Archaeological Survey of 0.06 Acre for the Proposed Lost Cabin Spring ALERT Weather Station in Mohave County, Arizona

For submittal to

Bureau of Land Management

On behalf of

Mohave County Flood Control District

Prepared by

SWCA Environmental Consultants

December 2010

ARCHAEOLOGICAL SURVEY OF 0.06 ACRE FOR THE PROPOSED LOST CABIN SPRING ALERT WEATHER STATION IN MOHAVE COUNTY, ARIZONA

For submittal to

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BLM Cultural Resource Use Permit No. AZ-000411.BLM
BLM Fieldwork Authorization No. BLM-AZ-310-11-10

SWCA Cultural Resources Report No. 10-518

December 2010

PROJECT ABSTRACT

Report Title. Archaeological Survey of 0.06 Acre for the Proposed Lost Cabin Spring ALERT Weather Station in Mohave County, Arizona

Report Date. December 2010

Agencies. Bureau of Land Management (BLM), Mohave County Flood Control District (FCD)

Permit Number. BLM Cultural Resource Use Permit No. AZ-000411.BLM; BLM Fieldwork Authorization No. BLM-AZ-310-11-10

Land Ownership. BLM

Project Description. Mohave County FCD proposes to construct a new weather monitoring device on BLM-managed lands to assess potential flooding threats throughout Mohave County and trigger a response from emergency personnel. The collected data would also benefit the BLM and other federal agencies that manage sensitive resources. The monitoring device would be constructed within a 10 × 10–foot lease area adjacent to an existing road. The proposed construction on BLM land constitutes a federal undertaking subject to review under Section 106 of the National Historic Preservation Act and its implementing regulations (36 Code of Federal Regulations Part 800). SWCA Environmental Consultants (SWCA) was contracted by the Mohave County FCD to complete an archaeological survey of the area of potential effect (APE) to assist the BLM with its Section 106 responsibilities. The APE for this project consists of a 50 × 50–foot (0.06-acre) survey area that contains the 10 × 10–foot lease area and a construction buffer.

Project Location. The APE is northwest of the city of Kingman in Section 23, Township 24 North, Range 21 West, Mohave County, Arizona, Gila and Salt River Baseline and Meridian, on the U.S. Geological Survey Grasshopper Junction NW, Arizona, 7.5-minute quadrangle.

Number of Acres Surveyed. 0.06 acre

National Register of Historic Places (NRHP)-Eligible Properties. None

NRHP-Ineligible Properties. None

Recommendations. No cultural materials, features, or sites were identified during the archaeological survey of the 0.06-acre APE. SWCA recommends that this project will result in a finding of No Historic Properties Affected, and no further archaeological work is recommended for the APE. However, if previously undocumented buried cultural resources are identified during ground-disturbing activities, all work in the immediate vicinity of the discovery should stop until the find can be evaluated by a professional archaeologist.

INTRODUCTION

Mohave County operates an early warning emergency system, referred to as ALERT (Automated Local Evaluation in Real Time). The ALERT system consists of approximately 119 fully automated sites and dozens of full weather stations within Mohave County. Mohave County is continually adding new locations to the ALERT system. System components for these weather stations vary, but are used to collect precipitation data, monitor roadway surfaces for temperature and surface moisture, and collect stream flow data, to name a few uses. The primary purpose of the ALERT system is to assess potential flooding threats throughout Mohave County and trigger a response from emergency personnel. Secondary uses of the data would benefit the Bureau of Land Management (BLM) and other federal agencies that manage sensitive resources. The primary funding for the continued growth of the ALERT system has come from the Mohave County Flood Control District (FCD) and from the Highway User Revenue Fund.

The Mohave County FCD proposes to construct a new weather monitoring device on BLM-managed lands in Mohave County; the device consists of a 1-foot-diameter standpipe, with antennae reaching a height of no more than 12 feet. The monitoring device would be constructed on a 10 × 10–foot lease area adjacent to an existing road. The proposed construction on BLM land constitutes a federal undertaking subject to review under Section 106 of the National Historic Preservation Act and its implementing regulations (36 Code of Federal Regulations Part 800). SWCA Environmental Consultants (SWCA) was contracted by the Mohave County FCD to complete an archaeological survey of the area of potential effect (APE) to assist the BLM with its Section 106 responsibilities. The APE for this project consists of a 50 × 50–foot (0.06-acre) survey area that contains the 10 × 10–foot lease area and a construction buffer.

