Division's Historic Resources Exhibit 8

CULTURAL RESOURCE INVENTORY OF ALTON COAL DEVELOPMENT'S PROJECT AREA, KANE COUNTY, UTAH

Patricia Stavish

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By:

Patricia Stavish

With Contributions by:
Alden H. Hamblin
A.H. Hamblin Paleontological Consulting
and
Nancy B. Lamm
Licensed Professional Geologist

Prepared For:

Utah Division of Oil, Gas & Mining
Salt Lake City
and
Bureau of Land Management
Cedar City District, Kanab Resource Area

Prepared Under Contract With:

Alton Coal Development, LLC
195 North 100 West
P.O. Box 1230
Huntington, Utah 84528-1230

Submitted By:

Keith R. Montgomery, Principle Investigator
Montgomery Archaeological Consultants. Inc.
P.O. Box 219
Moab, Utah 84532

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ABSTRACT

A cultural resource inventory was conducted by Montgomery Archaeological Consultants, Inc. (MOAC) in June and July 2005 for Alton Coal Development, LLC. This is a multiple year proposal in which the company proposes to develop an open pit coal mine within their lease south of the town of Alton, Kane County, Utah. The inventory was implemented at the request of Mr. Allen Childs, Talon Resources, Huntington, Utah. A total of 3064 acres were inventoried for cultural resources, of which 1804 acres occur on public lands administered by the Bureau of Land Management, Cedar City District, Kanab Resource Area and 1260 acres occur on private lands.

The inventory resulted in the documentation of 31 previously recorded archaeological sites and 60 new archaeological sites. The previously recorded archaeological sites include one historic site (Alton Cemetery); three multi-component prehistoric/historic sites; and 27 prehistoric sites that consist of temporary camps, artifact scatters, and lithic scatters. The new archaeological sites include two historic sites (a corral and a bridge); two multi-component prehistoric/historic sites; and 56 prehistoric sites that consist of temporary camps, artifact scatters, and lithic scatters. The inventory also resulted in the documentation of 30 new paleontological localities and three previously documented paleontological localities (Appendix B).

The cultural resource inventory of the Alton Coal Development project area resulted in the documentation of 91 new and previously recorded archaeological sites. Seventy-four sites (42Ka1267, 42Ka1313, 42Ka1314, 42Ka2038-42Ka2041, 42Ka2044, 42Ka2045, 42Ka2047-42Ka2052, 42Ka2055-42Ka2059, 42Ka2065, 42Ka2066, 42Ka3077, 42Ka3097, 42Ka3115, 42Ka3140, 42Ka3168, 42Ka6073-42Ka6076, 42Ka6080, 42Ka6081, 42Ka6083, 42Ka6084, 42Ka6087, 42Ka6089-42Ka6094, 42Ka6097, 42Ka6098, 42Ka6101-42Ka6104, 42Ka6109, 42Ka6110, 42Ka6112-42Ka6117, 42Ka6119-42Ka6123, 42Ka6125-42Ka6130, 42Ka6133-42Ka6139, and 42Ka6307) are recommended as eligible to the NRHP under Criterion D as they are likely to contribute information important to prehistory. One site, 42Ka3140, is recommended as eligible to the NRHP under Criteria A and B, as many of the individuals are early settlers of the Upper Kanab area and early founders of the town of Kanab and the cemetery dates to an early period of settlement in southwestern Utah. Sixteen sites (42KA6072, 42Ka6077, 42Ka6078, 42Ka6079, 42Ka6082, 42Ka6085-42Ka6086, 42Ka6088, 42Ka6095, 42Ka6096, 42Ka6099, 42Ka6100, 42Ka6111, 42Ka6118, 42Ka6131, and 42Ka6132) are recommended as not eligible to the NRHP, as they fail to meet the criteria outlined in 36 CFR 60.4. It is recommended that all eligible sites be avoided by the undertaking. If eligible sites can not be avoided, a separate mitigation or treatment plan will have to be created.

TABLE OF CONTENTS

ABSTRACT. i
TABLE OF CONTENTS. ii
LIST OF FIGURES. ii
LIST OF TABLES. ii
INTRODUCTION. 1
DESCRIPTION OF PROJECT AREA. 3
Environmental Setting. 3
Cultural Overview. 5
SURVEY METHODOLOGY. 12
INVENTORY RESULTS. 12
Archaeological Sites. 12
NATIONAL REGISTER OF HISTORIC PLACES EVALUATION.. 44
MANAGEMENT RECOMMENDATIONS.. 45
REFERENCES CITED. 46
APPENDIX A: INTERMOUNTAIN ANTIQUITIES COMPUTER
SYSTEM (IMACS) SITE FORMS. 51
APPENDIX B: Alton Coal Field Paleontological Survey Sections 12, 13, 24 and 25
T 39 S R 6 W and Sections 7, 18, 19, 30 and 31 T39 S R 5W. 52
APPENDIX C: Geologic Report of the Impacts of Bedrock and Surficial Units on the
Distribution of Cultural Resources at the Alton Coal Field, Kane Co. Utah. 53

LIST OF FIGURES

1. Cultural Resource Inventory of the Proposed Alton Coal Development Showing Archaeological Sites. 4

LIST OF TABLES

1. Site Type and NRHP Eligibility of Archaeological Sites. 40

INTRODUCTION

A cultural resource inventory was conducted by Montgomery Archaeological Consultants, Inc. (MOAC) in June and July 2005 for Alton Coal Development, LLC. This is a multiple year proposal in which the company proposes to develop an open pit coal mine within their lease south of the town of Alton, Kane County, Utah. The inventory was implemented at the request of Mr. Allen Childs, Talon Resources, Huntington, Utah. The inventory was conducted on lands administered by the Bureau of Land Management, Cedar City District, Kanab Resource Area and on private lands.

The objective of the inventory was to locate, document, and evaluate any cultural resources within the project area in order to attain compliance with a number of federal and state mandates, including the National Historic Preservation Act of 1966 (as amended), the National Environmental Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, the American Indian Religious Freedom Act of 1978, and the Utah State Antiquities Act of 1973 (amended 1992).

The fieldwork was performed between June 2 and July 15, 2005 under the supervision of Keith Montgomery, assisted by Meg Thornton, Patricia Stavish, and Andre Jendresen. The inventory was conducted under the auspices of U.S.D.I. (FLPMA) Permit No. 05-UT-60122 and State of Utah Antiquities Project (Survey) No. U-05-MQ-1568b,p.

A record search for previous projects and cultural resources was conducted at the Utah State Historic Preservation Office, Salt Lake City on March 25, 2005 by Ms. Marty Thomas. Intensive cultural resource investigations have taken place in the area since the 1980s; however, numerous archaeological sites have been recorded since the 1970s. The majority of the eleven identified inventories were conducted by the Museum of Northern Arizona or Bureau of Land Management and are mostly related to proposed mining activities.

In 1974, the Museum of Northern Arizona (MNA) performed clearance of 48 drilling locations and access routes on the Skutumpah Terrace in Kane County; 19 drilling locations and access routes in the Alton Amphitheater in Kane County; and four meteorological tower sites in Kane County (Davidson, et al. 1974; Project No. U-74-NI-0037bps). Thirty-six archaeological sites were documented during the investigations. Three of these sites are located in the current project area, 42Ka1267, 42Ka1314, and 42Ka1834. Site 42Ka1267 is a lithic campsite with lithic tools, lithic debitage and ground stone that was determined to be significant. 42Ka1314 is an artifact scatter determined to be significant. These sites were re-documented for the current undertaking. Site 42Ka1834, a small lithic scatter with a single projectile point, could not be relocated in the field.

In 1979-1980, the Museum of Northern Arizona (MNA) conducted inventories for Utah International, Inc.'s coal mining lease area situated on the Skutumpah Terrace and Alton Amphitheater (Halbirt and Gualtieri 1981; Project No. U-81-NI-0254b and U-80-NM-007). The four surveyed parcels were designated Alton East and Alton West, the coal preparation plant site, and major road routes. A total of 107 archaeological sites, most of which were of prehistoric affiliation were documented dating from the Archaic to Late Prehistoric. A portion of the Alton West parcel is located within the current project area and includes previously documented sites 42Ka2037, 42Ka2038, 42Ka2039, 42Ka2040, 42Ka2045, 42Ka2047, 42Ka2048, 42Ka2049, 42Ka2050, 42Ka2051, 42Ka2052, 42Ka2055, 42Ka2056, 42Ka2057, 42Ka2058, 42Ka2059, 42Ka2065, and 42Ka2066. These sites are prehistoric temporary camps, artifact scatters and lithic scatters. All

of these sites, except 42Ka2037, were re-documented for the current undertaking. Site 42Ka2037 is a lithic scatter with a single projectile point that was not relocated during the current inventory.

In 1980, the Bureau of Land Management (BLM) Kanab Field Office performed a Class III inventory of Engineers International, Inc. seismic testing areas (McFadden 1980; Project No. U-80-BL-0162b). No cultural resources were located in the project area. The BLM performed a cultural resource inventory in 1981 of a tract allotment for Heaton Brothers (McFadden 1981; Project No. U-81-BL-0230b). No archaeological sites were documented during the project. The Cone allotment chaining area was surveyed by the BLM in 1982, resulting in a finding of no cultural resources (McFadden 1982; Project No. U-82-BL-0178b).

In 1984, the BLM surveyed the Syler Knoll chaining area for cultural resources (McFadden 1984; Project No. U-84-BL-0679b). Previously recorded site 42Ka2045, a large lithic scatter containing diagnostic artifacts, was located within the project area. Because 42Ka2045 was previously evaluated as not significant (for eligibility to the NRHP), clearance was recommended for the chaining activities.

In 1986, the Museum of Northern Arizona (MNA) performed cultural resource inventories of 43 drill locations and access roads within the Alton Coal Field for Utah International, Inc. (Weaver 1986; Project No. U-86-NI-0279bp). Two new archaeological sites, located outside of the current project area, were documented. Also in 1986, the Museum of Northern Arizona (MNA) performed survey and monitoring of nine test pit locations and access routes for Utah International, Inc. (Weaver and Hurley 1986; Project No. U-86-NI-0864b). No new cultural resources were documented.

In 1986, the Museum of Northern Arizona (MNA) returned to the Alton Coal Leasehold to survey another 12,500 acres, resulting in the documentation of 103 additional sites of which six occur in the present project area (42Ka3077, 42Ka3080, 42Ka3097, 42Ka3115, 42Ka3140, and 42Ka3168) (Keller 1987). Site 42Ka3077 is a lithic and hearth scatter of Archaic affiliation that was recommended as eligible to the NRHP. 42Ka3097 is a multi-component Archaic, Anasazi, Paiute, and historic artifact scatter that was recommended as eligible to the NRHP. Site 42Ka3115 is a lithic scatter of Paiute affiliation that was recommended as eligible to the NRHP and site 42Ka3140 is the Alton Cemetery. Site 42Ka3168 is a lithic and hearth scatter of Virgin Anasazi affiliation that is recommended as eligible to the NRHP. These sites were re-documented for the current undertaking. Site 42Ka3080 was described as a historical agricultural trash dump consisting of various agricultural implements and an automobile. This site was not re-located during the current inventory and was likely moved or reclaimed from the in use agricultural field.

In 1987, the Museum of Northern Arizona (MNA) surveyed 22 auger borings and 27 backhoe test pits for Utah International, Inc. (Weaver and Hurley 1987; Project No. U-87-NI-0856b).

In 1993 and 1994, Nielson Consulting Group and Timpanogos Research Associates performed cultural resource inventories and site evaluations of several abandoned mines in central and southern Utah (Hughes, Nielson, and Sulz; Project No. U-93-NP-0712). Three of the mines (42Ka4017, the Smirl Mine; 42Ka4019, Prospect 2A; and 42Ka4091, the Alton Mine) are located in the current project area. None of these mines are evaluated as eligible to the NRHP. These sites could not be re-located for the current inventory, likely as a result of reclamation.

In March 2005, MOAC conducted a cultural resource inventory of Alton Coal Development's Sink Valley - Alton Amphitheater project area on private land; resulting in the documentation of fifteen archaeological sites (Stavish 2006). Seven (42Ka1313, 42Ka2041, 42Ka2044, 42Ka6104, 42Ka6109, 42Ka6110, and 42Ka6126) of theses sites are located in the current project area and all are recommended as eligible under Criterion D. Sites 42Ka1313, 42Ka6110, and 42Ka6126 are prehistoric temporary camps and sites 42Ka2041, 42Ka2044, 42Ka6104, and 42Ka6109 are prehistoric lithic scatters. In August 2005, MOAC completed a survey of six coal seam drill sites for Alton Coal Development; no cultural resources were found (Thornton and Montgomery 2005).

A paleontological literature review was completed by Alden H. Hamblin at the office of the State Paleontologist, Utah Geological Survey (April 2005). This consultation indicated that three paleontological localities have been documented in or near the current project area. Additionally, there are exposures of the Cretaceous Dakota formation (Sections 19 and 30, T39S R5W) and the Tropic Shale (Sections 19, 20, 29 and 30, T39S R5W) within the project area. Therefore, it was recommended that a paleontological consultant examine the project area. A paleontological survey was conducted by Alden H. Hamblin during September and October 2005 for the Alton Coal Development project (Appendix B).

DESCRIPTION OF THE PROJECT AREA

The project area is situated south of the town of Alton, in the Alton Amphitheater and the western portion of Sink Valley, Kane County, Utah. This area lies a few miles east of US 89 just south of Alton to the east and west of County Road 136, Kane County, Utah. The legal description of the project area is Township 39 South, Range 5 West, Sections 7, 18, 19, 30 and 31; Township 39 South, Range 6 West, Sections 11, 12, 13, 24, and 25 (Figure 1).

Environmental Setting

The study area lies within the Grand Staircase Section physiographic subdivision of the Colorado Plateau (Stokes 1986). This area is characterized by a series of cliffs and terraces that rise from the Grand Canyon in Arizona to the summit of the High Plateaus in Utah. This section is bounded on the east by the East Kaibab Monocline, on the west by the Hurricane Fault, on the north by the edges of the various high plateaus, and on the south by the Grand Canyon of Arizona. Harder rock layers create cliffs and accompanying benches and tablelands, whereas the softer rock units have eroded into slopes and badlands. Specifically, the project area is located along the western edge of the Paunsaugunt Plateau. The Alton Coal Field is comprised of relatively horizontal bedrock units of Mesozoic age (see Lamm, Appendix C). Within portions of the project area, bedrock units are exposed as low hills and along the incised drainage of Kanab Creek. From the oldest to youngest: the Winsor member of the Carmel formation (Jurassic), the Dakota formation (Cretaceous), and the Tropic shale (Cretaceous). Table 1, in Appendix C, summarizes the impacts of surficial and bedrock units of the distribution of cultural resources in the area. The two most prominent geologic units are alluvial valley fill and Tropic Shale. The possible impacts to cultural resources distributed on the alluvial valley fill include localized slope failure/collapse of arroyo walls, piping of finer grained sediments, entrenching of drainages, and the potential for buried cultural resources (Lamm, Appendix C). Cultural resources distributed across the Tropic shale formation are potentially impacted by localized slope failure, surficial creep on steeper slopes, slope was on steeper slopes, and erosion of weathered bedrock slopes on steep to gentle slopes. Furthermore, the vertical erosion of sediments formed in situ on exposures of the Tropic shale may also distort the integrity of buried cultural resources (Lamm, Appendix C).

