV1449	2082	5928	Poor	Fair	17	0-3%	Dump
41CV1450	2083	4844	Good	Fair	65	10-30%	Dump
41CV1451	2086	15000	Poor	Poor	65	0-3%	Domestic Dwelling
41CV1452	2087	13750	Poor	Fair	25	0-3%	Dump
41CV1453	2091	24500	Fair	Destroyed	100	0-3%	Domestic Dwelling
41CV1454	2095	180	Good	Fair	25	0-3%	Dump
41CV1455	2096	80	Good	Poor	70	0-3%	Dump
41CV1456	2097	57	Fair	Good	50	3-10%	Cistern
41CV1457	2099	90000	Good	Good	35	0-3%	Farm/Ranch

Prehistoric Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Features Present	Charcoal	Bone	Shell	Density	Burned Rock	Flakes	Chips	Biface Type I	Biface Type II	Biface Type III
41BL0170		Burned Rock Midden	Absent	Absent	Absent	Low	Heavy	Absent	Absent	Absent	Absent	Absent
41BL0411	637	None	Absent	Absent	Absent	Low	Light	Present	Absent	Absent	Absent	Present
41BL0412	648	None	Absent	Absent	Absent	Low	Light	Present	Absent	Absent	Present	Absent
41BL0877	1956	Burned Rock Midden	Absent	Absent	Absent	Medium	Heavy	Present	Present	Absent	Absent	Present
41CV0105		None	Absent	Absent	Present	Low	Medium	Present	Present	Absent	Absent	Absent
41CV0413	354	Burned Rock Midden	Absent	Absent	Absent	Low	Medium	Present	Present	Absent	Absent	Absent
41CV0588	653	Burned Rock Midden	Absent	Absent	Absent	Medium	Absent	Present	Present	Absent	Absent	Absent
41CV0734	1019	Burned Rock Hearth	Absent	Absent	Absent	Low	Medium	Present	Present	Absent	Present	Present
41CV1369	1936	Burned Rock Midden	Absent	Absent	Absent	Low	Heavy	Present	Present	Absent	Absent	Absent
41CV1441	2078	Burned Rock Midden	Absent	Absent	Absent	Medium	Medium	Present	Absent	Present	Absent	Absent
41CV1442	2079	None	Absent	Absent	Absent	Low	Absent	Present	Absent	Absent	Absent	Absent
41CV1443	2081	None	Absent	Absent	Absent	Medium	Medium	Present	Absent	Absent	Absent	Present
41CV1444	2092	None	Absent	Absent	Absent	Medium	Medium	Present	Absent	Present	Absent	Absent
41CV1445	2093	None	Absent	Absent	Absent	Medium	Heavy	Present	Present	Absent	Absent	Absent
41CV1446	2094	Burned Rock Hearth	Absent	Absent	Absent	High	Heavy	Absent	Absent	Absent	Absent	Absent

Prehistoric Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Borer	Biface Scraper	Other Modified Bifaces	Dart Points	Arrow Points	Blanks	Flake w/ Retouch	Blade w/ Retouch	Side Scraper	End Scraper	Graver	Burin	Other Unifaces	Core
41BL0170		Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0411	637	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Present
41BL0412	648	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent
41BL0877	1956	Absent	Absent	Absent	Present	Absent	Absent	Present	Present	Present	Present	Absent	Absent	Absent	Present
41CV0105		Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Present
41CV0413	354	Absent	Absent	Absent	Pre[illegible]	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV0588	653	Absent	Absent	Absent	Abs[illegible]c	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV0734	1019	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41CV1369	1936	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1441	2078	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1442	2079	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent
41CV1443	2081	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Present
41CV1444	2092	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1445	2093	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41CV1446	2094	Absent	Abs[illegible]nt	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Prehistoric Sites Recorded in Delivery Order 1 Survey (Cultural Information)

TARL No.	Field No.	Hammer	Chopper	Mano	Metate	Other Ground Stone	Interval	Debitage Count	Tool Count	Ecofact	Burned Rock
41BL0170		Absent	Absent	Absent	Absent	Absent	20	0	0	0	Absent
41BL0411	637	Absent	Absent	Absent	Absent	Absent	38	7	2	0	Absent
41BL0412	648	Absent	Absent	Absent	Absent	Absent	21	5	5	0	Absent
41BL0877	1956	Present	Present	Present	Absent	Absent	194	9	1	0	Absent
41CV0105		Absent	Absent	Absent	Absent	Absent	100	46	1	0	Absent
41CV0413	354	Absent	Absent	Absent	Absent	Absent	20	1	0	0	Absent
41CV0588	653	Absent	Absent	Absent	Absent	Absent	18	19	3	0	Absent
41CV0734	1019	Absent	Absent	Absent	Absent	Absent	253	14	3	0	Absent
41CV1369	1936	Absent	Absent	Absent	Absent	Absent	42	2	2	0	Absent
41CV1441	2078	Absent	Absent	Absent	Absent	Absent	34	42	2	0	Absent
41CV1442	2079	Absent	Absent	Absent	Absent	Absent	18	1	3	0	Absent
41CV1443	2081	Absent	Absent	Absent	Present	Absent	138	102	13	0	Absent
41CV1444	2092	Absent	Absent	Absent	Absent	Absent	26	10	2	0	Absent
41CV1445	2093	Absent	Absent	Absent	Absent	Absent	4	1	0	0	Absent
41CV1446	2094	Absent	Absent	Absent	Absent	Absent	1	0	0	0	Absent

Prehistoric Sites Recorded in Delivery Order 1 Survey (Environmental Information)