The APE, which totals approximately 0.06 acre, is approximately 30 miles (about 48 km) northwest of the city of Kingman and 11 miles (about 18 km) east of U.S. Route 93 in Section 23, Township 24 North, Range 21 West, Gila and Salt River Baseline and Meridian (Figure 1). The APE consists of BLM-managed public land in unincorporated Mohave County.

ENVIRONMENTAL SETTING

The APE is in the northern extent of the Black Mountains on the western edge of the Sacramento Valley. The Lost Cabin Spring is less than 500 feet (167 m) southeast of the APE. Several unnamed drainages in the vicinity of the APE flow southeast, eventually emptying into Sacramento Wash 20 miles (about 32 km) to the southeast.

Surface sediments are composed of alluvial deposits that form the Azure-Detrital-Antares complex (granitic/schist, sandy loam) soil map unit, as defined by the Natural Resources Conservation Service (2010). Elevation in the APE is 3,820 feet above mean sea level.

The APE lies within the Mohave Desertscrub biotic community, as described by Brown (1994). Dominant vegetation includes creosotebush (*Larrea tridentata*), all-scale (*Atriplex polycarpa*), brittlebush (*Encelia farinose*), desert holly (*Atriplex hymenelytra*), and white burrobrush (*Hymenoclea salsola*). Other species observed include banana yucca (*Yucca baccata*), cholla (*Cylindropuntia* spp.), and Mohave prickly pear (*Opuntia polyacantha* var. *erinacea*).

CULTURE HISTORY

The culture history of this region has been previously documented (Curriden 1977; Warren 1983) and will not be repeated in detail here. The following information is provided as a brief synopsis of the prehistory and history relevant to the APE.