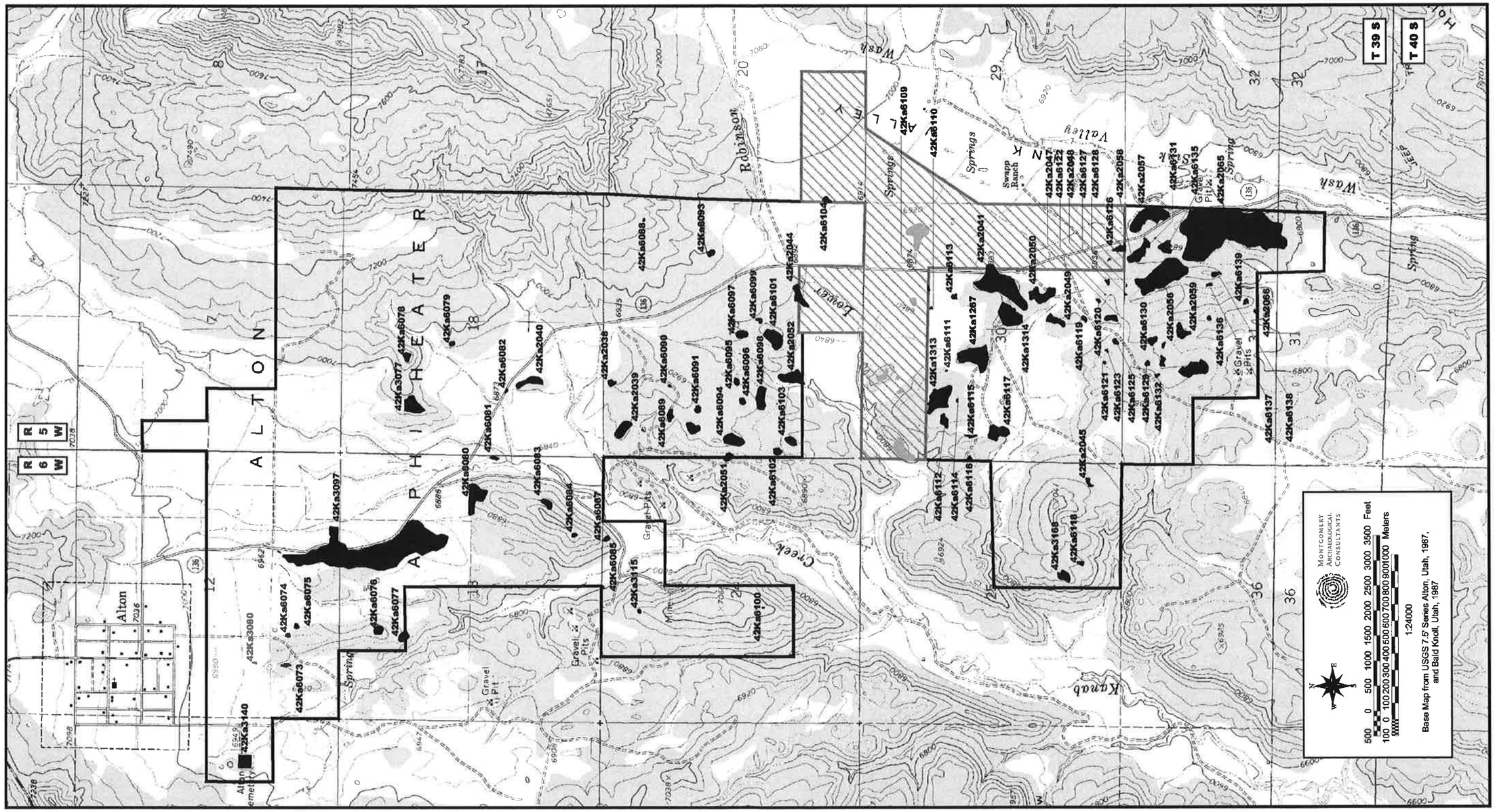

Figure 1. Cultural Resource Inventory of Alton Coal Development's Project Area, showing Archeological Sites.

The horizontal deposition of the geologic formations coupled with the impact of water and wind erosion has reduced much of the area to flat ridges and benches which are dissected by long alluvial drainages and tributaries. Drainages often widen to form meadows, such as Sink Valley and the Alton Amphitheater. Alluvial valley fill, derived from weathered bedrock, is extensive throughout the project area along the broad, open areas of cultivation and valley floor. Characteristics of the alluvial valley fill include the location of low, relatively level areas of the project including cultivated fields and the presence of incised arroyos and drainages. According to Lamm (Appendix B), total depth of the alluvial valley fill is not known and likely varies across the project area. Soils in the drainages have some agricultural potential as a result of their sand, gravel and silt composition and the presence of limestone and arkosic minerals (Gregory 1951:12). Today less than 2% of the area is under cultivation and products consist of primarily of alfalfa, potatoes, and cold weather vegetables which demand different growing conditions than the prehistoric corn-based agriculture (Halbirt and Gualtieri 1981:6). Major drainages in the project area are Kanab Creek , Sink Hole Valley Wash and Lower Robinson Creek. Kanab Creek flows from north to south through the project area forming an incised canyon, and eventually empties into the Colorado River byway of the Virgin River. In addition, water resources are manifested as geologic aquifers or springs. Most of the springs are perennial and are derived from the Tropic Shale formation.

Elevation in the project area ranges from 6800 ft (2079 m) to 7200 ft (2202 m). Climatic patterns are based on a 59 year record (1915 to 1974) from the Alton, Utah, weather station (Halbirt and Gualtieri 1981:8). The average monthly temperatures are generally mild and follow a modal distribution with a low of 26 degrees F during January and a high of 65 degrees F during July. The number of consecutive frost-free days average between 84 to 104 days (Gregory and Moore 1931). This period is shorter than the necessary 100 to 120 frost-free days required to mature modern hybrid corn, and more time is needed under dry conditions (Crosswhite 1981). The vegetation over most of the study area is a pinyon-juniper and sagebrush community. Pinyon-juniper with oakbrush associations occur on the tops and slopes of ridges, while a sagebrush community exists within alluvial flood plains, draws, and meadows. Other plant species which may have been utilized by ethnographic and prehistoric groups in the area include barberry, canyon grape, cattail, currant, goosefoot, onion, prickly pear cactus, sedge, squawbush, sunflower, and yucca (Ibid:10). Modern impacts of the landscape include ranching, agriculture, coal mining, and roads.

Cultural Overview

Human occupation in the region represents the Paleoindian, Archaic, Formative, Protohistoric, and Historic cultural stages. The first Native American occupation of the general study area probably occurred during the Paleoindian stage at the late glacial Pleistocene-Holocene boundary (ca. 11,500 B.P. to 9000 B.P.). Early Paleoindian artifact assemblages are typified by large, lanceolate projectile points, spurred end scrapers, gravers and borers, and crescents (Frison 1978:78), indicating the exploitation of megafaunal and floral resources. On the basis of projectile point typologies and subsistence strategies, the early portion of the PaleoIndian stage is commonly divided into two cultural complexes referred to as the Clovis (ca. 11,500 - 11,000 B.P.), and the Folsom (ca. 11,000 - 10,000 B.P.). Aikens and Madsen (1986) postulate that PaleoIndian people migrated into the eastern portion of the Great Basin following the recession of Lake Bonneville (10,500 B.P.). Several surface fluted projectile points have been reported from Garfield County (Copeland and Fike 1988) and Washington County (Kohl 1991) as well as northeastern Arizona (Geib 1995). Late Paleoindian or Plano projectile points have been found on the Kaiparowits

Plateau and classified as large stemmed or concave base points (Geib, Collette and Spurr 2001:191-192).

The Archaic stage (7800 to 500 B.C.) is generally viewed as a hunting-gathering lifeway that is represented by subsistence practices more labor-intensive than those of Paleoindians with many more smaller animal and plant species being intensively exploited. Several cultural sequences for the Archaic stage are proposed on the basis of regional differences. Jennings (1978) provides a concept of the western Archaic, or Desert Culture, based on diverse resource exploitation, diagnostic artifacts including cordage and basketry, and artifactual variability in various regions such as the California-Nevada axis and Utah-Oregon axis. Matson (1991) presents a four-period sequence model incorporating data from the Greater Southwest: Early (7800 - 4000 B.C.), Middle (4000 - 2000 B.C.), Late (2000 - 1000 B.C.), and Terminal (1000 B.C. to roughly A.D. 700). South of the study area, the Early Archaic period is labeled the Desha Complex known for its crudely made, shallow, side-notched lanceolate points. In the Glen Canyon region excavations from Sand Dune and Dust Devil Cave provide a radiocarbon date of 5050 to 6050 B.C. Early Archaic component from the former site (Lindsay et al. 1968). About a dozen projectile points were recovered from the lower layer in Sand Dune Cave including Pinto Series, Jay, and varieties of side-notched points (later classified as Sand Dune Side-notched) (Matson 1991:147). Faunal remains recovered from the Desha Complex include those of mountain sheep, cottontail, pack rat, and lesser numbers of jackrabbit, gopher, squirrels, skunk, and bison (one bone). At Dust Devil Cave, the earliest Archaic component (Stratum IV) provided a date from a yucca-lined pit of ca. 8793 B.C. along with an abundance of prickly pear cactus (*Opuntia*) extracted from human feces (Ambler 1996:42). Significant materials recovered from this cave included 25 Archaic sandals, classified into three basic types; open-twined, fine warp-faced, and coarse warp-faced (Ibid 44). On the northern Colorado Plateau the earliest Archaic component is dated at Cowboy Cave (42Wn420) between 7430-7100 B.C. although no artifacts were found in this stratum (Schroedl and Coulam 1994:11). The upper Early Archaic component (Stratum III 5250 to 4350 B.C.), however, contained 11 projectile points (Pinto, Northern Side-notched, and Elko Corner-notched), faunal remains (cottontails, jackrabbits, porcupine, and *Canis* sp.), and floral remains (sunflower, sand dropseed, chenopods, cactus, juniper and bugseed) (Jennings 1980). The most significant features from Stratum III were a number of depressions referred to as "scooped out troughs" by Jennings (1975:9). More recently these features have been redefined by Schroedl and Coulam (1994:6-7) as pitstructures which were repeatedly cleaned-out and reoccupied during the Early Archaic. In the Alton West Coal leasehold previous investigations have documented several Early Archaic projectile points types (Pinto Series, Humboldt, and Northern Side-notched) from sites which include later Formative and Late Prehistoric temporal components (e.g. 42Ka2045 and 42Ka2056) (Halbirt and Gualtieri 1981).

During the Middle Archaic period (4000 - 2000 B.C.) there was a decrease in the occupation of the Colorado Plateau, presumably caused by the Altithermal climate, which may have been a two drought event (Matson 1991:165-166). Many of the previously mentioned sites (Dust Devil Cave and Cowboy Cave) exhibit a reduced intensity of occupation during the Middle Archaic period. Recent radiocarbon data from the Glen Canyon region are filling the Middle Archaic gap (e.g. 1,000 years) as proposed by Berry and Berry (1986) for the Colorado Plateau indicating that the hunter-gatherers of the area may have not completely abandoned the area 6,000 years ago (Geib 1996:32). Middle Archaic settlement patterns most likely reflect the response to a probable protracted drought by populations shifting residential camps to water-rich lowlands and especially higher elevation settings (above 8,000 ft). Common projectile points at Middle Archaic sites include Sudden Side-notched, San Rafael Side-notched, Hawken Side-notched and Elko Series. Previous

investigations in the Alton West Coal leasehold have identified similar point types as listed above along with earlier and later temporal components at sites categorized as residential camps and processing stations (Halbirt and Gualtieri 1981).

The Late Archaic period began around 4,000 years ago and corresponds to a noticeable increase in radiocarbon dates in the region and is temporally correlated with an increase of effective moisture what is termed as the sub-boreal interval (Berry and Berry 1986). This period is marked by a heavy reoccupation of Cowboy Cave starting at about 1750 B.C. and is characterized by the inhabitants engaging in broad-scale hunting and gathering with an increased emphasis on mountain sheep and chenopods/amaranths (Matson 1991:171). Gypsum projectile points comprised approximately 30 percent of the total identifiable collection from Cowboy and adjacent Walters Cave (Jennings 1980:36). These stemmed points are among the most common type of point found in southeastern Utah and appeared on the northern Colorado Plateau sometime after 2550 B.C. (Holmer 1986:105). Split-twig figurines are another important diagnostic of the Late Archaic period, best known from Cowboy Cave, but occur over a broad territory centered on the Colorado River and it tributaries. Further south in the Glen Canyon region, Late Archaic occupations are less represented, although a few Gypsum points were recovered from Dust Devil Cave (Geib and Ambler 1991). On the Kaiparowits Plateau, Late Archaic sites are represented primarily by residential camps situated in the higher elevations with access to ample water, fuel wood, large and small game, and plant resource diversity, whereas, the limited activity camps and reduction loci are prevalent in the lower elevations that contained a greater abundance of economic grasses (Geib, Collette and Spurr 2001:367). Investigations at the Arroyo Site (42Ka3976), situated in The Grand Staircase-Escalante National Monument, revealed a potential pitstructure (dated circa 1850 B.C.) exposed in a trench below a Formative age horizon which was interpreted as a semi-permanent occupation in the floodplain environment (McFadden 2000:15). In the Alton West Coal leasehold several Late Archaic Gypsum projectile have been recorded at open sites with other older and more recent prehistoric temporal components (42Ka2047 and 42Ka2059) (Halbirt and Gualtieri 1981).

The Terminal Archaic (1000 B.C. to roughly A.D. 700) is marked on the northern Colorado Plateau by the presence of arrow points and shafts along with the introduction of corn. The Archaic-Formative transition at Cowboy Cave is found in two separate episodes of occupation beginning about A.D. 100 during a period of high effective moisture (Schroedl and Coulam (1994:23). This relatively intense occupation (Stratum Vb) appeared to have represented a late summer/early fall seed processing locale based on the coprolite evidence (Hogan 1980). A corn cache as well as corn kernels were found in this horizon revealing that the pre-Formative occupants were growing this domesticate, although the extent of agricultural dependency is unknown. It is well established that corn dates to at least 1200 B.C. across much of the southern portion of the Colorado Plateau with later dates derived from sites further north (Geib 1996:54). Even if the populations within this geographical area were not actively involved with farming by around the Christian era, they were likely in contact with farmers or were a least experiencing changes resulting from the presence of nearby farmers. At Hog Canyon Dune (42Ka2574) located at the junction of Hog and Kanab creeks (about two miles north of Kanab) charred corn kernels were recovered from a pitstructure in association with a hearth and a burial that yielded two dates: 910-390 B.C. and A.D. 60-640 (Janetski 1993:229). The dating of bow-and-arrow introduction to the eastern Great Basin and Utah has been an issue of continuing debate. Past evidence from the lithic technologies between the terminal Archaic Proto-Fremont and BM II populations indicates that by ca. A.D. 100 the bow and arrow was employed by the ancestral Fremont, while the ancestral Anasazi continued to employ the atlatl. In the northern portion of the region, at Cowboy Cave,

arrow points come from preceramic Stratum V deposited about A.D. 100-600 (Schroedl and Coulam 1994). To the south, the Sunny Beaches site (42Ka2751) in the Glen Canyon Recreational Area is somewhat of an anomaly. A number of Rose Spring Corner-notched points, which are accepted markers of bow-and-arrow technology dated earlier (e.g. around A.D. 100) than the established chronology for BM II aceramic occupations. In the Alton Coal leasehold previous inventories have documented Rose Spring Corner-notched arrow points from several sites. At site 42Ka2056 both Early Archaic Pinto Series points and Rose Spring Corner points were found, but in two separate lithic assemblage loci (Halbirt and Gualtieri 1981:85).