TARL No.	Field No.	Quad Easting	Quad Northing	Project	UTM Easting	UTM Northing	Drainage	Environmental Zone	Creek/Crest	Landform
41BL0170		12	41	FY87	1202	4103	Cowhouse Creek	Intermediate Upland	Crest	Ridge/Plateau
41BL0411	637	12	41	FY87	1232	4167	Cowhouse Creek	Intermediate Upland	Crest	Spur
41BL0412	648	12	42	FY87	1242	4204	Cowhouse Creek	Intermediate Upland	Crest	Outlier
41BL0877	1956	21	47	FY87	2122	4734	Cowhouse Creek	Upland	Crest	Outlier
41CV0105		12	44	FY87	1261	4433	Cowhouse Creek	Intermediate Upland	Creek	Primary Terrace
41CV1369	1936	23	69	FY87	2319	6988	Leon River	Intermediate Upland	Creek	Outlier
41CV1441	2078	12	44	FY87	1277	4417	Cowhouse Creek	Intermediate Upland	Creek	Primary Terrace
41CV1442	2079	11	42	FY87	1110	4234	Cowhouse Creek	Intermediate Upland	Creek	Spur
41CV1443	2081	12	43	FY87	1262	4389	Cowhouse Creek	Intermediate Upland	Creek	Secondary Terrace
41CV1444	2092	13	46	FY87	1348	4640	Cowhouse Creek	Intermediate Upland	Creek	Terrace
41CV1445	2093	13	46	FY87	1325	4647	Cowhouse Creek	Intermediate Upland	Creek	Terrace
41CV1446	2094	13	46	FY87	1302	4610	Cowhouse Creek	Intermediate Upland	Creek	Terrace
41CV0413	354	13	46	FY87	1307	4653	Cowhouse Creek	Intermediate Upland	Creek	Terrace
41CV0588	653	13	46	FY87	1322	4617	Cowhouse Creek	Intermediate Upland	Crest	Spur
41CV0734	1019	21	48	FY87	2153	4853	Cowhouse Creek	Upland	Crest	Outlier

Prehistoric Sites Recorded in Delivery Order 1 Survey (Environmental Information)

TARL No	Field No.	Position	Elevation	Vegetation Zone	Perennial Water	Distance to Perennial Water (in meters)	Nearest Water	Distance to Nearest Water (in meters)
41BL0170		Slope	950	Wooded Area (0-25%)	Clear Creek	150	Clear Creek	150
41BL0411	637	Slope	935	Wooded Area (0-25%)	Clear Creek	100	Clear Creek	100
41BL0412	648	Slope	945	Grasslands with Scattered Trees	Clear Creek	200	Clear Creek	200
41BL0877	1956	Top	1020	Wooded Area (50-75%)	Cowhouse Creek	1200	Cowhouse Creek	150
41CV0105		Slope	850	Grasslands with Scattered Trees	Clear Creek	450	Clear Creek	200
41CV1369	1936	Slope	870	Wooded Area (0-25%)	Leon River	1400	Tirbutary of Turnover Creek	250
41CV1441	2078	Slope	860	Grasslands with Scattered	Clear Creek	600	Tributary of Clear Creek	200
41CV1442	2079	Slope	960	Wooded Area (0-25%)	Clear Creek	175	Clear Creek	175
41CV1443	2081	Top	850	Grasslands with Scattered Trees	Clear Creek	200	Clear Creek	200
41CV1444	2092	Slope	860	Wooded Area (0-25%)	Clear Creek	200	Tributary of House Creek	15
41CV1445	2093	Slope	820	Wooded Area (0-25%)	Clear Creek	25	Clear Creek	25
41CV1446	2094	Base	800	Wooded Area (50-75%)	Clear Creek	25	Clear Creek	25
41CV0413	354	Base	805	Wooded Area (0-25%)	Clear Creek	75	Clear Creek	75
41CV0588	653	Top	875	Wooded Area (0-25%)	Clear Creek	150	Clear Creek	150
41CV0734	1019	Top	1020	Wooded Area (25-50%)	Cowhouse Creek	1450	Cowhouse Creek	150

Prehistoric Sites Recorded in Delivery Order 1 Survey (Environmental Information)

TARL No.	Field No.	Area in Square Meters	Exposure	Condition	Percent Disturbed	Slope	Site Type
41BL0170		9500	Good	Fair	30	0-3%	Single Burned Rock Mound
41BL0411	637	29400	Poor	Poor	90	3-10%	Burned Rock Scatter with Lithics
41BL0412	648	6875	Fair	Poor	95	0-3%	Burned Rock Scatter with Lithics
41BL0877	1956	443000	Fair	Good	25	3-10%	Multiple Burned rock Mounds
41CV0105		54531	Good	Fair	40	3-10%	Burned Rock Scatter with Lithics
41CV1369	1936	11400	Good	Fair	80	10-30%	Burned Rock Scatter with Lithics
41CV1441	2078	9688	Good	Fair	55	0-3%	Single Burned Rock Mound
41CV1442	2079	1875	Good	Good	12	0-3%	Burned Rock Scatter with Lithics
41CV1443	2081	111875	Good	Good	16	0-3%	Burned Rock Scatter with Lithics
41CV1444	2092	14300	Good	Poor	80	3-10%	Burned Rock Scatter with Lithics
41CV1445	2093	600	Good	Fair	70	3-10%	Burned Rock Scatter with Lithics
41CV1446	2094	1	Good	Poor	95	100+%	Burned Rock Scatter with no Lithics
41CV0413	354	71300	Good	Poor	85	3-10%	Multiple Burned rock Mounds
41CV0588	653	30400	Good	Poor	75	3-10%	Burned Rock Scatter with Lithics
41CV0734	1019	590000	Poor	Fair	80	0-3%	Lithic Quarry

Historic Sites Recorded in Delivery Order 6 Survey (Cultural Information)

TARL No.	Field No.	Coarse Earthenware	Undecorated Whiteware	Decorated Whiteware	Stoneware	Porcelan	Maker's Mark	Pipes	Ceramic Toys	Other Ceramics	Bottle Glass	Brandy/Whisky Bottles
41BL0088	1960	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0883	1980	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0951	2117	Present	Present	Present	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent
41BL0952	2119	Absent	Present	Absent	Present	Present	Absent	Absent	Absent	Absent	Present	Absent
41BL0953	2122	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent
41BL0954	2124	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent
41BL0955	2125	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present	Absent
41BL0956	2126	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent
41BL0957	2127	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent
41BL0958	2128	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent
41BL0959	2129	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent
41BL0960	2130	Absent	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent