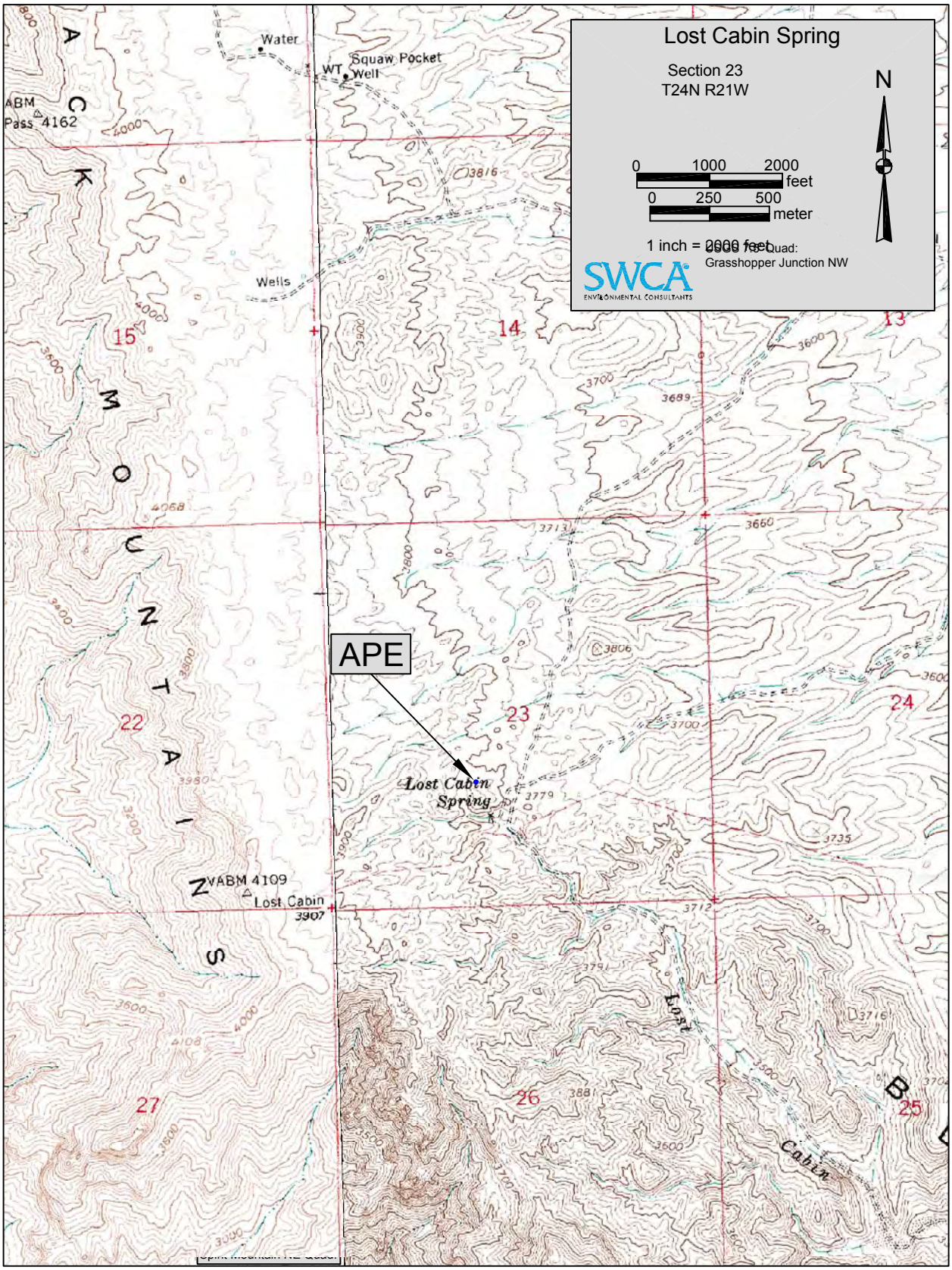

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Figure 1. Area of potential effect.

Paleoindian and Early Archaic Periods (10,000–5000 B.C.)

There are several different temporal classifications of desert cultures in this and the surrounding areas, making comparisons problematic. The earliest human occupation of the Mohave Desert was during the Lake Mohave period (Warren and Crabtree 1986). The Lake Mohave period is considered to be a Paleoindian complex by most archaeologists. Other names used for this complex include San Dieguito and Playa (Rogers 1939, 1958, 1966). This complex is not well understood, and dates have been inferred exclusively from the stratigraphic superpositioning of sites, the thickness of desert varnish found on artifact surfaces, and artifact typologies, rather than from firm artifact seriation and chronometric data. More recently, the Lake Mojave period has been characterized in terms of point styles, such as long-stemmed points called Lake Mohave points and short-bladed stemmed points called Silver Lake points (Warren and Crabtree 1986). Other tools associated with these point styles include crescentics, lanceolate knives, drills, engraving tools, core tools, and hammerstones (Rogers 1966; Slaughter 1991).

Middle and Late Archaic Periods (5000 B.C.–A.D. 500)

The transition from the Paleoindian to Archaic period is marked by a change in settlement and subsistence patterns. This change probably corresponds to the drying out of the western deserts, which was coupled with a reduction of human occupation in these areas. Warren and Crabtree (1986:184) postulate that during the later parts of the Pinto period, “much of the lower desert may have been essentially uninhabited.” Few sites have been found that date to this period; those that have are located along watercourses and the surrounding water sources, which suggests an increased importance for this resource. Assigning cultural resources to the Archaic period based mainly on flaking debris is tentative because similar debris is also associated with later cultures.

The Pinto period (5000–2000 B.C.) is characterized by Pinto style projectile points, small and large leaf-shaped points, domed scrapers, and flat milling stones. Representative sites that contain this component include the Pinto Basin site (Campbell and Campbell 1935), Salt Springs (Rogers 1939), and the Stahl site (Harrington 1957). This tool assemblage reflects a hunting and gathering subsistence. The Pinto period, once equated with Amargosa I by Rogers (Haury 1950), was later reclassified, along with the Gypsum period, and compared to Amargosa II (Rogers 1966).