The Formative stage began about A.D. 500 when ceramics were in general use on the Colorado Plateau, and continued until A.D. 1300, with the Anasazi abandonment of Four Corners region. Within the region, this stage encompasses two different cultures: the Anasazi (Ancestral Pueblo) and the Fremont. The project area is within the occupation zone of the Anasazi which is divided into two recognizable branches: Virgin Anasazi, primarily occupying the Arizona Strip, southwestern Utah, and southernmost Nevada; and Kayenta Anasazi, occupying a large portion of northern Arizona and far southeastern Utah. The Fremont are considered a separate entity, found primarily at sites in Utah north of the Anasazi region. Artifactual evidence in the study area indicates primarily a Virgin Anasazi cultural tradition, although both Kayenta Anasazi and Fremont ceramics have been identified.

The Virgin Anasazi occupied the area from Basketmaker II through early Pueblo III times, and apparently adapted horticultural practices to a variety of environmental conditions (Thompson and Thompson 1978; Walling and Thompson 1988). Investigations in the Grand Staircase area east of Kanab Creek indicate it was occupied continuously from at least Basketmaker III times (ca. A.D. 300) through late Pueblo II (ca. A.D. 1200). Virgin Anasazi residential units are characterized by an architectural sequence from pithouse residences with separate cist storage facilities, through intermediate stages of room block development, and eventually to substantial surface masonry pueblos incorporating both storage and habitation functions (Talbot 1990). According to McFadden (1996:24), the quantity of storage space per residential unit did not vary significantly which is indicative of a continuity of subsistence practices. In the Grand Staircase region, Virgin Anasazi sites located adjacent to cultivable fields were fully residential with large storage capacities (Ibid 7). Furthermore, residential mobility may have been part of an adaptive strategy that allowed the Virgin Anasazi to engage in agriculture in an environment in which a variety of short-term environmental fluctuations needed to be accommodated. In contrast, the Kolob/Skutumpah Terrace area, where the present study area resides (above 6,400 ft), is characterized by a short growing season (less than 120 days at Alton), hence prehistoric agricultural potential was risky. Several studies in this area (Christensen et al. 1983; Halbirt and Gualtieri 1981; Keller 1987:87) indicate that the vast majority of the prehistoric sites are limited activity locales or camps related to hunting and gathering. Documented sites represent Archaic, Virgin or Western Anasazi, and Southern Paiute groups which engaged in hunting and gathering activities most likely on a seasonal basis (Keller 1987). For the entire Alton Coal leasehold, Keller (1987:87) estimates that 23% of the sites date from Basketmaker III to Pueblo II. Data compiled by McFadden (1996:17) from this area, as well as the Grand Staircase and Upper Virgin River, suggests that Virgin Anasazi residential sites are virtually always associated with agricultural potential, while hunting/gathering sites are more common in the elevated zones where agriculture is not feasible. Ceramic types identified in the Alton Coal leasehold are dominated by Virgin Anasazi North Creek Gray, North Creek Corrugated, Shinarump Brown, and St George Black-on-Gray. To a lesser extent Kayenta Anasazi Tusayan Black-on-Gray and Fremont Great Salt Lake Gray have been reported in the area adjacent to Kanab Creek (Halbirt and Gualtieri 1981:35).

In the Grand Staircase physiographic section, the adaptive strategy of the Virgin Anasazi is summarized by McFadden (1996:30) as an occupation of multiple "homesteads" located in a variety of different agricultural niches, each with different characteristics, but all suitable for agriculture. Furthermore, shifts in residence would occur periodically in response to short-term climatic fluctuations, but also as a result of local environmental deterioration. A comparison of site types from the lower elevation study areas and the Kolob and Skutumpah Terrace suggests that given frequent residential moves, the farmsteads themselves could have served as base camp/processing stations with this upland functioning as a hunting-gathering component.

Protohistoric occupation of the project area is attributed to the Southern Paiute, members of the Numic population. Several models address the migration of Numic populations to the Great Basin. Some theorize that Numic expansion from the southwestern Great Basin eastward occurred approximately 1,000 years ago (Madsen 1982:219). Other models view the expansion taking place several thousand years ago (see Bettinger 1994). On the basis of the co-occurrence of Southern Paiute and Virgin Anasazi ceramics in stratigraphic context, it is theorized that entry into the southwestern Utah area by Numic speakers occurred during the late occupational period of the Virgin Anasazi (Westfall et al. 1987). Fowler (1994) compares the material culture of the Southern Paiute to that of the Virgin Anasazi, noting similarities such as clay figurine styles, certain features of coiled basketry, and one type of sandal, and concludes that these similarities suggest interaction between the groups. Besides pottery or perishable materials, the other common diagnostic is the Desert Side-notched projectile point. Although Desert Side-notched points should be considered horizon marker rather than ethnic markers, Southern Paiute use of the study area is well documented (Kelley 1964), and appeared to have constituted the primary post-A.D. 1300 indigenous occupation. Cottonwood Triangular points may not be useful diagnostics of Numic occupations if they are unfinished items broken in production; such tools might have been intended as Desert Side-notched points or Bull Creek points or some other arrow point type (Geib et al. 2001:392). Southern Paiute Brown Ware found in southwest Utah is characterized as conical-bottomed vessels exhibiting undulating surfaces on its thick walls. Decoration is limited to some surface incising, corrugation or fingernail impressions, and/or clapboarding of coils, the former often over the entire surface of the vessel (Baldwin 1950). Temper tends to be visible and coarse and fall into two types for the area: 1) abundant very fine rounded to subangular particles that are generally clear and appear to be frosted suggesting that they originate from eolian and alluvial deposits; 2) large angular to subangular particles most of which are white and very fine grained as if derived from a crushed quartzite or other aphanitic particles (Westfall et al. 1987:70).

The Southern Paiute were hunter-gatherers and part-time horticulturists, with domesticates playing a minor role in their subsistence strategy (Fowler and Fowler 1971, 1981; Steward 1938). This cultural tradition is characterized by the use of rockshelters, and open camp sites containing wickiup dwellings, rock-filled roasting pits, fire hearths, conical-bottomed brownware ceramics, rabbit fur blankets, basketry hats and containers, digging sticks, milling stones, and stone tools (Euler 1966; Westfall et al. 1987). Social organization revolved around bands of multiple family units, cooperating and joining forces when necessary to ensure the survival of the community (Steward 1938). At least 16 major bands, or 35 smaller groups, have been identified in Utah. The area adjacent to the present town of Alton was the summer home of one of the seven socio-economic groups that comprised the Kaibab Band of the Southern Paiute (Kelley 1964). The organization of these groups was largely economic in character; however, some attention was allotted to social residence. It appears that the group inhabiting the Alton area was a small patrilocal aggregate. Evidence exists that other groups visited the area occasionally to gather seeds and berries yet there seems to have been minimal economic cooperation between groups

(Kelley 1964). The Alton group was controlled by a chief who directed the seasonal movements of camps, and was in most instances in charge of deer hunting (Ibid 27). According to Kelley (Ibid 6), campsite location was determined by the presence of springs which fell under the jurisdiction of the local economic group. Subsistence activities varied according to seasonality, with the occupants of a spring "....tending to share the same seasonal cycle" (Ibid 8). During the winter, the group resided in Kanab Canyon were camps were semi-permanent in the sense that the occupants returned to them following hunting and foraging trips. Resources utilized during this period included seeds and rabbits, the latter hunted in large scale drives consisting of perhaps 25 individuals from different households (Ibid 24). Periodically, deer and pinyon nut forays were also conducted along the top of the Vermillion cliffs. When snows receded in the spring, the group moved north to the Alton area and subsisted until summer on stores of food previously cached in caves (Ibid 16). The group remained in Alton for most of the summer collecting a wide variety of seeds and berries as well as hunting deer, marmot, and rabbit (Halbirt and Gualtieri 1981:15). At some point during this period the group returned briefly to the Kanab area to gather seeds and cache them for the succeeding winter occupation (Kelly 1964:16). Deer hunting and the gathering of "plateau" seeds was emphasized during the late summer to fall months. It is during this period that deer begin to congregate in small migratory groups.

The first documented entry of European Americans into Kane County was the expedition of Fathers Francisco Atanasio Dominguez and Silvestre Velez de Escalante in the autumn of 1776 to establish an overland route between settlements in Santa Fe and Los Angeles. Because of a snowstorm near Milford, the expedition halted the attempt to reach California, and instead followed a route to the southeast to return to Santa Fe. Along this route they named Sulphur Creek (later renamed the Virgin River), Rio de Pilar (later known as Ash Creek), and Hot Sulphur Springs (Alder and Brooks 1996; Bradley 1999). Another early explorer, Jedediah Smith, followed parts of the Dominguez and Escalante Old Spanish Trail, of which various portions were later referred to as the California Trail, through Washington County in 1826 and 1827. His route created a new pathway for pioneers traveling from the East to California, and was widened to an actual wagon road in 1849. Other explorers to follow in these footsteps include John C. Fremont in 1844 and Mormon pioneer leaders from Salt Lake City in 1847 (Alder and Brooks 1996).

Important to the Mormon colonization effort was the organization of an Indian mission in Harmony in early 1854. Jacob Hamblin, a Mormon explorer and settler of Kane County, led the effort to establish harmonious relationships with key Native American leaders. His knowledge of the area also facilitated government exploration and mapping projects in the area, including a Colorado River voyage with John Wesley Powell in 1871 that documented the landscape of Glen Canyon and the present-day city of Kanab. While Kanab is the principal settlement in Kane County, small towns in Long Valley are important centers of agriculture and stock-raising. In 1862, John and William Berry first led a team of ranchers into the Long Valley area in search of rangeland for their cattle. The area was called Long Valley due literally to its length (a long narrow valley situated between high mountain walls), fertile land, and proximity to water. The first settlement in the valley was probably that of Berryville (later renamed Glendale), established by the Berry brothers in 1864. Berryville was abandoned in June 1866 due to conflicts between the Mormon settlers and Paiute and Navajo tribes in the area. This pattern of settlement was common to many of the small towns in Long Valley throughout the late 1800s. On January 16, 1864, the Utah Territorial Legislature approved an act that officially created Kane County. Its boundaries were defined on the west to include the upper Virgin River area, including Virgin City, the principal town in the new county at the time (Bradley 1999:56-59). Kane County remained isolated because of its challenging landscape, its relatively small population, and its lack of connection to railroad lines.

The town of Alton is a small ranching community located near the head of Long Valley. It originally developed from Upper Kanab. It was first settled by Lorenzo Wesley Roundy when he brought his family to Upper Kanab Creek in 1865. Historically, this area had tall grass, good fodder for their animals, streams of clear water, abundant wildlife in the nearby mountains, berries and other wild fruit, and timber for homes and fences (Bradley 1999:65). The settlement was first called Roundy's Station and the immigrants built two log cabins that first summer. In 1865, the Mormon Church ordered inhabitants of Upper Kanab and other small settlements to go to Kanab, Dixie, and larger towns in the area to help fortify them against Pauite raids (Ibid 65-66). Settlers did not return to Upper Kanab until 1870, when Lorenzo Roundy's nephew, Byron Donalvin Roundy, and his wife settled there. Byron and his brother William Roundy organized a cattle company called the Canaan Cooperative Stock Company, headquartered in St. George. In 1882, Edwin D. Woolley and Daniel Seegmiller also brought their families to settle in Upper Kanab. Two buildings, a schoolhouse and a recreation hall, were erected in 1885 at the head of the Virgin River. During the late 1880s, when the federal government began to crack down on the polygamists of Utah territory, many Mormon men fled to the area to escape marshals (Ibid 143-149). In 1887, the communities of Ranch, Upper Kanab, and Sink Valley joined together to form a LDS ward. In 1908, the town acquired its present-day name of Alton during a May Day celebration drawing. Charles R. Pugh, who had been reading a book about the Alton Fjord in Norway, suggested the name. The population of the town peaked at 350 in the 1930s (Ibid 210). In the post-World War II years, coal reserves were discovered near Alton, and the Smirl-Alton coal mines extracted an average of 40 tons daily in 1949. Today, Alton is home to fewer than 100 people, and its main sources of livelihood stem from the timber industry and its potential for coal mining.

Navajos occupied areas of the Skutumpah Terrace during the post WW-II period (about 1945 to 1970) while cutting and installing cedar fences for local ranchers (Halbirt and Gualtieri 1981:56). Physical remains from the Navajo occupation primarily east of the project area fall into one of the four following categories: 1) forked-stick hogans composed of interlocking poles and a corbelled roof entrance; 2) palisade hogan composed of a corbelled roof supported by four corner posts and a series of stringers which lean against the roof; 3) brush hogan roughly square in plan view and partially supported by two living pinyon trees which provided the superstructure firm support; 4) sweat lodge consisting of three interlocking poles with stringers leaning against the frame and packed with mud daub (Bradley 1999:56).

Today, most traffic through the area is generated by tourists headed to attractions such as Bryce Canyon National Park, Zion National Park, and Grand Staircase-Escalante National Monument. Bryce Canyon, the southern part of which lies in Kane County, was designated a national monument by President Warren G. Harding in 1923, and elevated to National Park status in 1928. Originally, the boundary of Zion National Park ended at the Washington-Kane County State line. In 1930, it was expanded to include part of Kane County, which was made accessible by the Zion-Mt. Carmel tunnel and road (Bradley 1996:218). Grand Staircase-Escalante National Monument was established by President Bill Clinton on September 17, 1996. The monument comprises approximately 1.7 million acres in Kane and Garfield Counties. These major tourist destinations are all accessible via US Highway 89, which bisects Long Valley and proceeds through every town in Kane County except Alton (Ibid 8).

SURVEY METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. The project area was examined for cultural resources by the archaeologists walking parallel transects spaced no more than 10 m (30 ft) apart. Ground visibility was considered good. A total of 3064 acres were inventoried for cultural resources, of which 1804 acres occur on public lands administered by the Bureau of Land Management, Cedar City District, Kanab Resource Area and 1260 acres occur on private lands.

Cultural resources were recorded as archaeological sites or isolated finds of artifacts. Archaeological sites are defined as spatially definable areas with ten or more artifacts and/or features. Sites were documented by the archaeologists walking transects across the site, spaced no more than 3 m (10 ft) apart and marking the locations of cultural materials with pinflags. This procedure allowed clear definition of site boundaries and artifact concentrations. At the completion of the surface inspection, a handheld GEO XT Trimble GPS unit was employed to point-provenance diagnostic artifacts and other relevant features in reference to the site datum, a steel rebar stamped with a temporary site number. A judgmental lithic analysis sample unit (a 2x2 meter count grid) was utilized for archaeological sites with dense lithic debitage assemblages. Also, where lithic densities were variable within the site, judgmental sample units were employed to reflect such density changes. Archaeological sites were plotted on a 7.5' USGS quadrangle, photographed, and documented with site data entered on an Intermountain Antiquities Computer System (IMACS, 1990 version) inventory form (Appendix A).

INVENTORY RESULTS

The inventory resulted in the documentation of 31 previously recorded archaeological sites and 60 new archaeological sites. The previously recorded archaeological sites include one historic site (Alton Cemetery); three multi-component prehistoric/historic sites; and 27 prehistoric sites that consist of temporary camps, artifact scatters, and lithic scatters. The new archaeological sites include two historic sites (a corral and a bridge); two multi-component prehistoric/historic sites; and 56 prehistoric sites that consist of temporary camps, artifact scatters, and lithic scatters. The inventory also resulted in the documentation of 30 new paleontological localities and three previously documented paleontological localities (Appendix B).