Historic Sites Recorded in Delivery Order 6 (Cultural Information)

TARL No.	Field No.	Occupation Period	Canning Jars	Cold Cream	Condiment Jars/ Bottles	Depression Glass	Insulators	Kerosene Lamp Parts
41BL0088	1960	Early 20th Century	Absent	Absent	Absent	Absent	Absent	Absent
41BL0883	1980	Early 20th Century	Absent	Absent	Absent	Present	Absent	Present
41BL0951	2117	Early 20th Century	Absent	Present	Absent	Absent	Absent	Absent
41BL0952	2119	Late 19th-Early 20th Century	Present	Absent	Present	Absent	Absent	Absent
41BL0953	2122	Late 19th-Early 20th Century	Absent	Present	Absent	Absent	Absent	Absent
41BL0954	2124	Early 20th Century	Absent	Absent	Absent	Absent	Absent	Absent
41BL0955	2125	Early 20th Century	Absent	Absent	Absent	Absent	Absent	Absent
41BL0956	2126	Early 20th Century	Absent	Absent	Absent	Absent	Absent	Absent
41BL0957	2127	Late 19th-Early 20th Century	Absent	Present	Absent	Absent	Absent	Absent
41BL0958	2128	Late 19th-Early 20th Century	Absent	Absent	Absent	Absent	Absent	Absent
41BL0959	2129	Early 20th Century	Absent	Absent	Absent	Absent	Absent	Absent
41BL0960	2130	Early 20th Century	Present	Absent	Present	Present	Present	Absent

Historic Sites Recorded in Delviery Order 6 Survey (Cultural Information)

TARL No.	Field No.	Lavender Bottles	Medicine Bottles	Milk Glass Lid-liner	Softdrink Bottles	Snuff Bottles	Tableware	Tumblers	Other Glass	Barrel Hoop	Buckets	Car Parts	Chains	Clothing Items
41BL0088	1960	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0883	1980	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0951	2117	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent
41BL0952	2119	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Present	Present	Absent	Present
41BL0953	2122	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0954	2124	Present	Absent	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Present
41BL0955	2125	Present	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent
41BL0956	2126	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0957	2127	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0958	2128	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent
41BL0959	2129	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent
41BL0960	2130	Present	Present	Present	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present	Absent

Historic Sites Recorded in Delivery Order 6 (Cultural Information)

TARL No.	Field No.	Farm Machinery	Guns and Gun Parts	Hand Tools	Horse Hardware	Household Goods	Plow Parts	Tin Cans	Metal Toys	Tractor Parts	Washtub Metal	Other	Asphalt	Bricks
41BL0088	1960	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent
41BL0883	1980	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent
41BL0951	2117	Absent	Absent	Present	Absent	Present	Absent	Present	Absent	Absent	Absent	Present	Absent	Absent
41BL0952	2119	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present
41BL0953	2122	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Present
41BL0954	2124	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0955	2125	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0956	2126	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0957	2127	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41BL0958	2128	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Present
41BL0959	2129	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent
41BL0960	2130	Absent	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent

Historical Sites Recorded in Delivery Order 6 Survey (Cultural Information)

TARL No.	Field No.	Brick with Maker's Mark	Flat Glass	Foundation Material	Structural Hardware	Tiles Materials	Tin Roofing	Wooden Building Materials	Other Building Materials	Butchered Bones	Graphite
41BL0088	1960	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0883	1980	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0951	2117	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0952	2119	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0953	2122	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent
41BL0954	2124	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0955	2125	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent
41BL0956	2126	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0957	2127	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0958	2128	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0959	2129	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0960	2130	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 6 Survey (Cultural Information)

TARL No.	Field No.	Leather	Plastic	Rubber	Plaster	Windmill Parts	Other Misc. Material	Bridge	Chiminey Fall/ Hearth	Cistern	Concrete Foundation Pier	Concrete Foundation Slab	Concrete Water Tank
41BL0088	1960	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0883	1980	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0951	2117	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent
41BL0952	2119	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent
41BL0953	2122	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0954	2124	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0955	2125	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0956	2126	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0957	2127	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0958	2128	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0959	2129	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0960	2130	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 6 Survey (Cultural Information)

TARL No.	Field No.	Corral	Depression	Dip Tank	Domestic Vegetation	Extant Structure	Fence	Foundations	Paving Stone	Root Celler	Rubble Tank	Stock	Stone Wall
41BL0088	1960	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0883	1980	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent
41BL0951	2117	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0952	2119	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41BL0953	2122	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0954	2124	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0955	2125	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0956	2126	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0957	2127	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0958	2128	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41BL0959	2129	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0960	2130	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Historic Sites Recorded in Delivery Order 6 (Cultural Information)

TARL No.	Field No.	Water Tank	Well	Windmill	Other Features
41BL0088	1960	Absent	Absent	Absent	Absent
41BL0883	1980	Absent	Absent	Absent	Present
41BL0951	2117	Absent	Absent	Absent	Absent
41BL0952	2119	Absent	Presen	Absent	Present
41BL0953	2122	Absent	Present	Absent	Absent
41BL0954	2124	Absent	Absent	Absent	Present
41BL0955	2125	Absent	Present	Present	Present
41BL0956	2126	Absent	Present	Present	Present
41BL0957	2127	Absent	Absent	Absent	Absent
41BL0958	2128	Absent	Present	Absent	Absent
41BL0959	2129	Absent	Absent	Absent	Present
41BL0960	2130	Absent	Absent	Absent	Present

Historic Sites Recorded in Delivery Order 6 Survey (Environmental Information)