The Gypsum period (2000 B.C.–A.D. 500) is characterized by a change and diversification in tool assemblage during a period in which the environment became moister. Sites dating to this period are more numerous and are frequently larger; they include Rose Spring, Newberry Cave, and Gypsum Cave (Warren 1983; Warren and Crabtree 1986). The flaked stone assemblage appears to be more varied than that of the Pinto period. It includes Elko eared and Elko corner-notched points, Gypsum points, and Humbolt concave-base points. These points have been compared to the Basketmaker I and II periods of the Four Corners area (Warren and Crabtree 1986). Pit houses, split-twig figurines, and a more varied milling assemblage can be seen in the Mohave Desert during the Gypsum period. Projectile point size decreased as the period progressed, and during the latter parts of the Gypsum period, use of the atlatl gave way to the bow and arrow.

Ceramic Period (A.D. 500–1604)

During the Saratoga Springs period (A.D. 500–1200), technology and subsistence practices continued to change. This change was accelerated by Basketmaker III/Anasazi influences from the north and Hakataya/Yuman (Patayan) influences from the south. Ceramic pottery first appears, and Colorado River wares are found in increasing abundance. There is a continued trend toward reliance on plant material and

smaller animals for subsistence. Sites are larger and more diversified, and projectile point types are smaller than during the previous period.

The Hakataya/Yuman occupation is characterized as representing a mobile way of life and is distinguished by its “rock-outlined jacales, gravel or boulder alignments, rock-filled roasting pits, rock-pile trail shrines, thick dry-laid, low-walled rock or boulder structures, rock-shelters, and bedrock milling stones . . . and crudely decorated pottery” (Schroeder 1979:100). The Hakataya/Yuman temporal phases are based on ceramics, trade wares, and settlement patterns (see Colton 1945; Rogers 1945; Waters 1982).

The area associated with the Hakataya extends from northern Arizona south of the Grand Canyon south and east to Globe, Arizona, and west to Mojave, California. To the southwest, the Hakataya can be found extending to the Pacific Coast in northern Baja California (Schroeder 1979:100). Citing McGuire (1982), Cordell (1984:78) argues the term “Hakataya” is too broad a formulation to accurately reflect the ethnic diversity present throughout this area during the Ceramic period. Instead, she prefers to use the term “Patayan” to refer specifically to cultures in western Arizona.

With the general decline of Anasazi influence in the area, Yuman influence from the south continued and expanded. The Protohistoric period (A.D. 1200–1604) Native Americans that occupied the general area were the Mojave, a Yuman linguistic group (Kroeber 1925, 1951, 1972; Stewart 1982; Stone 1987). Mojave sites can be distinguished by ceramic wares (i.e., Parker Buff, Parker Red-on-buff, and Fort Mojave Variant). During this period, smaller points, like the Desert side-notched and Cottonwood triangular, became more widespread, as did Lower Colorado River buff wares.

Ethnographically, the APE falls within the traditional territory of the Walapai. McGuire (1983) notes that the origins of the Walapai have been linked to the Cerbat branch of the Upland Patayan tradition (Dobyns 1974; Euler 1958).

Historic Period (A.D. 1604–Present)

Juan de Oñate and 30 companions were the first known Europeans to enter what is now Mohave County in 1604. In 1776, three Franciscan missionaries explored the area. Fray Francisco Atanasio Dominguez, Fray Velez de Escalante, and Fray Francisco Garcés sought converts to the Catholic faith and suitable sites for new missions, but found neither. Spanish impact on the Mohave area was negligible. The Spanish did not establish any permanent settlements in the area and largely ignored and avoided it (Messersmith 1991).

The first Euro-Americans to enter what is now Mohave County were trappers in search of beaver. Several parties of trappers are known to have traversed the area between 1826 and 1834. The most notable of these were the party under Jedediah Smith (1826–1927) and the parties under Ewing Young (1826–1827, 1829, and 1830) (Messersmith 1991).

The Treaty of Guadalupe de Hidalgo in 1848 formally ended the Mexican War and granted the United States most of New Mexico, California, and Arizona. Military expeditions soon entered the newly acquired territory to map it, assess its potential for settlement, and determine the best routes for wagon trails and railroads. Captain Lorenzo Sitgreaves (1851), Lt. Amiel Whipple (1853), and Lt. Edward Beale (1857, 1858, and 1859) led expeditions through the area, and Beale established a wagon road from Albuquerque to California (Messersmith 1991). The Beale Wagon Road opened Mohave County to immigrants heading for California. Fort Mohave was established in 1859 in order to protect the wagon trains from the local Mohave Indians. The fort was located near the head of the Mohave Valley opposite the present town of Needles, California. It was abandoned in 1861, re-established in 1863, and finally closed in 1890 (McKenna 1991:56).