Archaeological Sites

Smithsonian Site No.: 42Ka1267
Temporary Site No.: N/A
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: This is a multi-component site consisting of a prehistoric artifact scatter and a historic trash scatter. The site is located on the top and slopes of a small knoll in the valley of the Alton Amphitheater. The site was originally documented in 1974 by the Museum of Northern Arizona at which point it was recorded as a lithic campsite with ground stone (not relocated), lithic tools and debitage.

The prehistoric component is an artifact scatter of Numic cultural affiliation. The prehistoric artifacts documented at the site include nine chipped stone tools and lithic debitage. The chipped

stone tools consist of one Desert side-notched point, one fragmented projectile point of unknown type, three bifaces, two quartzite cores, one utilized core, and one utilized flake. The lithic debitage (n=279) is dominated by shatter, though tertiary flakes are common, and the lithic material types include various cherts and quartzite. No features were documented at the site.

The historic component is a trash scatter that likely dates to the early 1950s, based on a broad range of dates that spans from 1915 to 1985. The historic artifacts are located primarily in one trash dump and include a wooden button, a metal grommet, a jar lid, a plastic toy, glass bottles, and tin cans. The glass artifacts include two colorless bottles with the Glass Container Inc. trademark (dating 1933-1983), one colorless bottle with the Alexander H. Kerr & Company trademark (AHK; dating 1944-1992), one colorless wine bottle with the Owens-Illinois Duraglas trademark (diamond IO; dating 1954-present), one colorless oval liquor bottle with the Owens-Illinois trademark (1954-present), one brown bottle with the Obear-Nester Glass Comp. trademark (dating 1915-1980), and several fragments of colorless bottle glass. The tin cans include ten hole-in-top cans (dating between 1930-1975 and 1950-1985), thirteen church key opened sanitary cans, three rectangular meat cans, and thirty sanitary food cans of various size.

Smithsonian Site No.: 42Ka1313
Temporary Site No.: 05-95-6
Land Status: BLM, Private
NRHP Eligibility: Eligible, Criterion D
Description: This is an extensive prehistoric temporary camp which exhibits a broad occupational span (Early and Middle Archaic, Pueblo II, and Protohistoric/Contact). It is situated on the top and southern slope of a ridge in the Alton Amphitheater. A two track bisects the site northwest to southeast. The site measures 227 by 136 meters and is situated in a pinyon-juniper woodland. Cultural materials include ceramics (n=2), ground stone implements (n=2), chipped stone tools (n=52), and debitage. Ceramics consist of two Tusayan Dogoszhi Black-on-White sherds which date to the Pueblo II period. Ground stone implements are two miscellaneous ground fragments (Tools 2 and 28). Temporally diagnostic chipped stone artifacts include a Hawken Side-notched projectile point (Tool 33), a Northern Side-notched projectile point (Tool 31) and two Desert Side-notched projectile points (Tools 11 and 17). Other chipped stone tools include 13 unknown projectile points, 24 bifaces, two cores, and nine utilized flakes. Lithic debitage (n=998) is dominated by tertiary flakes manufactured from various chert, quartzite, and obsidian materials. Feature A is a concentration of 40-50 fire-cracked sandstone rocks within a one meter diameter area which lacks evidence of dark soil.

Smithsonian Site No.: 42Ka1314
Temporary Site No.: N/A
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a temporary camp of Southern Paiute cultural affiliation that is located on the top and slope of a knoll in the valley of the Alton Amphitheater. The site was originally documented in 1974 by the Museum of Norther Arizona at which point the site consisted of lithic material, ground stone and ceramic sherds.

The artifacts documented at the site include sixteen chipped stone tools, two ground stone implements, lithic debitage, and ceramics. The chipped stone tools consist of one Desert Side-notched point (Tool 5), four projectile point fragments of unknown type, three utilized flakes, four bifaces, and four quartzite cores. The ground stone implements (Tools 4 and 13) are unknown

ground stone fragments. The lithic debitage (n=197) is dominated by shatter, though tertiary flakes are common, and the lithic material types include various cherts and quartzite. The ceramic artifacts include four body sherds and one jar rim sherd of Southern Paiute Utility Ware. Feature A is a soil stain feature that consists of darkened soil and a high concentration of artifacts. The feature measures approximately 15 by 20 meters and all of the ceramics were located in this soil stain. Feature B is located within Feature A and is a very dark soil stain. The stain is circular in shape and measures approximately 35 cm in diameter. Feature C is also located within Feature A and is a firecracked rock concentration. The concentration is approximately 20 cm in diameter and consists of several pieces of fragmented and oxidized sandstone.

Smithsonian Site No.: 42Ka2038
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a prehistoric artifact scatter located on a low knoll in the valley of the Alton Amphitheater. The site was originally recorded in 1980 by the Museum of Northern Arizona, at which time a Desert side-notched point and ceramics were documented suggesting a Paiute affiliation. The site was documented for the current undertaking and these artifacts were not relocated.

The artifacts documented at the site include chipped stone tools and lithic debitage. The chipped stone tools consist of one Stage 2 or 3 biface (Tool 1), one quartzite core (Tool 2), and one unknown projectile point of a translucent white chert (Tool 3). The lithic debitage (n=5) is sparse and is dominated by shatter. The lithic material types include chert, obsidian, and quartzite. Feature A is a small concentration of firecracked rock located in the central portion of the site. The firecracked rock consists of small pieces of angular shale and sandstone situated within a 2 by 2 meter area lacking soil discoloration.

Smithsonian Site No.: 42Ka2039
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a temporary camp of Late Archaic and Numic affiliation located on a low knoll in the valley of the Alton Amphitheater. The site was originally recorded in 1980 by the Museum of Northern Arizona, at which time the site was described as a Paiute lithic and ground stone scatter.

The artifacts documented at the site consist of chipped stone tools, ground stone implements, and lithic debitage. The chipped stone tools include two Elko corner-notched points (Tools 6 and 13), one Desert side-notched point (Tool 1), two points of unknown type, two utilized cores, three cores, and two bifaces. A single ground stone implement, a portable trough metate (Tool 2), was documented at the site. The lithic debitage is dominated by shatter and lithic material types include various cherts and quartzite.

The features documented at the site include one hearth feature and three firecracked rock concentrations. Feature A is a firecracked rock concentration that consists of several fragments of sandstone and shale burnt stones. Several of the stone exhibit oxidation, though no soil staining was observed. The feature measures 4 by 3.5 meters in size. Feature B is a firecracked rock concentration that consists of several fragments of sandstone and shale burnt stones. Several of

the stones exhibit oxidation, though no soil stain was observed. The feature is located in a small drainage and measures 5 by 2 meters. Feature C is a hearth feature that consists of a circular concentration of firecracked rock within a dark soil stain. The fragmented sandstone firecracked rocks exhibit oxidation, and several larger stones may outline the stained soil. Several small fragments of charcoal are located within a concentration, 50 cm in diameter. The feature measures 2 by 3 meters in size. Feature D is a firecracked rock concentration that consists of a few fragments of burnt sandstone. The firecracked rocks exhibit oxidation, though no soil stain was observed. The feature measures 1 by 2 meters and is located on a slight slope.

Smithsonian Site No.: 42Ka2040
Temporary Site No.: N/A
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a Southern Paiute lithic and ceramic scatter located on the top and slope of a low ridge in the valley of the Alton Amphitheater. The site consists of a ceramic sherd, chipped stone tools, and lithic debitage. The ceramic consists of one body sherd of Southern Paiute Utility Ware. Chipped stone tools include one biface, one utilized flake and a core. Lithic debitage (ca. 100 flakes) is dominated by tertiary flakes, while shatter is common and primary and secondary flakes are rare. The lithic material types include various cherts and quartzite. No features were found at the site.

Smithsonian Site No.: 42Ka2041
Temporary Site No.: N/A
Land Status: BLM, Private
NRHP Eligibility: Eligible, Criterion D
Description: This is a lithic and ceramic scatter with two cultural components (Anasazi and Protohistoric/Contact) located on a slight rise in an otherwise flat area of Alton Amphitheater. The site measures 120 by 360 meters and lies in a pinyon-juniper woodland. A county road bisects the easternmost portion of the site and another road bisects the site in the south. Cultural materials consist of ceramics, chipped stone tools, an unknown ground stone implement, and lithic debitage. Ceramics consist of one undetermined Virgin Series sherd and a Southern Paiute Utility Ware sherd. Chipped stone tools include two Desert Side-notched projectile points (Tools 5 and 13), five unknown projectile points fragments, one utilized flake, five bifaces, three cores, and a worked piece of glass. The lithic debitage (n=274) is dominated by tertiary flakes manufactured from several chert, quartzite, and obsidian material types. No features were found at this site; however, the site has good potential for subsurface cultural materials.

Smithsonian Site No.: 42Ka2044
Temporary Site No.: N/A
Land Status: BLM, Private
NRHP Eligibility: Eligible, Criterion D
Description: This is an Archaic temporary camp located on the top of a low ridge in Alton Amphitheater. The site measures 40 by 160 meters and is in a pinyon-juniper woodland. Cultural materials consist of chipped stone tools and lithic debitage. Diagnostic artifacts include a Rocker Side-notched projectile point (Tool 3), a utilized flake, and a core. Lithic debitage (n=149) is dominated by shatter manufactured from chert, quartzite, and obsidian materials. The site also contains three collectors' piles of 100+ flakes in total. Feature A is a semicircle of fire-cracked rock associated with a quartzite core (Tool 2) and a heat treated flake. The soil does not appear to be discolored, however the soil does appear to be disturbed by rodent activity.

Smithsonian Site No.: 42Ka2045
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is an Archaic lithic scatter located on the slope of a low knoll in the valley of the Alton Amphitheater. The site was originally recorded in 1980 by the Museum of Northern Arizona, at which time the artifacts suggested a Late Archaic and Paiute affiliation. The site was documented for the current undertaking.

The site consists of chipped stone tools, lithic debitage, and two firecracked rock concentrations. The artifacts documented at the site include chipped stone tools and lithic debitage. The chipped stone tools consist of three bifaces (Tools 1, 2, and 4) and one Elko Side-notched projectile point (Tool 3). The lithic debitage is estimated at approximately 50+ flakes based on a 2 by 2 meter lithic analysis sample unit (n=3). The lithic debitage is dominated by shatter; however, tertiary and secondary flakes are also common. The lithic material types include various cherts, quartzite, and obsidian. Feature A is a firecracked rock concentration the consists of several pieces of burnt and fragmented shale and sandstone. The concentration measures 5 by 5 meters and exhibits no soil discoloration. Feature B is a firecracked rock concentration located near the eastern edge of the site. The concentration consists of several pieces of burnt and fragmented sandstone and the concentration measures approximately 1 by 1 meter. No soil discoloration was observed for this feature.

Smithsonian Site No.: 42Ka2047
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a temporary camp of unknown cultural affiliation located on the top and slope of a low ridge in the valley of the Alton Amphitheater. The site contains 100 flakes and eleven tools. The debitage is dominated by shatter, while tertiary flakes are common and primary and secondary flakes are rare. The material types include a wide range chert, quartzite and a small amount of obsidian. The stone tools consist of three utilized flakes, four bifaces, two unspecified projectile points, and two ground stone. Feature A is a small fire cracked rock concentration that does not exhibit a soil color change and which measures approximately 60 x 40 cm. Feature B is a disperse fire cracked rock scatter, measuring approximately 160 x 140 cm, with a tighter concentration of fire cracked rock towards the middle. This feature does not exhibit a soil color change, however two ground stone artifacts (Tools 10 and 11) and several lithic flakes were located within the scatter of fire cracked rock.

Smithsonian Site No.: 42Ka2048
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a lithic scatter of unknown cultural affiliation located on the top and slope of a low ridge in the valley of the Alton Amphitheater. The site contains 48 flakes and three tools. The debitage is dominated by shatter, while tertiary and secondary flakes are common and primary flakes are rare. The material types include a wide range chert and quartzite. The stone tools consist of one utilized flake and two bifaces. No features were located at this site.

Smithsonian Site No.: 42Ka2049
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is an Early Archaic lithic scatter located on the top and slope of a low ridge in the valley of the Alton Amphitheater. The site contains an estimated 300+ flakes and 15 tools. The debitage is dominated by tertiary flakes, while shatter is common and secondary flakes are rare. The material types include a wide range chert and quartzite. The stone tools consist of one Pinto Shouldered Point (Tool 9), four unknown unspecified projectile points, five bifaces, four utilized flakes, and one ground stone. No features were located at this site. The site was previously recorded as a Paiute-Fremont/Anasazi temporary camp in 1983, during which several sherds of thumbnail indented ceramics, a Desert Side-notched point, a Rose Springs point and a Cottonwood point were documented. None of these temporal indicator were found during the current investigation.

Smithsonian Site No.: 42Ka2050
Temporary Site No.: N/A
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: This is a multi-component site consisting of a prehistoric artifact scatter and a historic herding camp. The site is located on the top and slopes of a small knoll in the valley of the Alton Amphitheater. The site was originally documented in 1980 by the Museum of Northern Arizona at which point the site was described as a prehistoric lithic scatter and historic ranch.

The prehistoric component is an artifact scatter of Archaic temporal affiliation. The prehistoric artifacts documented at the site include thirteen chipped stone tools and lithic debitage. The chipped stone tools consist of one Elko Corner-notched point (Tool 11), two fragmented projectile points of unknown type, four bifaces, and six utilized flakes. The lithic debitage is estimated to be between 100 to 500 flakes based on two lithic analysis sample units (2 by 2 meters). The debitage is dominated by shatter, though tertiary flakes are common, and the lithic material types include various cherts, obsidian, and quartzite. No features are attributed to the prehistoric component.

The historic component is a herding camp that consists of historic trash located in several dumps, a possible clothes line, two corrals, an outhouse, and a collapsed wooden structure. Feature A is an outhouse constructed of cut lumber and wire nail with three wall and one seat. The structure has fallen on to its side and no depression or soil stain was visible near the wooden structure. The structure measures approximately 6 ft tall and 3 ft 3 inches wide. Feature B is a trash dump located near a two-track road and consisting of tin cans and glass artifacts. The tin cans include eight hole-in-top cans embossed "Punch Here" (1935-1945), six hole-in-top cans (1917-1929), two sardine tins, two Velvet tobacco pocket tins, one cut-around opened sanitary can, and several crushed sanitary cans. Glass includes two colorless bottle bases with the Knox Bottle Company trademark (1924-1968 and 1932-1953), a bottle fragment with the Hazel-Atlas trademark (1923-1964), two brown bottles with the Lincoln Glass Bottle Company trademark (1942-1952), a bottle with the Owens-Illinois Duraglas trademark (1940-present), and one small prescription bottle with an unknown diamond trademark. Feature C is a trash dump consisting primarily of tin cans and glass artifacts. Feature D is a small wood and wire corral that incorporates two trees into the construction. Feature E is a collapsed wooden structure that consists of a small pile of cut lumber boards with wire nails, metal mesh screening, and wooden logs. Feature F is a trash dump located

in the northern portion of the site that consists of tin cans, glass, and ceramic artifacts. Feature G is a wire strung between two trees that stretches, possibly a clothes line.

Smithsonian Site No.: 42Ka2051
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is an artifact scatter of unknown cultural affiliation located on the slope of a knoll in the valley of the Alton Amphitheater. The site was originally documented in 1980 by the Museum of Northern Arizona at which time a Rose Spring projectile point (Fremont/Anasazi) was found (not relocated).