TARL No.	Field No.	Eastquad	Northquad	Project	UTM Easting	UTM Northing	Environmental Zone	Creek/Crest	Landform
41BL0881	1960	23	46	FY87	2373	4610	Intermediate Upland	Creek	Slope
41BL0883	1980	24	47	FY87	2475	4713	Intermediate Upland	Creek	Slope
41BL0951	2117	28	44	FY87	2862	4442	Intermediate Upland	Creek	Slope
41BL0952	2119	28	44	FY87	2847	4476	Intermediate Upland	Creek	Bench
41BL0953	2122	26	45	FY87	2675	4581	Lowland	Creek	Primary Terrace
41BL0954	2124	26	44	FY87	2670	4497	Lowland	Creek	Primary Terrace
41BL0955	2125	26	45	FY87	2616	4573	Lowland	Creek	Primary Terrace
41BL0956	2126	26	46	FY87	2648	4686	Intermediate Upland	Crest	Hillock
41BL0957	2127	24	46	FY87	2402	4679	Lowland	Creek	Primary Terrace
41BL0958	2128	24	46	FY87	2402	4635	Intermediate Upland	Creek	Slope
41BL0959	2129	27	45	FY87	2778	4556	Upland	Crest	Slope
41BL0960	2130	27	45	FY87	2774	4536	Intermediate Upland	Creek	Slope

Historic Sites Recorded in Delivery Aorder 6 Survey (Envirnomental Information)

TARL No.	Field No.	Position	Elevation	Vegetation Zone	Perennial Water	Distance to Perennial Water	Nearest Water	Distance to Nearest Water
41BL0881	1960	Base	895	Grasslands	South Nolan Creek	3460	Intermittent Creek	110
41BL0883	1980	Base	905	Grasslands	South Nolan Creek	4740	Intermittent Creek	20
41BL0951	2117	Base	855	Wooded Area (50-75%)	South Nolan Creek	3660	Intermittent Creek	60
41BL0952	2119	Slope	865	Grasslands with Scattered Trees	South Nolan Creek	3800	Intermittent Creek	100
41BL0953	2122	Base	900	Wooded Area (50-75%)	South Nolan Creek	4260	Intermittent Creek	20
41BL0954	2124	Base	860	Grasslands	South Nolan Creek	3450	Intermittent Creek	200
41BL0955	2125	Base	920	Grasslands with Scattered Trees	South Nolan Creek	3150	Intermittent Creek	110
41BL0956	2126	Top	975	Grasslands	South Nolan Creek	5230	Intermittent Creek	110
41BL0957	2127	Slope	880	Grasslands	South Nolan Creek	4100	Intermittent Creek	300
41BL0958	2128	Base	260	Grasslands	South Nolan Creek	3760	Intermittent Creek	40
41BL0959	2129	Slope	950	Wooded Area (75-100%)	South Nolan Creek	4350	Intermittent Creek	140
41BL0960	2130	Slope	900	Wooded Area (50-75%)	South Nolan Creek	4070	Intermittent Creek	80

Historic Sites Recorded in Delivery Order 6 Survey (Environmental Information)

TARL No.	Field No.	Area in Square Meters	Exposure	Condition	Percent Disturbed	Slope	Site Type
41BL0881	1960	19688	Fair	Poor	40	0-3%	Domestic Dwelling
41BL0883	1980	400	Fair	Poor	50	0-3%	Farm/Ranch
41BL0951	2117	34375	Good	Good	25	3-10%	Domestic Dwelling
41BL0952	2119	11000	Fair	Poor	5	0-3%	Farm/Ranch
41BL0953	2122	17344	Fair	Poor	50	3-10%	Unknown Historic
41BL0954	2124	35600	Fair	Poor	10	0-3%	Unknown Historic
41BL0955	2125	12656	Good	Fair	45	0-3%	Unknown Historic
41BL0956	2126	156	Poor	Fair	33	0-3%	Farm/Ranch
41BL0957	2127	30000	Good	Fair	34	3-10%	Domestic Dwelling
41BL0958	2128	22969	Fair	Poor	30	0-3%	Domestic Dwelling
41BL0959	2129	180	????	Good	0	3-10%	Dump
41BL0960	2130	527	Good	Good	25	10-30%	Dump

Preshistoric Sites Recorded in Delivery Order 6 (Cultural Information)

TARL No.	Field No.	Features Present	Charcoal	Bone	Shell	Density	Burned Rock	Flakes	Chips	Biface Type I	Biface Type II	Biface Type III
41BL0177		None	Absent	Absent	Absent	Low	Absent	Present	Present	Present	Absent	Absent
41BL0796	1437	None	Absent	Absent	Absent	High	Absent	Present	Present	Absent	Present	Present
41BL0866	1748	None	Absent	Absent	Absent	Low	Absent	Present	Present	Present	Present	Absent
41BL0944	2114	None	Absent	Absent	Absent	High	Absent	Present	Present	Present	Present	Absent
41BL0945	2115	None	Absent	Absent	Absent	Medium	Medium	Present	Absent	Absent	Present	Absent
41BL0946	2116	None	Absent	Absent	Absent	Low	Light	Present	Present	Present	Absent	Absent
41BL0947	2118	None	Absent	Absent	Absent	Medium	Absent	Present	Present	Present	Present	Present
41BL0948	2120	None	Absent	Absent	Absent	Low	Absent	Present	Absent	Absent	Present	Absent
41BL0949	2121	None	Absent	Absent	Absent	Low	Absent	Present	Absent	Absent	Present	Absent
41BL0950	2123	None	Absent	Absent	Absent	High	Absent	Present	Present	Absent	Present	Present

Prehistoric Sites recorded in Delivery Order 6 Survey (Cultural Information)

TARL No.	Field No.	Borer	Biface Scraper	Other Modified Bifaces	Dart Points	Arrow Points	Blanks	Flake w/ Retouch	Blade w/ Retouch	Side Scraper	End Scraper	Graver	Burin	Other Unifaces	Core
41BL0177		Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41BL0796	1437	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Present
41BL0866	1748	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41BL0944	2114	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0945	2115	Absent	Absent	Present	Absent	Absent	Absent	Present	Absent	Present	Absent	Absent	Absent	Absent	Present
41BL0946	2116	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present
41BL0947	2118	Absent	Absent	Absent	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
41BL0948	2120	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent
41BL0949	2121	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Absent	Present
41BL0950	2123	Absent	Present	Absent	Present	Absent	Absent	Present	Absent	Present	Present	Absent	Absent	Absent	Present