In the early 1860s, soldiers from Fort Mohave and civilians from Nevada and California began prospecting for precious metals in the Hualapai, Silver Creek, and Cerbat mountains. By 1873, hundreds of claims had been filed and were being worked in Mohave County. Mining activity in the Cerbat district began on a large scale in the early 1870s with the establishment of the Todd Basin mining area and the community of Mineral Park. From 1870 to 1900, mining in the district concentrated on exploiting near-surface, oxidized, high-grade deposits of silver and gold.

Kingman itself was founded in 1882 near Camp Beale's spring, where the town began as a simple railroad siding along the newly constructed Atlantic & Pacific Railroad. This railroad would later become the Atchison, Topeka & Santa Fe in 1902. The Mohave County seat was moved from Mineral Park to Kingman in 1887. Regional gold, silver, lead, and zinc mining contributed to the economy of the Kingman area. U.S. Route 66 was built through Kingman in the 1920s.

PREVIOUS RESEARCH

An archaeological records search was conducted to identify previously conducted archaeological surveys and previously recorded archaeological sites within a 1-mile radius of the APE. Archaeological records were checked using the AZSITE database, which includes records from the Arizona State Museum (ASM), Arizona State University, and the BLM. Survey and site records held at the BLM Kingman Field Office were also consulted, as well as the National Register of Historic Places (NRHP) database.

An archaeological records search indicated that three archaeological surveys have been conducted within a 1-mile radius of the APE (Table 1, Figure 2). No archaeological sites have been recorded and no NRHP listed properties exist within a 1-mile radius of the APE.

Table 1. Previously Conducted Archaeological Surveys within a 1-Mile Radius of the Area of Potential Effect

Agency Number	Project Name	Report Reference
01-35.BLM	Not Available	Not Available
04-63.BLM	Lost Cabin Well Storage	Bayer (1981)
04-106.BLM	Pipeline Survey	Bayer (1982)

General Land Office Map Research

The General Land Office (GLO) plat map for Township 24 North, Range 21 West, filed in 1919, depicts Lost Cabin Spring and Lost Cabin Wash southeast of the APE but no roads or structures (Figure 3).

PROJECT METHODS

SWCA archaeologist Sara Ferland surveyed the APE on December 1, 2010. General conditions for the survey were excellent, and ground visibility was generally 90 percent. The survey consisted of parallel transects spaced no more than 10 feet (about 3 m) apart. Evidence for cultural resources was sought in the form of artifacts (e.g., ceramics, lithics, historical metals, or glass) or features (concentrations of fire-cracked rock, charcoal-stained soil, prehistoric or historical structures, or other cultural anomalies). A total of 0.06 acre was surveyed.