Cultural materials documented at the site include chipped stone tools and lithic debitage. The chipped stone tools consist of one white mottled chert Stage 2 to 3 biface fragment and one red mottled chert utilized flake. The lithic debitage is estimated at 25 to 100 flakes based on two lithic analysis sample units (2 by 2 meters in size). The lithic debitage is dominated by shatter and lithic material types include various colors of cherts. No features were documented at the site.

Smithsonian Site No.: 42Ka2052
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is an artifact scatter of Archaic temporal affiliation located on the slope of a knoll in the valley of the Alton Amphitheater. The site was originally documented in 1980 by the Museum of Northern Arizona at which point the site was described as a Fremont/Anasazi lithic scatter with one Rose Spring point (not relocated).

The artifacts documented at the site include chipped stone tools, lithic debitage, and few pieces of scattered firecracked rock. The chipped stone tools consist of one Elko Eared projectile point base fragment (Tool 1) and one drill fragment (Tool 2). The lithic debitage is estimated to be between 100 and 300 flakes, based on two lithic analysis sample units (2 by 2 meters in size). The lithic debitage is dominated by shatter, though tertiary flakes are common, and lithic material types include chert, obsidian, and quartzite. No features were documented at the site.

Smithsonian Site No.: 42Ka2055
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This is a multi-component prehistoric camp dating from Late Archaic through Southern Paiute. The site is located on the slope of a knoll in the valley of the Alton Amphitheater. The site was originally documented in 1980 by the Museum of Northern Arizona at which point the site was described as a Fremont/Anasazi and Paiute hunting camp with chipped stone tools, lithic debitage, and a pot break.

Cultural materials include chipped stone tools, lithic debitage, and ceramics. The chipped stone tools include a Cottonwood point (Tool 1), one Bull Creek point (Tool 9), one Gypsum point (Tool 11), an unknown projectile point fragment, four utilized flakes, and four bifaces. The lithic debitage is estimated to be between 100 and 300 flakes, based on two lithic analysis sample units (2 by 2 meters in size). The lithic debitage is dominated by shatter and lithic material types include

chert, obsidian, and quartzite. The ceramic artifacts consist of 54 sherds of Southern Paiute Utility Ware and are all located in a small concentration that likely represents a pot break. Three firecracked rock concentrations were documented at the site. Feature A is a firecracked rock concentration that consists of several pieces of fragmented sandstone. The concentration measures approximately 1 by 1 meter in size. No soil stain was documented. Feature B is a firecracked rock concentration that consists of several pieces of fragmented sandstone. The concentration measures approximately 1 by 1 meter in size. No soil stain was documented. Feature C is a firecracked rock concentration that consists of several pieces of fragmented sandstone. The concentration measures approximately 2 by 1 meter in size. No soil stain was documented.

Smithsonian Site No.: 42Ka2056
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is an artifact scatter of Fremont and Numic cultural affiliation that is located on the top of a knoll in the valley of the Alton Amphitheater. The site was originally documented in 1980 by the Museum of Norther Arizona at which point the site was described as a Fremont/Anasazi and Archaic lithic scatter with a Rose Spring, Pinto, and Northern side-notched points (none relocated).

The artifacts documented at the site include chipped stone tools and lithic debitage. The chipped stone tools consist of one Desert Side-notched point (Tool 28), a Bull Creek point (Tool 26), one small lanceolate point (Tool 29), one small triangular point (Tool 30), five projectile point fragments of unknown types, seven utilized flakes, and fourteen bifaces. The lithic debitage is estimated to be at least 100+ flakes, based on one lithic analysis sample unit (2 by 2 meters in size). The lithic debitage is dominated by shatter and the lithic material types include chert, obsidian, and quartzite. No features were documented at the site.

Smithsonian Site No.: 42Ka2057
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a temporary camp of Anasazi and Paiute/Ute cultural affiliation that is located on the top of a knoll in the valley of the Alton Amphitheater. The site was originally documented in 1980 by the Museum of Norther Arizona at which point the site was described as a Paiute lithic scatter with two Cottonwood points.

The artifacts documented at the site include numerous chipped stone tools, lithic debitage, and ceramic sherds. The chipped stone tools (n=41) consist of 23 bifaces, seven utilized flakes, five projectile points of unknown type, two Cottonwood points (Tools 20 and 29), one projectile point with concave base (Tool 1), one Elko Corner-notched point (Tool 8), one Bull Creek point (Tool 23), and one core fragment. The lithic debitage is estimated between 100 and 500 flakes, based on two lithic analysis sample units (2 by 2 meters each). The lithic debitage is dominated by shatter and lithic material types include chert, obsidian, and quartzite. The ceramics documented at the site consist of two sherds of Southern Paiute Utility Ware. Feature A is a firecracked rock concentration that consists of approximately nine pieces of fragmented sandstone. The feature measures approximately 2 by 2 meters in size. Several of the sandstone fragments exhibit oxidation; however, no soil change was evident.

Smithsonian Site No.: 42Ka2058
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a multi-component site that consists of a Late Archaic artifact scatter and a historic trash dump. The site was originally documented in 1980 by the Museum of Norther Arizona at which point the site was described as a small lithic scatter of unknown cultural affiliation.

The prehistoric component of the site is a Late Archaic lithic scatter. The prehistoric artifacts include chipped stone tools and lithic debitage. The chipped stone tools consist of one Gypsum point (Tool 4), nine bifaces, and three cores. The lithic debitage is estimated to be at least 100+ flakes, based on two lithic analysis sample units (2 by 2 meters in size). The lithic debitage is dominated by shatter and the lithic material types include chert, obsidian, and quartzite. No features were documented at the site.

The historic component of the site is a trash dump that dates between 1930 and 1975, based on tin can manufacturing chronologies. The historic artifacts documented at the site are located primarily within a single dump location. The trash dump measures approximately 40 ft by 20 ft in size. The artifacts located in the trash dump include a segment of rubber hose, an enamelware pot, three tin plates, one aluminum dish, several fragments of ceramics, glass, and tin cans. The ceramics include one rim fragment of a lead glazed crock, at least 20 fragments of an unknown yellow ware, and at least 20 fragments of an unknown white ceramic with clear glaze. The glass artifacts include fragments that represent at least five colorless bottles, one large fragment of a milk glass mug, and one large fragment of a colorless cut glass vase. The tin cans include two hole-in-top evaporated milk cans (dating between 1930 to 1975), fifteen Schlitz Beer cans with church key openings, one internal friction paint can, and one pour spout gas can.

Smithsonian Site No.: 42Ka2059
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a lithic scatter of unknown cultural affiliation located on the slope of a low lying knoll in the valley of the Alton Amphitheater. The site was originally recorded in 1980 by the Museum of Northern Arizona, at which time several projectile points, ground stone implements and ceramics suggested a Late Archaic and Paiute cultural affiliation. None of the projectile points, ground stone implements, or ceramics were relocated during this documentation of the site.

The artifacts documented at the site include six chipped stone tools and lithic debitage. The chipped stone tools consist of two utilized flakes (Tools 1 and 3), two bifaces (Tools 2 and 4), one core (Tool 5), and one projectile point fragment of unknown type (Tool 6). The lithic debitage is estimated at approximately 100+ flakes based on two Lithic Analysis Sample units, 2 by 2 meters in size each. The lithic debitage is dominated by shatter and lithic material types include various colors of chert and quartzite. No features were documented at the site.

Smithsonian Site No.: 42Ka2065
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a temporary camp that is located on the top of a knoll in the valley of the

Alton Amphitheater. The diagnostic artifacts documented at the site suggest multiple use periods including artifacts affiliated with the Late Archaic, Anasazi, Fremont, and Ute/Paiute. The site was originally documented in 1986 by the Museum of Norther Arizona at which point the site was described as a Virgin Anasazi (Pueblo II) lithic and ceramic scatter with a several lithic tools and ground stone implements.

The artifacts documented at the site include numerous chipped stone tools, lithic debitage, and ceramic sherds. The chipped stone tools include 31 bifaces, twelve utilized flakes, seven projectile points of unknown type, two small side-notched points, two Desert side-notched points (Tools 10 and 60), two Elko corner-notched points (Tools 14 and 35), one Parowan basal-notched point (Tool 24), one Gypsum point (Tool 44), two drills (Tools 32 and 51), and one scraper. The lithic debitage is estimated to be between 100 and 500 flakes, based on two lithic analysis sample units (2 by 2 meters each). The lithic debitage is dominated by shatter, though tertiary flakes are common, and lithic material types include chert, obsidian, and quartzite. The ceramic artifacts documented at the site include eleven sherds of Southern Paiute Utility Ware and two sherds of a Virgin Series Whiteware. Two firecracked rock concentrations were documented and are located in the southern half of the site. Feature A is a firecracked rock concentration that consists of several pieces of fragmented and oxidized sandstone and shale. The feature measures approximately 3.5 by 3.0 meters in size. The soils associated with the feature is stained in patches of red and black. Feature B is a firecracked rock concentration that consists of several pieces of fragmented and oxidized sandstone and shale. The feature measures approximately 1.5 by 1.5 meters in size and no soil stain was observed.

Smithsonian Site No.: 42Ka2066
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is an artifact scatter of unknown cultural affiliation that is located on the top and slope of a small knoll in the valley of the Alton Amphitheater. The site was originally documented in 1980 by the Museum of Northern Arizona, at which time the site was described as a Paiute/Ute lithic scatter with one Cottonwood point (not relocated).

The artifacts documented at the site include chipped stone tools and lithic debitage. The chipped stone tools include one small corner-notched point (Tool 4), one projectile point fragment of unknown type (Tool 2), and five bifaces. The lithic debitage is estimated to be at least 100 flakes, based on one judgmental lithic analysis sample unit (2 by 2 meters in size). The lithic debitage is dominated by shatter, though tertiary flakes are common, and lithic material types include chert, obsidian, and quartzite.

Smithsonian Site No.: 42Ka3077
Temporary Site No.: N/A
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a lithic scatter of unknown cultural affiliation that is located on the slope of a knoll in the valley of the Alton Amphitheater. The site was originally recorded in 1986 by the Museum of Northern Arizona at which time the site was much larger in size and consisted of several hearths and diagnostic projectile points indicating an archaic temporal affiliation. The hearth features and projectile points could not be relocated for this documentation.

The artifacts documented at the site include two chipped stone tools and lithic debitage. The chipped stone tools consist of a quartzite core fragment and a Stage 3 or 4 gray mottled chert biface fragment. The lithic debitage (n=33) is dominated by shatter and lithic material types include various cherts and quartzite. No features were documented at the site.

Smithsonian Site No.: 42Ka3097
Temporary Site No.: N/A
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a large artifact scatter of Late Archaic, Anasazi and Ute/Paiute cultural affiliation located in the broad valley of the Alton Amphitheater, just west of Kanab Creek. The site was originally recorded in 1980 by the Museum of Northern Arizona at which point the site was larger with numerous projectile points and firepit hearth concentrations (not relocated) and a scattering of historic trash (no diagnostic artifacts were relocated). Presently, the site extends primarily along the western side of County Road 136 in an agricultural field and much of the site area appears to have been disturbed by agricultural activities and grazing.

The artifacts documented at the site include numerous chipped stone tools, lithic debitage and ceramics. The chipped stone tools include nine projectile points of unknown type, one Elko corner-notched point (Tool 1), one Desert side-notched point (Tool 2), three Gypsum points (Tools 3, 4, and 10), two Bull Creek points (Tools 11 and 17), sixteen bifaces, two drills, and one scraper. The lithic debitage is estimated at 100+ flakes based on four lithic analysis sample units (2 by 2 meters in size). The lithic debitage is dominated by shatter and lithic material types include various colors of chert, quartzite, and obsidian. The ceramics documented at the site consist of five body sherds and one bowl rim sherd of North Creek Greyware. No features were documented at the site.

Smithsonian Site No.: 42Ka3115
Temporary Site No.: N/A
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a temporary camp of unknown cultural affiliation that is located on the slope of a low lying ridge in the valley of the Alton Amphitheater. The site was originally recorded in 1980 by the Museum of Northern Arizona at which time the material culture (Cottonwood projectile points, ground stone implements, etc.) suggested a Paiute cultural affiliation. These diagnostic artifacts could not be relocated at the time of the current documentation.

The artifacts documented at the site include one chipped stone tool and a sparse lithic scatter. The chipped stone tool is a quartzite core. The lithic debitage (n=19) is dominated by shatter, though tertiary flakes are common, and the lithic material types include various colors of chert and quartzite. One firecracked rock feature was documented at the site. Feature A is a firecracked rock concentration located in a drainage that runs through the site. The concentration measures approximately 5 meters by 5 meters in size. The firecracked rock consists of small to medium pieces of sandstone and shale that do not exhibit a pattern. Additionally, no soil discoloration or soil staining was evident.

Smithsonian Site No.: 42Ka3140
Temporary Site No.: N/A
Land Status: Private
NRHP Eligibility: Eligible, Criteria A and B
Description: The site is the town cemetery of Alton, Utah. The cemetery is located approximately 1/4 mile southwest of the town and is approximately 1.72 acres in size. The cemetery was originally documented in 1986 by the Museum of Northern Arizona. The site was relocated and a site boundary based upon the cemetery fencing was re-documented. No datum was placed in the site and no photos were taken.

The Utah History Research Center Cemetery Burials Database states that the cemetery was established in 1923 when the cemetery was donated to the town of Alton by Jonathan R. Heaton and Emma R. Heaton. The cemetery contains 154 graves that date from 1899 to 1997. The Cemetery Burials Database contains the listings of individuals buried at the cemetery.

Many of the individuals buried in the Alton cemetery are early settlers of the Upper Kanab area and early founders of the town of Kanab. A few of these individuals are detailed here, briefly. Byron Donalvin Roundy and Matilda A. Roundy were among the first settlers of Upper Kanab (later named Alton), arriving in 1872 and upon their deaths were buried in the cemetery. In 1908, the town of Alton, Utah was founded by Jonathon Heaton. Heaton bought a significant amount of land in the area and moved his family there in 1901. Heaton died in 1960 and is buried in the Alton Cemetery, as are a number of his family members. Additionally, the Alton cemetery dates from the earliest period of European/American settlement and community in the Upper Kanab region. The earliest burial dates to 1899 and is that of Dean Hoyt Robertson. The most recent recorded death is in 1997; however, the many of the burials are those of early settlers to the Upper Kanab area and those who established the community of Alton. The Alton Cemetery dates to an early period of settlement in southwestern Utah and dates to the formation of the community of Alton (Upper Kanab).

Smithsonian Site No.: 42Ka3168
Temporary Site No.: N/A
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is an artifact scatter of Anasazi cultural affiliation that is located on the slope of a knoll in the broad valley of the Alton Amphitheater. The site was originally documented in 1980 by the Museum of Northern Arizona, at which time the site was described as a Virgin Anasazi site with a lithic, ceramic (not relocated), and ground stone scatter with several hearth features (not relocated).

The artifacts documented at the site include chipped stone tools, ground stone implements, and lithic debitage. The chipped stone tools include one Bull Creek point (Tool 10), one point fragment of unknown type (Tool 11), five bifaces, one utilized flake, and one core. The ground stone implements include three portable sandstone trough metate, one sandstone single-handed mano, and one unknown grinding stone. The lithic debitage (n=27) is dominated by shatter and lithic material types include various cherts, quartzite, and obsidian. No features were documented at the site.

Smithsonian Site No.: 42Ka6072
Temporary Site No.: MOAC 05-95-58
Land Status: Private
NRHP Eligibility: Not Eligible
Description: The site is a small lithic scatter of unknown cultural affiliation located on a slight slope in the valley of the Alton Amphitheater. The artifacts documented at the site consist of a scatter of lithic debitage. The lithic debitage (n=13) is dominated by shatter, though tertiary flakes are common. The lithic material types consist of a variety of colors of cherts. Artifacts were surficial and no intrusive features were observed.