Prehistoric Sites Recorded in Delivery Order 6 Survey (Cultural Information)

TARL No.	Field No.	Hammer	Chopper	Mano	Metate	Other Ground Stone	Interval	Debitage Count	Tool Count	Ecofact	Burned Rock
41BL0177		Absent	Absent	Absent	Absent	Absent	49	36	3	0	Absent
41BL0796	1437	Absent	Absent	Absent	Absent	Absent	144	401	35	0	Absent
41BL0866	1748	Absent	Present	Absent	Absent	Absent	187	189	11	0	Absent
41BL0944	2114	Present	Absent	Absent	Absent	Absent	26	378	48	0	Absent
41BL0945	2115	Present	Absent	Absent	Absent	Absent	34	92	11	0	Absent
41BL0946	2116	Absent	Absent	Absent	Absent	Absent	18	52	2	0	Absent
41BL0947	2118	Absent	Absent	Absent	Absent	Absent	52	123	14	0	Present
41BL0948	2120	Absent	Absent	Absent	Absent	Absent	28	8	48	0	Absent
41BL0949	2121	Absent	Absent	Absent	Absent	Absent	12	7	2	0	Absent
41BL0950	2123	Absent	Absent	Absent	Absent	Absent	66	548	26	0	Absent

Prehistoric Sites Recorded in Delivery Order 6 (Environmental Information)

TARL No.	Field No.	Quad Easting	Quad Northing	Project	UTM Easting	UTM Northing	Drainage	Environmental Zone	Creek/Crest	Landform
41BL0177	41BL177	26	46	FY87	2646	4681	Nolan Creek	Intermediate Upland	Crest	Hillock
41BL0796	1437	27	44	FY87	2724	4451	Nolan Creek	Intermediate Upland	Crest	Slope
41BL0866	1748	27	44	FY87	6270	3445	Nolan Creek	Intermediate Upland	Crest	Slope
41BL0945	2115	28	43	FY87	2855	4377	Nolan Creek	Intermediate Upland	Creek	Bench
41BL0946	2116	29	43	FY87	2905	4350	Nolan Creek	Intermediate Upland	Creek	Slope
41BL0947	2118	28	44	FY87	2866	4455	Nolan Creek	Intermediate Upland	Creek	Slope
41BL0948	2120	6	60	FY87	645	6051	Cowhouse Creek	Intermediate Upland	Crest	Slope
41BL0949	2121	5	60	FY87	597	6052	Cowhouse Creek	Lowland	Creek	Terrace
41BL0950	2123	26	46	FY87	2687	4600	Nolan Creek	Intermediate Upland	Crest	Spur
41BL0944	2114	27	44	FY87	2730	4471	Nolan Creek	Upland	Crest	Spur

Prehistoric Sites Recorded in Delivery Order 6 Survey (Environmental Information)

TARL No.	Field No.	Position	Elevation	Vegetation Zone	Perennial Water	Distance to Perennial Water (in meters)	Nearest Water	Distance to Nearest Water (in meters)
41BL0177		Top	970	Wooded Area(25-50%)	South Nolan Creek	5260	Intermittent Creek	80
41BL0796	1437	Slope	875	Wooded Area(50-75%)	South Nolan Creek	3160	Intermittent Creek	260
41BL0866	1748	Slope	250	Wooded Area(50-75%)	South Nolan Creek	3000	Intermittent Creek	240
41BL0945	2115	Slope	835	Wooded Area(50-75%)	South Nolan Creek	3000	Spring	185
41BL0946	2116	Slope	845	Grasslands with Scattered Trees	South Nolan Creek	3000	Spring	500
41BL0947	2118	Base	875	Wooded Area(50-75%)	South Nolan Creek	3880	Intermittent Creek	180
41BL0948	2120	Slope	850	Wooded Area(25-50%)	Bee House Creek	625	Bee House Creek	625
41BL0949	2121	Top	820	Grasslands with Scattered Trees	Bee House Creek	500	Bee House Creek	500
41BL0950	2123	Top	915	Wooded Area(50-75%)	South Nolan Creek	4300	Intermittent Creek	120
41BL0944	2114	Top	944	Wooded Area(50-75%)	South Nolan Creek	3280	Intermittent Creek	220

Prehistoric Sites Recorded in Delivery Order 6 Survey (Environmental Information)

TARL No.	Field No.	Area in Square Meters	Exposure	Condition	Percent Disturbed	Slope	Type
41BL0177		27343	Poor	Poor	57	0-3%	Lithic Scatter
41BL0796	1437	69375	Good	Good	32	0-3%	Lithic Scatter
41BL0866	1748	84688	Poor	Good	26	3-10%	Lithic Scatter
41BL0945	2115	12188	Good	Fair	35	0-3%	Burned Rock Scatter with Lithics
41BL0946	2116	10781	Good	Fair	5	0-3%	Lithic Scatter
41BL0947	2118	31718	Good	Fair	30	0-3%	Lithic Scatter
41BL0948	2120	3400	Fair	Fair	2	0-3%	Lithic Scatter
41BL0949	2121	781	Fair	Fair	19	3-10%	Lithic Scatter
41BL0950	2123	59375	Good	No info.	22	0-3%	Lithic Scatter
41BL0944	2114	11718	Good	Good	11	3-10%	Lithic Quarry

APPENDIX IX.