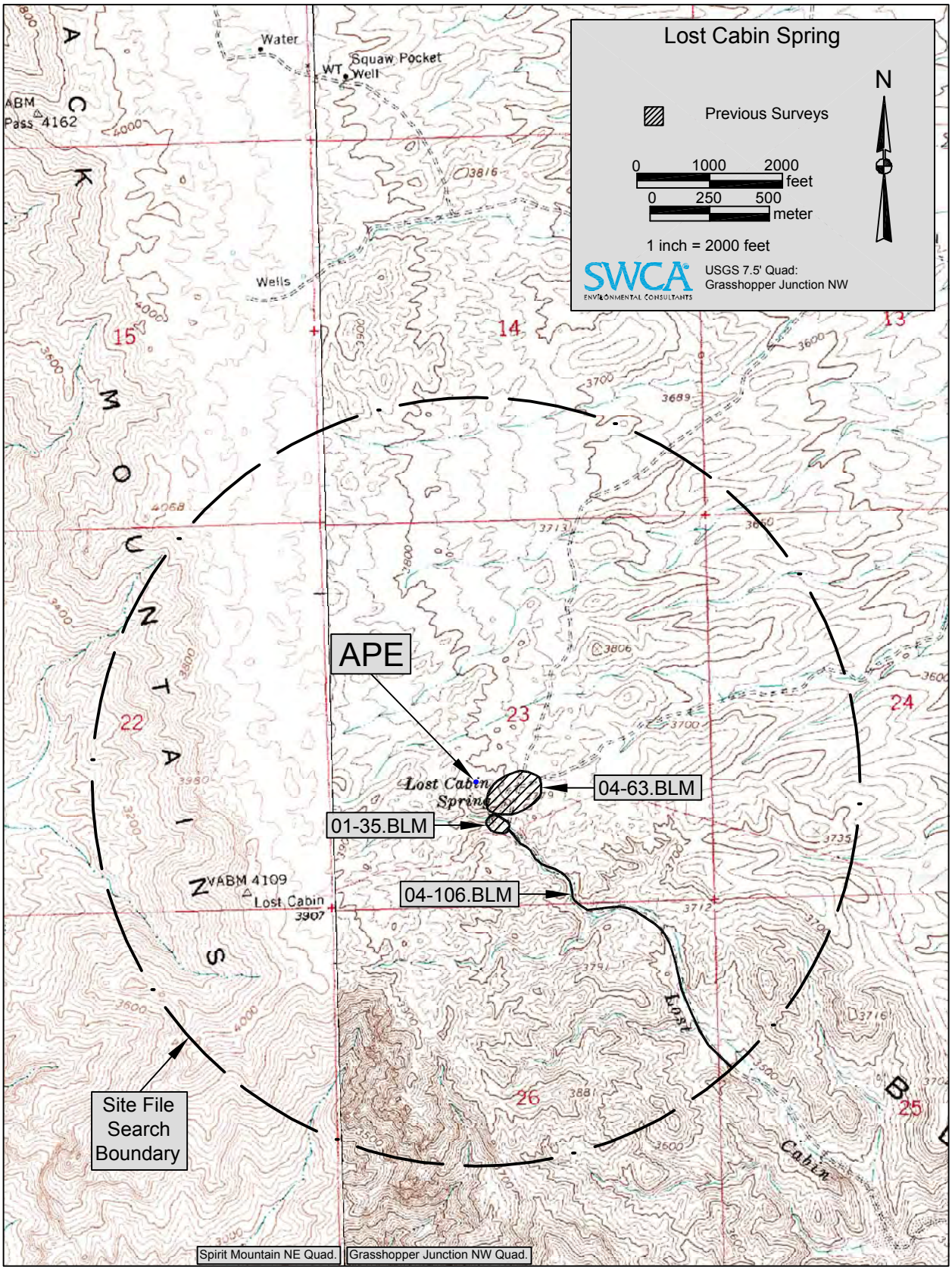

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Figure 2. Previously conducted archaeological surveys within 1 mile of the area of potential effect.