Smithsonian Site No.: 42Ka6073
Temporary Site No.: MOAC 05-95-67
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a small lithic scatter of unknown cultural affiliation located on a plain within a broad valley in the Alton Amphitheater. The site contains two chipped stone tools and lithic debitage. The chipped stone tools consist of one Stage 5-6 gray chert biface and one translucent chert unknown projectile point. The lithic debitage (n=25) is dominated by shatter, while tertiary flakes are common. The lithic debitage consists of various chert and obsidian material types.

Smithsonian Site No.: 42Ka6074
Temporary Site No.: MOAC 05-95-66
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a prehistoric lithic scatter with unknown cultural affiliation, which is located on a plain in a broad valley in the Alton Amphitheater. The site contains lithic debitage (n=11). The lithic debitage is dominated by shatter, while tertiary flakes are common and secondary flakes are rare. The lithic debitage is comprised of various chert and quartzite material types. No lithic tools or features were located at the site.

Smithsonian Site No.: 42Ka6075
Temporary Site No.: MOAC 05-95-68
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a small lithic scatter located on a plain in the broad valley of the Alton Amphitheater. The artifacts documented at the site consist of a scatter of lithic debitage. The lithic debitage (n=18) is dominated by shatter, though tertiary flakes are common. The lithic material types consist of a variety of colors of cherts. No features were documented at the site.

Smithsonian Site No.: 42Ka6076
Temporary Site No.: MOAC 05-95-65
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a small lithic scatter with four tools on a hill top. A total of 15 pieces of lithic debitage were documented on the site while the total is estimated at 20+ pieces. Flake fragments and broken flakes dominate the debitage. Four material types were noted including obsidian and three colors of chert. Four tools were also located including three biface fragments and a utilized flake. The site is considered likely to retain materials which may add to

the prehistoric record of the area and is therefore eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6077
Temporary Site No.: MOAC 05-95-64
Land Status: Private
NRHP Eligibility: Not Eligible
Description: This site consists of a small lithic scatter situated in the saddle of two small ridges within a broad valley in the Alton Amphitheater. The site contains three chipped stone tools, one ground stone tool and lithic debitage. The chipped stone tools consist of one Stage 6 brown chert biface, one fine-grained quartzite core, and one white chert utilized flake. One sandstone unknown ground stone was located at the site. The lithic debitage (n=28) is dominated by shatter, while tertiary flakes are common and secondary flakes are rare. The lithic debitage consists of various chert and quartzite material types. Due to the site's level of disturbance and lack of spatial integrity it is not considered eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6078
Temporary Site No.: MOAC 05-95-61
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: The site is a lithic scatter of unknown cultural affiliation located on the top of a ridge in the Alton Amphitheater. The site contains lithic debitage (n=53) and no tools. The debitage is dominated by shatter, while tertiary flakes are common and secondary and primary flakes are rare. The material types include various cherts and quartzite.

Smithsonian Site No.: 42Ka6079
Temporary Site No.: MOAC 05-95-60
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site consists of a small lithic scatter with two tools situated on the slope of a ridge within a broad valley in the Alton Amphitheater. The total documented lithic debitage at the site is 17 flakes of white or white mottled chert or quartzite. The tools documented at the site include one white mottled chert biface fragment and one white mottled chert projectile point fragment. Due to the sites low density of artifacts and lack of depth potential it is not considered eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6080
Temporary Site No.: MOAC 05-95-62
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a prehistoric temporary camp with Archaic and Numic cultural affiliation, which is located on the top and slope of a ridge in the Alton Amphitheater. The site contains an estimated 300+ flakes, based on two 2x2 sample units, and nine tools. Tertiary flakes dominate the lithic debitage assemblage, while shatter is common. The lithic debitage material types include various cherts and quartzite. The lithic tools include an Elko Corner-notched point (Tool 2), an Elko Side-notched point (Tool 9), a Desert Side-notched point (Tool 7), an unknown projectile point, one utilized flake, three bifaces and one core. While there are no features located on the site, several fire cracked rock concentrations were situated south of the current site on the top of a ridge.

Smithsonian Site No.: 42Ka6081
Temporary Site No.: MOAC 05-95-63
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a small prehistoric lithic scatter located on the top of a ridge in the Alton Amphitheater. The site was formerly the southwest portion of site 42Ka3097, an extensive lithic scatter, however during the current survey no artifacts were located that connected the two locations. An agricultural field lies between sites 42Ka3097 and 42Ka6081 and has been extensively cultivated. The site contains an estimated 50+ flakes, based on two 2x2 sample units. The lithic debitage assemblage is dominated by shatter, while tertiary flakes are common. The lithic debitage material types include various cherts. No chipped stone tools or features were located at this site.

Smithsonian Site No.: 42Ka6082
Temporary Site No.: MOAC 05-95-54
Land Status: Private
NRHP Eligibility: Not Eligible
Description: The site is a series of corrals located south of the town of Alton, Utah. The site consists of one large log corral, two small log corrals, and a log loading chute. The site may be associated with settlement of the Upper Kanab area in 1872 and the Canaan Cooperative Stock Company was organized shortly there after.

A single metal trough filled with salt residue is located at the south-eastern most portion of the site. No other artifacts were documented at the site. Feature A is a corral of log construction that is roughly rectangular in shape with a gate along the eastern side. This is a straight rail corral that is constructed of log posts with four to five log rails that are attached with wire nails and wrapped wire. The gate of the corral has some cut lumber for the rails and has hinges that are embossed "Sweetheart." The corral measures approximately 52 ft 6 inches by 39 ft 4 inches in size. Feature B is a small corral of log construction that is of irregular shape and is attached to a loading chute (Feature C). This is a straight rail corral that is constructed of log posts with four to five log rails that are attached with wire nails. A gate is located on the eastern most side. The corral measures approximately 13 ft by 16 ft. Feature C is a loading chute that is of log construction and is attached to the western most corner of a small corral (Feature B). The chute is approximately 2 ft 6 inches wide and approximately 6 ft in length. Feature D is a small corral of log construction that is roughly rectangular in shape. This is a straight rail corral that is constructed of log posts with four to five log rails that are attached with wire nails. The corral measures approximately 14 ft 8 inches by 15 ft 7 inches in size.

Smithsonian Site No.: 42Ka6083
Temporary Site No.: MOAC 05-95-69
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a small lithic scatter of unknown cultural affiliation located in a relatively flat area in the valley of the Alton Amphitheater. A portion of the site may be buried underneath a slump that appears to have fallen from the upper portion of the ridge. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include a hafted knife (Tool 1), a large side-notched projectile point (Tool 2), a scraper, and a biface fragment. The lithic debitage (n=32) is dominated by shatter, while tertiary flakes are common and secondary and primary flakes are rare. The lithic material types include chert and quartzite. No features were documented at

this site.

Smithsonian Site No.: 42Ka6084
Temporary Site No.: MOAC 05-95-70
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This is a lithic scatter of Southern Paiute cultural affiliation located on a small ridge in the valley of the Alton Amphitheater. The artifacts documented at the site include ceramics, chipped stone tools, and lithic debitage. The ceramics consist of 35 body sherds of Southern Paiute Utility Ware that are primarily located in the southern half of the site. The ceramic temper includes crushed soft gray rock and quartz sand. The chipped stone tools consist of two biface fragments, one of which (Tool 1) is possibly a fractured projectile point mid-section. The lithic debitage (n=9) is dominated by secondary flakes and lithic material types include quartzite, obsidian, and chert. No features were documented at the site. Additionally, three historic artifacts were noted at the site. These include one fragment of a cobalt glass and two hole-in-cap tin cans (pre-dating 1920).

Smithsonian Site No.: 42Ka6085
Temporary Site No.: MOAC 05-95-57
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site consists of a small lithic scatter with two tools situated on the slope of a ridge within a broad valley in the Alton Amphitheater. The total documented lithic debitage at the site is 15 flakes of white or white mottled chert. One Elko projectile point and one unknown projectile point were also documented at the site. Due to the sites low density of artifacts and lack of depth potential it is not considered eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6086
Temporary Site No.: MOAC 05-95-48
Land Status: Private
NRHP Eligibility: Not Eligible
Description: The site is a small wooden bridge that is collapsed into the flood plain of the Kanab Creek. The site is likely associated with settlement of Upper Kanab area and establishment of homesteads in the Alton area. The bridge is not documented on the 1877 and 1885 GLO maps of the area. Additionally, the bridge is not depicted on the 1964 USGS 7.5' Series Alton, Utah map. The bridge lies next to a dirt road that leads south of the creek towards a gravel pit. This small wooden bridge is collapsed into the flood plain of the Kanab Creek and lies next to a dirt road that leads south of the creek to a gravel pit. The bridge is constructed of two main log beams with cut lumber planks across the top of the beams. Several hand wrought nails were used in construction, however the majority of nails observed are machine made wire nails. Currently, the two track road bypass the bridge remnants to the west. The majority of nails used in the construction of the bridge were machine made wire nails, however several hand wrought nails were also observed. No other artifacts were documented at the site.

Smithsonian Site No.: 42Ka6087
Temporary Site No.: MOAC 05-95-39
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a small lithic scatter located on the slope of a high ridge.

Drainages run through the site causing substantial erosion. Lithic debitage on the site is estimated at 40+ pieces. A total of 34 pieces were documented comprised of various colors of chert, quartzite and obsidian. Flake fragments dominate the assemblage followed by tertiary flaking. Eight tools were located including a projectile point fragment, three bifaces, three utilized flakes and a slab metate. The site is considered to retain the potential for cultural depth and is therefore eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6088
Temporary Site No.: MOAC 05-95-56
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site consists of a small lithic scatter with three tools situated on the top and slope of a ridge within a broad valley. Two quartzite utilized cores were documented along with one quartzite core. Lithic debitage located on the site consists of two flakes, one of white chert and one of brown chert. Due to the sites low density of artifacts and lack of depth potential it is not considered eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6089
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a temporary camp located on the slope of a low lying ridge. This site contains an estimated 16 flakes of various cherts, obsidian and quartzite. Common among the debitage are secondary and tertiary flakes and shatter, while primary flakes are not present. Seven tools were located at the site including three projectile points, two utilized flakes and two cores. Feature A is a small scatter of fire cracked rock in a drainage area. This feature is not clearly defined or bounded. The site exhibits spatial patterning as well is diversity and density of artifacts and depth potential. Therefore the site is considered eligible for nomination the NRHP.

Smithsonian Site No.: 42Ka6090
Temporary Site No.: MOAC 05-95-49
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a temporary camp situated upon a low ridge. One tool was located at this site. Tool 1 is a portable trough metate made of sandstone. No lithic debitage was located at this site. Feature A is a clearly bounded fire cracked rock/burnt rock concentration which measures 2 meters by 4 meters. Tool 1, a metate, was located at the edge of the feature. The site exhibits spatial patterning as well is diversity and density of artifacts and depth potential.

Smithsonian Site No.: 42Ka6091
Temporary Site No.: MOAC 05-95-41
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This is an Early Archaic temporary camp situated on the slope of a ridge within a broader valley. Two concentrations of fire-cracked rock comprise the sites occupational features. Artifacts located on the site include six pieces of lithic debitage all of which are either broken flakes or flake fragments. Five material types were documented including quartzite and four colors of chert. One tool, a fragmented Northern Side-notched projectile point was located. The site is considered likely to retain subsurface remains which may provide additional data.

Smithsonian Site No.: 42Ka6092
Temporary Site No.: MOAC 05-95-40
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a small lithic scatter with four tools situated on top of a ridge. Tools located on the site include two projectile point mid-sections, a biface fragment and a mano. A total of 27 pieces of lithic debitage were documented on the site while site is estimated to contain 50+ pieces. In the documented debitage tertiary flaking and flake fragments dominate. Eight material types were located including various colors of chert and quartzite. Due to the sites low artifact density and low likelihood for buried cultural remains it is not considered eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6093
Temporary Site No.: MOAC 05-95-55
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a lithic scatter located on the slope of a small ridge in the Alton Amphitheater. A total of 14 pieces of lithic debitage were documented on the site. In the documented debitage secondary and tertiary flaking as well as broken or fragmented flakes are common, with no dominant flaking stage. Five material types were located including various colors of chert and quartzite. Seven tools were documented including three bifaces, a utilized core, a core, a scraper, and a utilized flake. The site exhibits spatial patterning as well is diversity and density of artifacts and depth potential. Therefore the site is considered eligible for nomination the NRHP.

Smithsonian Site No.: 42Ka6094
Temporary Site No.: MOAC 05-95-45
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of an Early Archaic large lithic scatter with several tools situated upon a low ridge. A total of 100+ pieces of lithic debitage were estimated to be on the site of which 36 pieces were documented in two sample units. Flake fragments dominate the debitage followed by tertiary flaking. Seven material types were noted including five colors of chert and quartzite. Nine tools were located including one Hawken Side-notched point, two projectile point fragments, one drill, two bifaces, two cores and a utilized flake. The site exhibits spatial patterning as well is diversity and density of artifacts and depth potential.

Smithsonian Site No.: 42Ka6095
Temporary Site No.: MOAC 05-95-47
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site consists of a small lithic scatter located on the slope of a low lying ridge. A total of 13 pieces of lithic debitage were estimated to be on the site. Broken or fragmented flakes and angular debris dominate the small lithic assemblage. Two material types were noted including various colors of chert and quartzite. There are 4 tools, which include one utilized flake and three biface fragments, which range from stage II-IV. The site is not considered likely to provide additional data and is therefore not considered eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6096
Temporary Site No.: MOAC 05-95-42
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site consists of a small lithic scatter with two tools situated on the top and slope of a ridge within a broad valley. Five pieces of lithic debitage were located including four pieces of angular debris and one broken flake. Material types include three colors of chert. The sites tool assemblage is comprised of a sandstone mano and a chert core. Due to the sites low density of artifacts and lack of depth potential it is not considered eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6097
Temporary Site No.: MOAC 05-95-53
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a disperse lithic scatter located on the slope of a low lying ridge. An estimated 100+ flakes are located at the site. Broken or fragmented flakes and angular debris dominate the small lithic assemblage. The lithic materials include a variety of colored and mottled cherts and quartzite. There are four tools, which include three projectile point fragments and one biface fragment.

Smithsonian Site No.: 42Ka6098
Temporary Site No.: MOAC 05-95-46
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a temporary camp located on the top and slope of a ridge. At this site the lithic debitage is estimated to be 100+ flakes and 13 tool were located. The lithic debitage is primarily comprised of tertiary flakes, while shatter is common and secondary flakes are rare. The tool located include four projectile points, five bifaces, two manos, one ground stone and one utilized flake. The lithic material types include cherts of various colors, sandstone, and quartzite. Feature A is a fire cracked rock/burnt stone concentration within a tight, distinct circle of blackened soil. Feature B is a fire cracked rock/burnt stone concentration within an area of slightly darkened/stained soil. Three tools are located just outside of the darker soil stain of this feature.

Smithsonian Site No.: 42Ka6099
Temporary Site No.: MOAC 05-95-52
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site consists of a small lithic scatter located on the slope of a low lying ridge. A total of 14 pieces of lithic debitage were estimated to be on the site. Broken or fragmented flakes and angular debris dominate the small lithic assemblage. The lithic materials include a variety of colored and mottled cherts. There are three tools, which include one projectile point fragment, one stage V-VI biface fragment and one mano.