HISTORIC ARTIFACT INVENTORY

41BL0410	047-0014	1	Clear glass bottle flat base cup-bottom mold (1904--1969) Owens scar
41BL0410	047-0015	1	Opaque white, pressed glass bowl whole pressed ribbed pattern (1938--1988)
41BL0410	047-0017	1	Ceramic doll parts
41BL0410	047-0018	1	Shell button
41BL0410	047-0021	3	Iron indeterminate
41BL0410	047-0022	1	Iron pipe tubing
41BL0410	047-0023	1	Iron toys
41BL0410	047-0024	1	Zinc indeterminate
41BL0881	050-0006	1	Iron indeterminate
41BL0939	047-0050	1	Lavender glass pedasteled vessel pedestal/stem pressed (1880--1918)
41BL0939	047-0053	1	Clear glass soft drink bottle whole machine made/crown cup-bottom mold "Buck Brand Beverages" "Coca Cola Bottling Co."
41BL0939	047-0055	1	White whiteware with clear (alkaline) glaze hollowware - rim with brown decoration with banded rim
41BL0941	047-0064	1	Lavender glass bottle lip/neck/shoulder improved tooled (1880--1915)
41BL0941	047-0065	1	Clear w/pink cast glass bottle lip/neck machine made/crown machine made (1911--1935)
41BL0941	047-0066	1	Clear glass bottle lip/neck/shoulder machine-made machine made (1903--1988)
41BL0941	047-0067	1	Clear glass brandy/whiskey bottle rim/body/base pressed floral pressed pattern
41BL0941	047-0068	1	White whiteware with clear (alkaline) glaze teacup - appendage with undecorated decoration
41BL0941	047-0069	1	White whiteware with clear (alkaline) glaze plate - rim with molded rim
41BL0941	047-0070	1	White whiteware with clear (alkaline) glaze plate - rim with multi-colored decoration (1900--1988) with decal rim
41BL0941	047-0071	1	White whiteware with clear (alkaline) glaze flatware - body with undecorated decoration (1882--1925) "Potters' Cooperative Co., McDade, Texas"
41BL0941	047-0072	1	Tan stoneware with Bristol glaze bowl - rim/shoulder/base with undecorated decoration (1920--1988)
41BL0941	047-0073	1	Iron lid
41BL0941	047-0074	1	Tin lantern part
41BL0941	047-0097	1	Lavender glass bottle flat base cup-bottom mold (1880--1918)
41BL0941	047-0098	1	Cobalt blue glass medicine bottle/jar whole beaded/threaded cup-bottom mold (1940--1988) Corrugated base "Maryland Glass Co." "Milk of Magnesia" "Norwich"
41BL0941	047-0099	1	Clear w/green cast glass patent medicine bottle whole machine-made cup-bottom mold (1924--1968) "Knox Glass Co."
41BL0942	047-0075	1	Emerald green glass medicine bottle/jar whole beaded/threaded machine made (1930--1954) "Owens-Illinois Glass Co."
41BL0942	047-0076	1	Green, Depression glass tumbler flat base pressed ribbed pattern (1930--1940)
41BL0942	047-0077	1	Lavender glass bottle lip/neck improved tooled (1880--1915)
41BL0942	047-0078	2	Pink, Depression glass bowl rim/body/base pressed floral pressed pattern (1931--1937) "Hocking Glass Co." "Mayfair Open Rose pattern"
41BL0942	047-0080	1	Clear w/green cast glass bottle lip/neck/shoulder machine-made machine made (1903--1988)
41BL0942	047-0081	1	Clear glass soft drink bottle body
41BL0942	047-0082	1	Opaque white, pressed glass plate lip/rim pressed pressed pattern (1938--1988)
41BL0942	047-0084	1	White milk glass teacup flat base pressed pressed pattern (1930--1936) "MacBeth-Evans Glass Co." "American Sweetheart"
41BL0942	047-0085	1	White semi-porcelain with clear (alkaline) glaze teacup - rim with multi-colored decoration (1900--1988) with decal rim
41BL0942	047-0085	1	White milk glass teacup body pressed pressed pattern (1930--1936) "MacBeth-Evans Glass Co." "American Sweetheart"
41BL0942	047-0086	1	White whiteware with clear (alkaline) glaze bowl - rim with blue decoration with banded rim
41BL0942	047-0087	1	White whiteware with clear (alkaline) glaze flatware - flat base with undecorated decoration (1901--1972) "Taylor, Smith, & Taylor, East Liverpool"
41BL0942	047-0088	1	White whiteware with clear (alkaline) glaze flatware - flat base with undecorated decoration