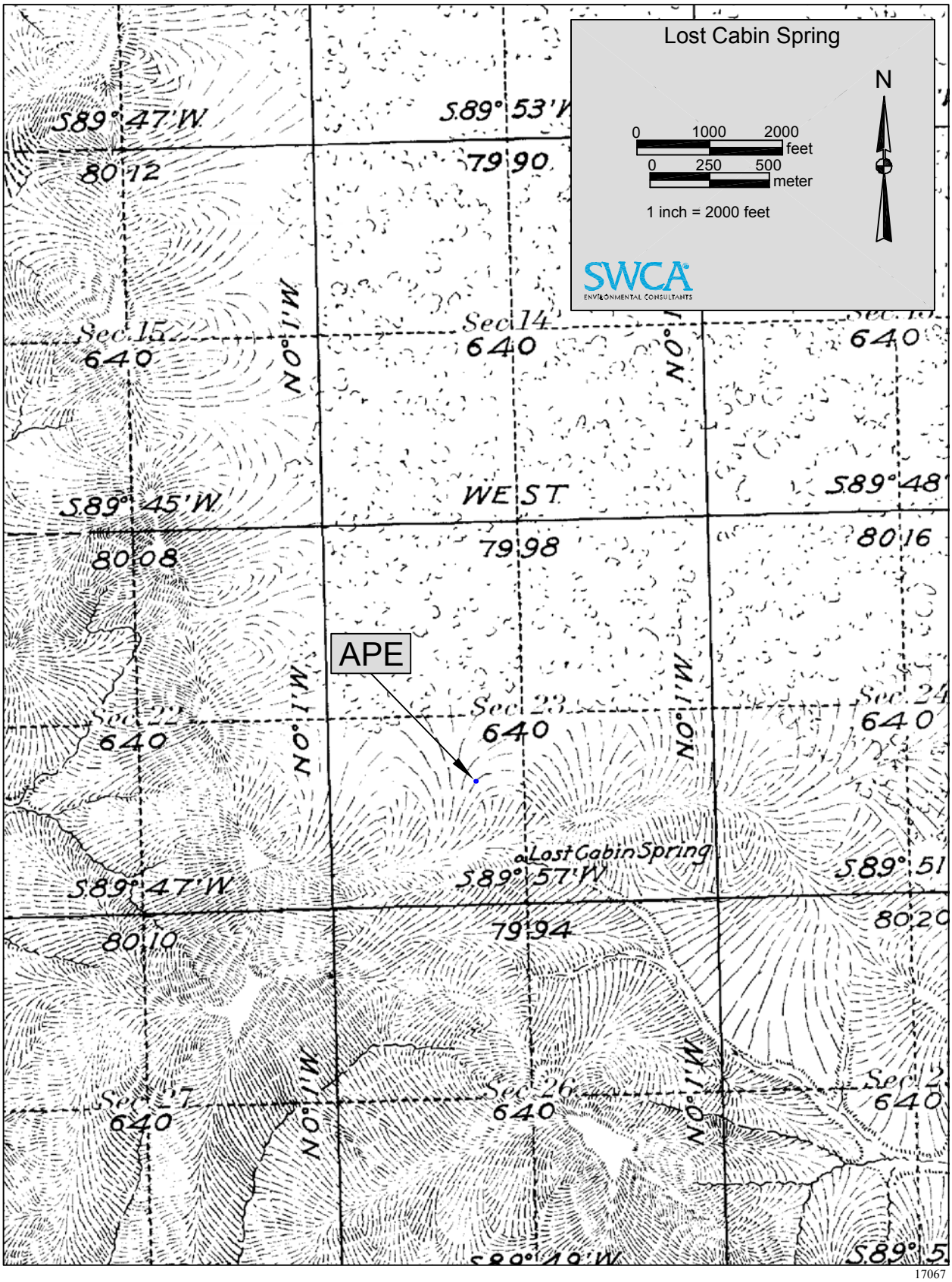

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Figure 3. 1919 General Land Office map, showing the area of potential effect.

Properties of archaeological interest must contain the remains of past human activity that are at least 50 years old. Finds are classified either as a site or an isolated occurrence (IO). A site must contain 30 or more artifacts of a single type, unless all pieces originate from a single source (e.g., one broken bottle or ceramic vessel); or 20 or more artifacts when multiple types are present, within an area no more than 50 feet (about 15.25 m) in diameter. A site may also contain any number of artifacts when a single fixed feature is present; or multiple fixed features, with or without any associated artifacts. Artifact finds that do not meet these criteria but that are over 50 years old may be designated IOs. Archaeological sites are accurately mapped and plotted using a handheld global positioning system (GPS) device, photographed, and recorded using the standard ASM form. IOs are point-located and recorded using a handheld GPS unit.

PROJECT RESULTS

The APE is located on the south-facing aspect of a hill slope, overlooking an unnamed drainage that empties into Lost Cabin Wash to the southeast (Figure 4). No archaeological sites or IOs were identified during this survey.

Figure 4. View of the APE, facing south.

SUMMARY AND MANAGEMENT RECOMMENDATIONS

The archaeological survey of the 0.06-acre APE resulted in the identification of no cultural materials or features. Therefore, SWCA recommends that this project will result in a finding of No Historic Properties Affected, and no further archaeological work is recommended for the APE. However, if previously undocumented buried cultural resources are identified during ground-disturbing activities, all work in the immediate vicinity of the discovery should stop until the find can be evaluated by a professional archaeologist.

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