Smithsonian Site No.: 42Ka6100
Temporary Site No.: MOAC 05-95-59
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: The site is a sparse Middle Archaic lithic scatter located on the slope of a ridge within a broad valley, in the Alton Amphitheater. The site contains 8 flakes and four tools. The tools

include one Hanna projectile point (Tool 4), one unknown projectile point, and two biface fragments. The debitage is dominated by tertiary flakes, while secondary flakes and shatter are common. The material types include chert, quartzite, and obsidian.

Smithsonian Site No.: 42Ka6101
Temporary Site No.: MOAC 05-95-51
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a lithic scatter located on the top and slope of a small ridge in the Alton Amphitheater. This site contains an estimated 25 flakes of various cherts and quartzite. Common among the debitage are secondary and tertiary flakes, while broken/fragmented flakes and angular debris dominate. Seven tools were located at the site including one Hawken Side-notched point, one projectile point fragment, one mano (sandstone), one core, two biface fragments and one utilized flake.

Smithsonian Site No.: 42Ka6102
Temporary Site No.: MOAC 05-95-43
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a large lithic scatter with several tools situated upon a low ridge within a broad valley. A total of 100+ pieces of lithic debitage were estimated to be on the site of which 84 pieces were documented. Flake fragments dominate the debitage followed by tertiary flaking. Ten material types were noted including nine colors of chert and obsidian. Nine tools were located including two bifaces and seven projectile point fragments.

Smithsonian Site No.: 42Ka6103
Temporary Site No.: MOAC 05-95-44
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a small lithic scatter with one tool spread atop and around a small rocky hill top. A total of 50+ pieces of lithic debitage were estimated to be on the site of which 23 pieces were documented in two sample units. Flake fragments dominate the debitage followed by tertiary flaking. Six material types were noted including five colors of chert and quartzite. One brown chert core was also located at the site.

Smithsonian Site No.: 42Ka6104
Temporary Site No.: MOAC 05-95-14
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is an Archaic-affiliated sparse lithic scatter located on the slope of a low north-south trending ridge in Sink Valley. It measures 66 by 41 meters and is in a pinyon-juniper woodland with low sagebrush. Cultural materials include chipped stone tools and lithic debitage. Diagnostic artifacts consist of a heat treated Elko projectile point (Tool 5), an unknown projectile point fragment (Tool 2), three bifaces (Tools 1, 4, and 6), a utilized flake (Tool 3), and a core (Tool 7). Lithic debitage (n=29) is dominated by shatter manufactured from various types of chert and quartzite material types. No features were found at this site; however, the site has good potential for subsurface cultural materials.

Smithsonian Site No.: 42Ka6109
Temporary Site No.: MOAC 05-95-13
Land Status: BLM, Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a sparse lithic scatter of unknown aboriginal affiliation located along the western edge of Sink Valley. It measures 33 by 19 meters and is in an area of low sagebrush. The cultural materials consist of chipped stone tools and lithic debitage. The chipped stone tools consist of a stage four chert biface (Tool 1) and a Stage 2 chert biface fragment (Tool2). Lithic debitage (n=50) is dominated by shatter manufactured from various chert material types. No features were found at this site; however, the site has good potential for subsurface cultural materials.

Smithsonian Site No.: 42Ka6110
Temporary Site No.: MOAC 05-95-11
Land Status: BLM, Private
NRHP Eligibility: Eligible, Criterion D
Description: This is a prehistoric temporary camp of unknown cultural affiliation located on a slight rise along the western margin of Sink Valley. The site measures 23 by 19 meters and is in a pinyon-juniper woodland with low sagebrush. Cultural materials consist of chipped stone tools and lithic debitage. Diagnostic artifacts consist of two unknown chert projectile point fragments. Lithic debitage (100-150) is dominated by shatter manufactured from various quartzite and chert material types. Feature A is an oblong concentration of fire-cracked sandstone rocks, with no discernible change in the soil color surrounding it, although there is potential for cultural fill.

Smithsonian Site No.: 42Ka6111
Temporary Site No.: MOAC 05-95-05
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site is a small lithic scatter of unknown cultural affiliation with chipped stone tools located on the slope of a small ridge in the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include three biface fragments and one utilized flake. The lithic debitage (n=14) is dominated by shatter, while tertiary flakes are common and secondary and primary flakes are not present. The lithic material types include various cherts and obsidian. No features were documented at this site.

Smithsonian Site No.: 42Ka6112
Temporary Site No.: MOAC 05-95-04
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of unknown cultural affiliation with chipped stone tools located on the slope of a small ridge in the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include one unknown projectile point and five biface. The lithic debitage (n=70) is dominated by shatter, while tertiary flakes are common and secondary and primary flakes are rare. The lithic material types include various cherts, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6113
Temporary Site No.: MOAC 05-95-12
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a prehistoric lithic scatter and a historic trash scatter located on the slope of a small rise in the valley of the Alton Amphitheater. The prehistoric component of the site consists of chipped stone tools and lithic debitage. The chipped stone tools include three bifaces and one utilized flake. The lithic debitage (n=19) is dominated by shatter, while tertiary and secondary flakes are common. The lithic material types documented at the site include chert, obsidian, and quartzite. No features were associated with the prehistoric component of the site.

The historic component of the site consists of ceramics, glass, and tin cans. The ceramics documented at the site include one fragment of a hard paste white porcelain, vessel type unknown, and one soft white/buff paste whiteware fragment with a Decal multi-colored floral with ring pattern, vessel type unknown. The decalcomania whiteware has an approximate date range of 1890 to the present, and plain whiteware has an indeterminable date range that spreads from 1820 to the present. Numerous fragments of glass were documented at the site. These include several fragments of aqua colored bottle glass, a clear bottle with an embossed star on the base, a clear machine made canning jar base, a clear bottle with a single thread finish, and a fragment of clear glass that is possibly part of a light fixture. Eight tin cans were documented at the site. These include four hole-in-top milk cans, one sanitary key wind meat can, one internal friction can, one sanitary oil or gas can, and one internal friction lid embossed "Clabber Girl Full Strength Air Tight Seal". The manufacturing dates of the hole-in-top milk cans is between 1930 and 1975. No features were associated with the historic component of the site.

Smithsonian Site No.: 42Ka6114
Temporary Site No.: MOAC 05-95-07
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This is a small lithic scatter of Middle Archaic temporal affiliation with chipped stone tools located on the slope of a small ridge in the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include one Hawken side-notched projectile point (Tool 3), one unknown projectile point fragment (possibly a Hawken side-notched), and two biface fragments. The lithic debitage (n=26) is dominated by shatter, while tertiary flakes are common and secondary flakes are rare. The lithic material types include various cherts, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6115
Temporary Site No.: MOAC 05-95-03
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of Archaic cultural affiliation with chipped stone tools located on the slope of a small rise in the valley of Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include one Elko Side-notched projectile point, two unknown projectile points, one utilized flake, and two biface. The lithic debitage (n=71) is dominated by shatter, while tertiary flakes are common and secondary flakes are rare. The lithic material types include various cherts, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6116
Temporary Site No.: MOAC 05-95-02
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a dense lithic scatter of unknown cultural affiliation with chipped stone tools located in a small valley between two ridges within the valley of Alton Amphitheater. Chipped stone tools include two unknown projectile points, six biface, one scraper, one utilized flake and one core. The lithic debitage (n=102) is dominated by shatter, while tertiary flakes are common and primary and secondary flakes are rare. The lithic material types include various cherts, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6117
Temporary Site No.: MOAC 05-95-01
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a dense lithic scatter of Formative cultural affiliation with chipped stone tools located on the slope of a small rise in the valley of Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include one Eastgate Series projectile point, four unknown projectile points, seven biface, one utilized flake and one core. The lithic debitage (n=277) is dominated by shatter, while tertiary flakes are common and primary and secondary flakes are rare. The lithic material types include various cherts, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6118
Temporary Site No.: MOAC 05-95-38
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site consists of a small lithic scatter situated on a slightly sloping potion of a larger ridge. Three tools were located on the site all of which are non-diagnostic projectile point fragments. A total of 25 pieces of lithic debitage were located on the site. Tertiary flaking is the dominant stage of reduction while a significant number of flake fragments were also noted. Material types include four colors of chert and quartzite. Due to the sites low artifact density and lack of cultural depth potential it is not considered eligible for nomination to the NRHP.

Smithsonian Site No.: 42Ka6119
Temporary Site No.: MOAC 05-95-34
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of unknown cultural affiliation located on the slope of a knoll in the valley of the Alton Amphitheater. The site consists of chipped stone tools and lithic debitage. The chipped stone tools include two unknown unspecified projectile points, five biface fragments, one utilized flake, one core, and one drill fragment. The lithic debitage (est. 100+) is dominated by tertiary flakes, while shatter is common. The lithic material types include chert, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6120
Temporary Site No.: MOAC 05-95-17
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of unknown aboriginal cultural affiliation located on the slope of a small rise in the valley of Alton Amphitheater. The site consists of a chipped stone tool, a ground stone tool, and lithic debitage. The chipped stone tool is a utilized flake. The ground stone tool is a two-handed sandstone mano, of which two pieces were documented and could be refit. The lithic debitage (n=100+) is dominated by shatter, while tertiary flakes are common and secondary flakes are rare. The lithic material types include various cherts and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6121
Temporary Site No.: MOAC 05-95-33
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of unknown cultural affiliation located on the slope of a low ridge in the valley of the Alton Amphitheater. The site consists of a chipped stone tool and lithic debitage. The chipped stone tool is a white mottled chert Stage 2-3 biface fragment with one reworked edge. The lithic debitage (n=93) is dominated by shatter, while tertiary flakes are common. Much of the lithic debitage is concentrated in the northern portion of the site. The lithic material types include chert, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6122
Temporary Site No.: MOAC 05-95-16
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This is a small lithic scatter of unknown cultural affiliation situated on the slope of a small ridge within the broad valley of Alton Amphitheater. The site consists of a chipped stone tool and lithic debitage. The chipped stone tool is a Stage 1 obsidian biface, which measures approximately 1.8 by 1.7 by 0.2 cm. The lithic debitage (n=19) is dominated by shatter, while tertiary flakes are common. The lithic material types include chert, obsidian, and quartzite.

Smithsonian Site No.: 42Ka6123
Temporary Site No.: MOAC 05-95-32
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of unknown cultural affiliation located on the slope of a knoll in the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include one white mottled chert biface fragment and one gray mottled chert scraper. The lithic debitage (n=26) is dominated by shatter, while tertiary flakes are common. The lithic material types include chert, quartzite, and obsidian. No features were documented at this site.

Smithsonian Site No.: 42Ka6125
Temporary Site No.: MOAC 05-95-31
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This is a lithic scatter of unknown cultural affiliation located on the slope of a knoll in

the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include one biface fragment, one flaked cobble, one core, and one utilized flake. The lithic debitage (n=35) is dominated by tertiary flakes, while shatter is common and secondary flakes are rare. The lithic material types include chert and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6126
Temporary Site No.: MOAC 05-95-18
Land Status: Private, BLM
NRHP Eligibility: Eligible, Criterion D
Description: The site is a prehistoric temporary camp representing Anasazi/Pueblo and Southern Paiute cultural traditions. The site is at the base of an east-facing slope in the Alton Amphitheater. The site measures 90 by 50 meters and is in a pinyon-juniper woodland. Cultural materials include chipped stone tools, lithic debitage and ceramics. Diagnostic stone tools include an obsidian Elko Series projectile point (Tool 9) and a chert Cottonwood Triangular projectile point (Tool 10). Other chipped stone tools include three unknown projectile point fragments, two utilized flakes, one core, a biface, and one utilized core. Lithic debitage (50-100) is dominated by shatter manufactured from various chert and quartzite material types. Ceramic artifacts consist of four Virgin Anasazi whiteware sherds and three Southern Paiute Utility Ware sherds. Feature A is a small concentration of 15-20 fire-cracked sandstone rocks, which measures approximately 50 cm in diameter. The feature does not exhibit any discernible change in the soil color.

Smithsonian Site No.: 42Ka6127
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a small lithic scatter of Middle Archaic temporal affiliation with chipped stone tools located on the a slight slope of a small knoll in the valley of the Alton Amphitheater. The site consists of a chipped stone tool and lithic debitage. The chipped stone tool is a Hawken Side-notched projectile point. The lithic debitage (n=16) is dominated by tertiary flakes, while shatter is common. The lithic material types include chert and obsidian. No features were documented at this site.

Smithsonian Site No.: 42Ka6128
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a small lithic scatter of unknown cultural affiliation with chipped stone tools located on the top of a small knoll in the valley of the Alton Amphitheater. The chipped stone tools include one utilized core, one biface fragment, one utilized flake, and one drill. The lithic debitage (n=11) is dominated by shatter, while tertiary flakes are common and primary and secondary flakes are rare. The lithic material types include a white mottled chert, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6129
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This is a small lithic scatter of Archaic temporal affiliation located in a relatively flat

area in the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include an Elko series projectile point (Tool 2), two biface fragments, and one core. The lithic debitage (n=24) is dominated by shatter, while tertiary and secondary flakes are common. The lithic material types include chert and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6130
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of unknown cultural affiliation located on the top and slope of a knoll in the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools consist of one quartzite core, one utilized flake, and two unknown projectile points. Tool 3, an unknown projectile point, is lanceolate in shape, while Tool 4, a base fragment of an unknown stemmed projectile point, may be the base of a hafted knife. The lithic debitage (n=36) is dominated by shatter, while tertiary flakes are common. The lithic material types include chert and quartzite. Feature A is a small concentration of firecracked rock that measures approximately 1.5 x 2 meters and exhibits no soil color change. The concentration is locate immediately next to a drainage that cuts through the site.

Smithsonian Site No.: 42Ka6131
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site is a small lithic scatter of unknown cultural affiliation located in the valley of the Alton Amphitheater. The site consists of a small scatter of lithic debitage. The lithic debitage (n=15) is dominated by shatter, while tertiary flakes are common and secondary flakes are rare. The lithic material types include various cherts, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6132
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Not Eligible
Description: This site is a lithic scatter of unknown cultural affiliation located on the slope of a knoll in the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include two biface fragments. The lithic debitage (n=17) is dominated by shatter, while tertiary flakes are common and secondary flakes are rare. The lithic material types include chert and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6133
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of unknown cultural affiliation located on the slope of a knoll in the valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include one utilized flake and three biface fragments. The lithic debitage (n=62) is dominated by shatter, while tertiary and secondary flakes are common. The lithic material types include chert and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6134
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a small lithic scatter of Archaic temporal affiliation located on the slope of a knoll in the valley of the Alton Amphitheater. The site consists of a chipped stone tool and lithic debitage. The chipped stone tool is a base fragment of an orange chert Hawken Side-notched projectile point. The lithic debitage (n=22) is dominated by shatter, while tertiary flakes are common. The lithic material types include chert and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6135
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This multi-component site consists of a prehistoric temporary camp and a small historic trash scatter located on the slope of a small ridge in the valley of the Alton Amphitheater. The prehistoric component is a Ute/Paiute affiliated temporary camp that consists of a firecracked rock concentration, a ceramic concentration, chipped stone tools, and lithic debitage. The ceramics are a Southern Paiute Utility Ware that are located within a 5 by 2 meter concentration. These ceramic sherds have a grayish brown surface color with fingernail indentation and a dark gray or brown core color. The temper is a coarse quartz. The chipped stone tools include one utilized flake and three biface fragments. The lithic debitage (n=62) is dominated by shatter, while tertiary and secondary flakes are common. The lithic material types include chert and quartzite. A firecracked rock concentration is located along the eastern portion of the site and consists of fragmented pieces of sandstone rock. Several of the pieces exhibit oxidation. The concentration measures approximately 2 by 1 meters in size and no soil stain was observed.