41BL0942	047-0089	1	Tan stoneware with Albany interior/Bristol exterior glaze crock - body with undecorated decoration (1880--1920) "McDade Pottery Co.,McDade, Texas"
41BL0942	047-0090	1	Tan stoneware with Albany slip glaze crock - rim
41BL0942	047-0091	1	Plastic indeterminate
41BL0943	047-0096	1	White whiteware with clear (alkaline) glaze bowl - rim with gold decoration with molded/gilded rim
41BL0951	050-0012	1	Lavender glass bottle lip/neck improved tooled (1880--1915)
41BL0951	050-0013	1	Lavender glass bottle lip/neck/shoulder improved tooled (1880--1915)
41BL0951	050-0014	1	Lavender glass tumbler flat base pressed ribbed pattern (1880--1918)
41BL0951	050-0015	1	Lavender glass flatware whole pressed ribbed pattern (1880--1918)
41BL0951	050-0016	1	Lavender glass bottle neck ribbed pattern (1880--1918)
41BL0951	050-0017	1	Clear w/green cast glass bottle body
41BL0951	050-0018	1	Brown glass bottle body
41BL0951	050-0019	1	White whiteware with clear (alkaline) glaze flatware - footed base with undecorated decoration
41BL0951	050-0020	1	White whiteware with clear (alkaline) glaze hollowware - body with molded decoration
41BL0951	050-0021	1	White semi-porcelain with clear (alkaline) glaze flatware - body with molded decoration
41BL0951	050-0022	1	Tan stoneware with Bristol glaze hollowware - body with blue banded decoration (1920--1988)
41BL0951	050-0023	1	Tan stoneware with Bristol glaze hollowware - body with undecorated decoration (1920--1988)
41BL0951	050-0024	1	Tan stoneware with Albany slip glaze hollowware - body with undecorated decoration (1900--1988)
41BL0951	050-0025	1	Iron pocket knife
41BL0951	050-0026	1	Brass razor head (1899--1988)
41BL0952	050-0028	1	Lavender glass canning jar flat base cup-bottom mold (1904--1918) Reserve Mark "Kerr Glass Mfg. Co."
41BL0952	050-0029	1	Lavender glass canning jar flat base cup-bottom mold (1904--1919) "Kerr Glass Mfg. Co."
41BL0952	050-0030	1	Lavender glass canning jar flat base (1904--1918) "Kerr Glass Mfg. Co."
41BL0952	050-0031	1	Lavender glass bottle lip/neck improved tooled (1880--1915)
41BL0952	050-0032	1	Lavender glass bottle lip/neck/shoulder improved tooled (1880--1915)
41BL0952	050-0033	1	Lavender glass bottle lip/neck improved tooled (1880--1915)
41BL0952	050-0034	1	Cobalt blue glass hollowware footed base pressed starburst pattern
41BL0952	050-0035	1	Clear glass bottle lip/neck machine-made machine made (1903--1988)
41BL0952	050-0036	1	Clear w/green cast glass bottle lip/neck/shoulder improved tooled
41BL0952	050-0037	1	Tan stoneware with Bristol glaze crock - body (1920--1989)
41BL0952	050-0038	1	Brass lid
41BL0954	050-0042	1	Shell button
41BL0954	050-0043	1	Brown glass snuff bottle flat base cup-bottom mold (1870--1988)
41BL0954	050-0044	1	Lavender glass bottle body (1880--1918)
41BL0954	050-0045	1	Transluscent green, pressed glass lip/rim pressed (1930--1940)
41BL0954	050-0046	1	White milk glass cold cream jar beaded/threaded machine made (1919--1988)
41BL0954	050-0047	1	White semi-porcelain with clear (alkaline) glaze flatware - rim with molded rim
41BL0954	050-0048	1	White whiteware with clear (alkaline) glaze plate - rim
41BL0954	050-0049	1	Tan stoneware with Bristol glaze - flat base
41BL0954	050-0050	1	Tan stoneware jug - shoulder
41BL0955	050-0051	1	Lavender glass bottle flat base (1880--1918)
41BL0955	050-0052	1	Clear w/green cast glass jar flat base post-bottom mold (1904--1915) Owens scar
41BL0955	050-0053	1	Clear w/pink cast glass (1911--1935)
41BL0955	050-0054	1	Clear glass bottle flat base (1904--1969) Owens scar
41BL0955	050-0055	1	Clear glass bottle lip/rim
41BL0955	050-0056	1	Clear glass bottle flat base cup-bottom mold (1929--1954) Owens scar "Owens-Illinois Glass Co."
41BL0955	050-0057	1	Clear glass pedasteled vessel pedestal/stem pressed
41BL0955	050-0058	1	Opaque white, pressed glass bluing bottle whole pressed (1938--1988)
41BL0955	050-0059	1	White whiteware with clear (alkaline) glaze bowl - rim with scalloped rim
41BL0955	050-0060	1	Tan stoneware with Bristol glaze crock - flat base with undecorated decoration (1920--1989)
41BL0955	050-0061	1	White whiteware with solid color glaze - body with undecorated decoration
41BL0955	050-0062	1	White whiteware with solid color glaze shallow bowl - rim with molded rim
41BL0955	050-0063	1	Glass button
41BL0955	050-0064	1	Iron cut nail

41BL0957	050-0065	1	Clear w/green cast glass bottle lip/neck improved tooled (1870--1915)
41BL0957	050-0066	1	Clear glass bottle lip/neck/shoulder machine-made machine made (1903--1988)
41BL0958	050-0067	2	Lavender glass spring clip lid whole pressed (1906--1918) Reserve Mark "Illinois Glass Co." "Dunkley"
41BL0958	050-0069	1	Lavender glass vase footed base pressed starburst pattern (1880--1918)
41BL0958	050-0070	1	Iron tin can w/folded side seams (1888--1988)
41BL0959	050-0071	1	Lavender glass bottle footed base
41BL0959	050-0072	1	Lavender glass goblet (tea) pedestal/stem pressed (1880--1918)
41BL0959	050-0075	1	Iron enamel bowl
41BL0959	050-0075	1	"Jersey" Iron ice cream freezer parts
41BL0959	050-0078	1	Clear glass bottle lip/neck machine-made machine made (1903--1988)
41BL0959	057-0071	1	Clear glass patent medicine bottle flat base machine made (1911--1929) Owens scar "Owens Bottle Co." "Dodson's Livertone" "J.C. Dodson Medicine Co."
41BL0960	000-0077	1	Lavender glass lid lid pressed floral pressed pattern (1880--1918)
41BL0960	050-0078	1	Transluscent green, pressed glass saucer shoulder pressed floral pressed pattern (1930--1940)
41BL0960	050-0079	1	Brown glass snuff bottle flat base
41BL0960	050-0080	1	Brown glass snuff bottle whole machine-made post-bottom mold (1903--1915) 2 dots
41BL0960	050-0081	1	Clear glass patent medicine bottle whole machine-made cup-bottom mold (1911--1929) Owens scar "Owens Bottle Co." "Dodson's Livertone" "J.C. Dodson Medicine Co."
41BL0960	050-0082	1	Clear glass patent medicine bottle whole machine-made cup-bottom mold (1916--1929) Owens scar "Illinois Glass Co."
41BL0960	050-0083	1	Clear glass patent medicine bottle lip/neck/shoulder machine made/cork machine made (1903--1915)
41BL0960	050-0084	1	Clear glass cosmetic bottle/jar whole machine made/threaded cup-bottom mold (1929--1954) Owens scar "Owens-Illinois Glass Co."
41BL0960	050-0085	1	Clear glass bottle lip/neck/shoulder machine made/threaded machine made (1919--1988)
41BL0960	050-0086	1	Clear glass tumbler flat base starburst pattern
41BL0960	050-0087	2	White whiteware with clear (alkaline) glaze saucer - rim with red decoration with transfer printed rim
41BL0960	050-0088	2	White whiteware with clear (alkaline) glaze plate - rim/shoulder/base with molded rim
41BL0960	050-0089	1	White whiteware with clear (alkaline) glaze flatware - body with multi-colored decal decoration (1900--1988)
41BL0960	050-0091	1	Carbon carbon rod from dry cell battery
41CV0412	047-0001	1	Lavender glass bottle lip/neck machine-made machine made (1903--1918)
41CV0412	047-0002	1	Lavender glass flatware body pressed pressed pattern (1880--1918)
41CV0412	047-0003	1	Clear glass canning jar flat base (1915--1946) "Kerr Glass Mfg. Co."
41CV0412	047-0004	1	Aqua glass bottle lip/neck/shoulder machine-made machine made (1903--1915)
41CV0412	047-0005	1	White whiteware with clear (alkaline) glaze bowl - rim with gold decoration with molded/gilded rim
41CV0412	047-0006	1	White semi-porcelain with clear (alkaline) glaze - body with undecorated decoration
41CV0412	047-0007	1	Iron lock plate
41CV0412	047-0008	1	White semi-porcelain with clear (alkaline) glaze teacup - rim with multi-colored decoration (1900--1988) with decal/painted rim
41CV0412	047-0009	1	White semi-porcelain with clear (alkaline) glaze teacup - rim with multi-colored decoration (1900--1988) with decal/painted rim
41CV0412	047-0010	1	White semi-porcelain with clear (alkaline) glaze teacup - rim with multi-colored decoration with banded rim
41CV0412	047-0011	1	Pink, Depression glass lid lid pressed floral pressed pattern (1931--1937) "Hocking Glass Co." "Mayfair Open Rose pattern"
41CV0412	047-0012	1	Blue, milk glass flatware footed base
41CV0412	047-0013	1	White semi-porcelain with clear (alkaline) glaze hollowware - body with blue banded decoration
41CV0412	047-0016	1	White whiteware with solid color glaze plate - rim with molded rim
41CV0412	047-0095	2	Clear glass jug lip/neck/shoulder machine-made machine made ribbed pattern (1903--1988)
41CV0731	047-0025	1	Clear w/green cast glass medicine bottle/jar lip/neck/shoulder improved tooled (1870--1915)
41CV0731	047-0026	1	Clear w/green cast glass bottle footed base "Bixby"
41CV0731	047-0027	2	Clear w/green cast glass patent medicine bottle body (1875--) "Dr. Kilmer's Swamp Root Cure" "Kilmer & Co."
41CV0731	047-0029	1	Iron license plate (1941--1941)
41CV0731	047-0030	1	Iron license plate (1930--1930)
41CV0731	047-0031	1	Iron license plate (1930--1930)

41CV0731	047-0032	1	White whiteware with clear (alkaline) glaze plate - rim with molded rim
41CV1448	047-0039	1	Clear w/green cast glass bottle lip/neck improved tooled (1870--1915)
41CV1448	047-0040	1	White whiteware with clear (alkaline) glaze hollowware - rim with blue decoration with banded rim
41CV1449	047-0046	1	Aqua glass bottle flat base post-bottom mold (1882--1915) "D.O. Cunningham Glass Co."
41CV1449	047-0047	1	Clear w/green cast glass bottle lip/neck/shoulder applied tooled (1825--1875)
41CV1449	047-0048	1	Brick brick fragment
41CV1450	047-0049	1	Yellow Depression glass finial whole pressed pressed pattern (1930--1940)
41CV1450	047-0050	1	Green, Depression glass brandy/whiskey bottle whole pressed ribbed pattern (1930--1940)
41CV1450	047-0051	1	Clear glass bottle footed base cup-bottom mold (1915--1988) "Obear-Nester Glass Co."
41CV1450	047-0052	1	White semi-porcelain with clear (alkaline) glaze plate - footed base with molded decoration
41CV1451	047-0056	1	Lavender glass bottle body (1880--1918)
41CV1451	047-0057	1	Glass button
41CV1451	047-0058	1	White whiteware with clear (alkaline) glaze hollowware - body with undecorated decoration
41CV1451	047-0059	1	White whiteware with clear (alkaline) glaze flatware - body with green transferprinted decoration
41CV1451	047-0060	1	White whiteware with clear (alkaline) glaze flatware - rim with molded rim
41CV1452	047-0061	1	Glass mirror flag
41CV1452	047-0062	1	Glass button
41CV1452	047-0063	1	Iron strap iron
41CV1453	047-0092	1	White whiteware with clear (alkaline) glaze flatware - body with molded decoration
41CV1453	047-0093	2	Tan stoneware with Bristol glaze crock - body (1920--1920)
41CV1454	047-0094	1	White semi-porcelain with clear (alkaline) glaze bowl - footed base with undecorated decoration (1930--1972) "Hall China Co., East Liverpool"
41CV1457	047-0100	1	Clear glass goblet (tea) pedestal/stem pressed
IF #1	047-0101	1	Lavender glass pedasteled vessel pedestal/stem pressed (1880--1918)
IF #1	047-0102	1	Glass button
IF #1	050-0094	1	Lavender glass bottle flat base cup-bottom mold (1880--1918)
IF #1	050-0095	1	Olive, dark glass wine bottle base w/kickup dip-bottom mold (1830--1870)
IF #2	047-0103	1	White whiteware with clear (alkaline) glaze bowl - rim with molded rim
IF #2	047-0104	1	Lavender glass jug lip/neck/shoulder improved tooled (1880--1915)
IF #2	047-0106	1	White semi-porcelain with clear (alkaline) glaze teacup - rim with multi-colored decoration (1900--) with decal/painted rim
IF #3	047-0107	1	Green, Depression glass handle body pressed floral pressed pattern (1930--1940)