The historic component is a small scatter of historic trash that dates between 1930 and 1975. The historic artifacts documented at the site include one glass soda bottle and 17 tin cans. The glass artifact is a aqua soda bottle with a red and white painted label "Royal Crown Cola." This is a 12 oz. bottle with ribbing along the sides and it dates between 1933 and 1954. Tin cans located at the site include eight hole-in-top milk cans, a turmeric spice tin, and eight large sanitary cans. A small modern trash scatter is also located at the site.

Smithsonian Site No.: 42Ka6136
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site consists of a small lithic scatter situated on top of a hill. A total of nine tools were located on the site including a projectile point base fragment, four bifaces, two utilized flakes and two unidentifiable projectile point fragments. An estimated 100+ pieces of lithic debitage are located on the site. Two sample units were documented with a maximum density of 24 lithic fragments per square meter. Chert is the dominant material type while quartzite and obsidian were also located. Tertiary is the dominant reduction stage with a significant number of flake fragments and secondary flakes.

Smithsonian Site No.: 42Ka6137
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This is a small lithic scatter located on the slope of a low lying ridge within the broader valley of the Alton Amphitheater. The site consists of a chipped stone tools and lithic debitage. The chipped stone tools include one utilized flake and seven biface fragments. The lithic debitage (n=24) is dominated by shatter, while tertiary flakes are common and primary flakes are rare. The lithic material types include chert, obsidian, and quartzite. No features were documented at this site.

Smithsonian Site No.: 42Ka6138
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is an artifact scatter with both Late Archaic temporal affiliation and Ute/Paiute cultural affiliation located on the slope of a knoll in the valley of the Alton Amphitheater. The site consists of chipped stone tools, lithic debitage, and ceramics. The chipped stone tools include a Gypsum point (Tool 1), a Desert side-notched Point (Tool 5), two unknown projectile points, three bifaces, and one utilized flake. The lithic debitage (n=81) is dominated by shatter, while tertiary flakes are common and secondary and primary flakes are rare. The lithic material types include chert, obsidian, and quartzite. The ceramics consist of 12 sherds of Southern Paiute Utility Ware that are from at least two different vessels and were located within two separate concentrations within the site. In the northwestern portion of the site, four sherds (one rim and three body sherds) were documented that are thinned, with a dark gray to black core color and a grayish brown surface color and exhibit fingernail indentation decoration. In the southeastern portion of the site, eight sherds (two rim and six body sherds) were documented that have a brown core color with a grayish brown to gray surface color and exhibit fingernail indentation decoration. Both groups of ceramics have a coarse quartz temper. Feature A is a fire cracked rock concentration that measures approximately 3 by 1.5 meters. The concentration exhibits no soil color change and is located next to a small drainage that cuts across the site.

Smithsonian Site No.: 42Ka6139
Temporary Site No.: MOAC 05-95-50
Land Status: BLM
NRHP Eligibility: Eligible, Criterion D
Description: This site is a lithic scatter of unknown cultural affiliation located on the top and slope of a knoll in the valley of the Alton Amphitheater. The site consists of a chipped stone tools, a ground stone tool, and lithic debitage. The chipped stone tools consist of two biface fragments and the ground stone tool is an unknown ground stone. The lithic debitage (estimated at 100+) is dominated by tertiary flakes, while shatter is common. The lithic material types include chert, obsidian, and quartzite. Two firecracked rock concentrations are located at the site. Feature A is a firecracked rock concentration consisting of approximately 30 pieces of firecracked rock and a light soil stain. The concentration is relatively circular and measures approximately 3 m in diameter. The soil stain is a light gray, while the surrounding soil color is a light tan. Feature B is a small firecracked rock concentration approximately 1 meter in diameter. The feature does not exhibit a soil stain.

Smithsonian Site No.: 42Ka6307
Temporary Site No.: MOAC 05-95-50
Land Status: Private
NRHP Eligibility: Eligible, Criterion D
Description: The site is a small lithic scatter of unknown cultural affiliation that is located on a low lying knoll in the valley of the Alton Amphitheater. The artifacts documented at the site include one chipped stone tool and lithic debitage. Tool 1 is a white mottled chert Stage 3 or 4 biface fragment. The lithic debitage (n=11) is dominated by shatter and lithic material types include various colors of cherts. No features were documented at the site.

Table 1. Site Type and NRHP Eligibility of Sites in Project Area.

State Site Number	Site Type	Land Status	NRHP Eligibility
42Ka1267	Prehistoric Artifact Scatter Historic Trash Dump	Private	Eligible; D
42Ka1313	Prehistoric Temporary Camp	BLM, Private	Eligible; D
42Ka1314	Prehistoric Temporary Camp	Private	Eligible; D
42Ka2038	Prehistoric Artifact Scatter	BLM	Eligible; D
42Ka2039	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka2040	Prehistoric Artifact Scatter	Private	Eligible; D
42Ka2041	Prehistoric Lithic Scatter	BLM, Private	Eligible; D
42Ka2044	Prehistoric Lithic Scatter	BLM, Private	Eligible; D
42Ka2045	Prehistoric Artifact Scatter	BLM	Eligible; D
42Ka2047	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka2048	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka2049	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka2050	Prehistoric Artifact Scatter Historic Herding Camp	Private	Eligible; D
42Ka2051	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka2052	Prehistoric Artifact Scatter	BLM	Eligible; D
42Ka2055	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka2056	Prehistoric Artifact Scatter	BLM	Eligible; D
42Ka2057	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka2058	Prehistoric Artifact Scatter Historic Trash Dump	BLM	Eligible; D
42Ka2059	Prehistoric Artifact Scatter	BLM	Eligible; D

State Site Number	Site Type	Land Status	NRHP Eligibility
42Ka2065	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka2066	Prehistoric Artifact Scatter	BLM	Eligible; D
42Ka3077	Prehistoric Artifact Scatter	Private	Eligible; D
42Ka3097	Prehistoric Artifact Scatter	Private	Eligible; D
42Ka3115	Prehistoric Temporary Camp	Private	Eligible; D
42Ka3140	Historic Cemetery	Private	Eligible; A & B
42Ka3168	Prehistoric Artifact Scatter	BLM	Eligible; D
42Ka6072	Prehistoric Lithic Scatter	Private	Not Eligible
42Ka6073	Prehistoric Lithic Scatter	Private	Eligible; D
42Ka6074	Prehistoric Lithic Scatter	Private	Eligible; D
42Ka6075	Prehistoric Lithic Scatter	Private	Eligible; D
42Ka6076	Prehistoric Lithic Scatter	Private	Eligible; D
42Ka6077	Prehistoric Lithic Scatter	Private	Not Eligible
42Ka6078	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6079	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6080	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka6081	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6082	Historic Corral	Private	Not Eligible
42Ka6083	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6084	Prehistoric Artifact Scatter	BLM	Eligible; D
42Ka6085	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6086	Historic Bridge	Private	Not Eligible
42Ka6087	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6088	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6089	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka6090	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka6091	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka6092	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6093	Prehistoric Lithic Scatter	Private	Eligible; D

State Site Number	Site Type	Land Status	NRHP Eligibility
42Ka6094	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6095	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6096	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6097	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6098	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka6099	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6100	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6101	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6102	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6103	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6104	Prehistoric Lithic Scatter	Private	Eligible; D
42Ka6109	Prehistoric Lithic Scatter	BLM, Private	Eligible; D
42Ka6110	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka6111	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6112	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6113	Prehistoric Artifact Scatter Historic Trash Scatter	BLM	Eligible; D
42Ka6114	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6115	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6116	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6117	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6118	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6119	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6120	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6121	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6122	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6123	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6125	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6126	Prehistoric Temporary Camp	Private, BLM	Eligible; D

State Site Number	Site Type	Land Status	NRHP Eligibility
42Ka6127	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6128	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6129	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6130	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka6131	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6132	Prehistoric Lithic Scatter	BLM	Not Eligible
42Ka6133	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6134	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6135	Prehistoric Temporary Camp Historic Trash Scatter	BLM	Eligible; D
42Ka6136	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6137	Prehistoric Lithic Scatter	BLM	Eligible; D
42Ka6138	Prehistoric Artifact Scatter	BLM	Eligible; D
42Ka6139	Prehistoric Temporary Camp	BLM	Eligible; D
42Ka6307	Prehistoric Artifact Scatter	Private	Eligible; D

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

The National Register Criteria for Evaluation of Significance and procedures for nominating cultural resources to the NRHP are outlined in 36 CFR 60.4 as follows:

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, material, workmanship, feeling, and association, and that they:
>
> a)...are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b)...are associated with the lives of persons significant to our past; or
>
> c)...embody the distinctive characteristics of a type, period, or method of construction; or that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d)...have yielded or may be likely to yield information important in prehistory or history.

The inventory resulted in the documentation of 91 new and previously recorded archaeological sites. Thirty-nine of the sites (42Ka2041, 42Ka2044, 42Ka2048, 42Ka2049, 42Ka2051, 42Ka6073, 42Ka6074, 42Ka6075, 42Ka6076, 42Ka6081, 42Ka6083, 42Ka6087, 42Ka6092, 42Ka6093, 42Ka6094, 42Ka6097, 42Ka6101, 42Ka6102, 42Ka6103, 42Ka6104, 42Ka6109, 42Ka6112, 42Ka6114, 42Ka6115, 42Ka6116, 42Ka6117, 42Ka6119, 42Ka6120, 42Ka6121, 42Ka6122, 42Ka6123, 42Ka6125, 42Ka6127, 42Ka6128, 42Ka6129, 42Ka6133, 42Ka6134, 42Ka6136, and 42Ka6137) are prehistoric lithic scatters that are recommended as eligible to the NRHP under Criterion D. These sites range in cultural and temporal affiliation from unknown aboriginal to Archaic to Southern Paiute and exhibit spatial patterning, site integrity, and the potential for buried cultural materials. Thirteen sites (42Ka2038, 42Ka2040, 42Ka2045, 42Ka2052, 42Ka2056, 42Ka2059, 42Ka2066, 42Ka3077, 42Ka3097, 42Ka3168, 42Ka6084, 42Ka6138, and 42Ka6307) are prehistoric artifact scatters that are recommended as eligible to the NRHP under Criterion D. These sites exhibit a variety of artifacts, exhibit spatial patterning and/or site integrity, and the potential for buried cultural materials. Seventeen of the sites (42Ka1313, 42Ka1314, 42Ka2039, 42Ka2047, 42Ka2055, 42Ka2057, 42Ka2065, 42Ka3115, 42Ka6080, 42Ka6089, 42Ka6090, 42Ka6091, 42Ka6098, 42Ka6110, 42Ka6126, 42Ka6130, and 42Ka6139) are prehistoric temporary camps that exhibit spatial patterning and/or site integrity, include a variety of artifacts, exhibit features, and the retain the potential for buried cultural materials. Five sites are multi-component prehistoric-historic sites that consist of prehistoric artifact scatter/historic trash dump sites (42Ka1267, 42Ka2058, and 42Ka6113), prehistoric temporary camp/historic trash scatter (42Ka6135), and a prehistoric artifact scatter/historic herding camp (42Ka2050). These sites are recommended as eligible to the NRHP under Criterion D, as the prehistoric components of the site exhibit spatial patterning and/or a variety of diagnostic artifacts, and the potential for intact buried cultural materials. The historic components of these sites fail to meet Criteria A, B, or C. One historic site (42Ka3140) is recommended as eligible to the NRHP under Criteria A and B. This site is the Alton Cemetery, at which many of the buried individuals are early settlers of the Upper Kanab area and early founders of the town of Kanab. Additionally, the cemetery dates to an early period of settlement in southwestern Utah and dates to the formation of the community of Alton (Upper Kanab).

Sixteen sites are recommended as not eligible for nomination to the NRHP. Fourteen sites (42Ka6072, 42Ka6077, 42Ka6078, 42Ka6079, 42Ka6085, 42Ka6088, 42Ka6095, 42Ka6096, 42Ka6099, 42Ka6100, 42Ka6111, 42Ka6118, 42Ka6131, and 42Ka6132) are prehistoric lithic scatters with limited artifact assemblages, do not exhibit site features, and have minimal potential for buried cultural remains. These sites are not associated with an known historic persons or events (Criteria A and B); nor do they embody the distinctive characteristics of a type, period, or method of construction (Criterion C), and the sites are unlikely to yield further information important to prehistory (Criterion D). Site 42Ka6082, a historic corral, is a common site type and is not associated with any known historic persons or events (Criteria A and B), nor is does the site embody the distinctive characteristics of a type, method, or period of construction (Criterion C), and the site is not likely to contribute information important to the history of the area (Criterion D). Site 42Ka6086, a historic bridge, has little structural integrity as it has collapsed and much of the wood is extensively deteriorated. The site is not associated with any known historic persons or events (Criteria A and B), nor is does the site embody the distinctive characteristics of a type, method, or period of construction (Criterion C), and the site is not likely to contribute information important to the history of the area (Criterion D).

MANAGEMENT RECOMMENDATIONS

The cultural resource inventory of the Alton Coal Development project area resulted in the documentation of 91 new and previously recorded archaeological sites. Seventy-four sites (42Ka1267, 42Ka1313, 42Ka1314, 42Ka2038-42Ka2041, 42Ka2044, 42Ka2045, 42Ka2047-42Ka2052, 42Ka2055-42Ka2059, 42Ka2065, 42Ka2066, 42Ka3077, 42Ka3097, 42Ka3115, 42Ka3140, 42Ka3168, 42Ka6073-42Ka6076, 42Ka6080, 42Ka6081, 42Ka6083, 42Ka6084, 42Ka6087, 42Ka6089-42Ka6094, 42Ka6097, 42Ka6098, 42Ka6101-42Ka6104, 42Ka6109, 42Ka6110, 42Ka6112-42Ka6117, 42Ka6119-42Ka6123, 42Ka6125-42Ka6130, 42Ka6133-42Ka6139, and 42Ka6307) are recommended as eligible to the NRHP under Criterion D as they are likely to contribute information important to prehistory. One site, 42Ka3140, is recommended as eligible to the NRHP under Criteria A and B, as many of the individuals are early settlers of the Upper Kanab area and early founders of the town of Kanab and the cemetery dates to an early period of settlement in southwestern Utah. Sixteen sites (42KA6072, 42Ka6077, 42Ka6078, 42Ka6079, 42Ka6082, 42Ka6085-42Ka6086, 42Ka6088, 42Ka6095, 42Ka6096, 42Ka6099, 42Ka6100, 42Ka6111, 42Ka6118, 42Ka6131, and 42Ka6132) are recommended as not eligible to the NRHP, as they fail to meet the criteria outlined in 36 CFR 60.4. It is recommended that all eligible sites be avoided by the undertaking. If eligible sites can not be avoided, a separate mitigation or treatment plan will have to be created.

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APPENDIX A

INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM (IMACS)
SITE FORMS

On File At:

Utah Division of State History
Salt Lake City, Utah

APPENDIX B

ALTON COAL FIELD
PALEONTOLOGICAL SURVEY
SECTIONS 12, 13, 24, AND 25, T 39 S, R 6 W AND
SECTIONS 7, 18, 19, 30 AND 31, T 39 S, R 5 W

APPENDIX C

GEOLOGIC REPORT OF THE IMPACTS OF BEDROCK AND SURFICIAL UNITS ON THE DISTRIBUTION OF CULTURAL RESOURCES AT THE ALTON COAL FIELD, KANE COUNTY UTAH