

MUSEUM OF NEW MEXICO

OFFICE OF ARCHAEOLOGICAL STUDIES

**JAL: THE TESTING OF LA 129126,
IN SOUTHERN LEA COUNTY, NEW MEXICO**

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ADMINISTRATIVE SUMMARY

Between August 14 and August 18, 2000, the Office of Archaeological Studies, Museum of New Mexico, conducted limited testing at the site of LA 129126 near Jal, Lea County New Mexico. The testing of LA 129126 was conducted at the request of the Environmental Section of the New Mexico State Highway and Transportation Department (NMSHTD) to determine the extent and importance of cultural resources present within the proposed project limits of planned right-of-way improvements to NM 18. The site is on private land and NMSHTD land acquired from private sources. NMSHTD provided the funding for this project.

The site is a surface lithic scatter. No intact cultural features or deposits were found at the site. The data potential of the portion of the site within the proposed project area was determined to be minimal beyond that already documented, and no further investigations are recommended.

NMSHTD Project AC-MIP-018-1(25)08, CN 3704
MNM Project No 41.685 (Jal)
CPRC Excavation Permit No. SE-161

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INTRODUCTION

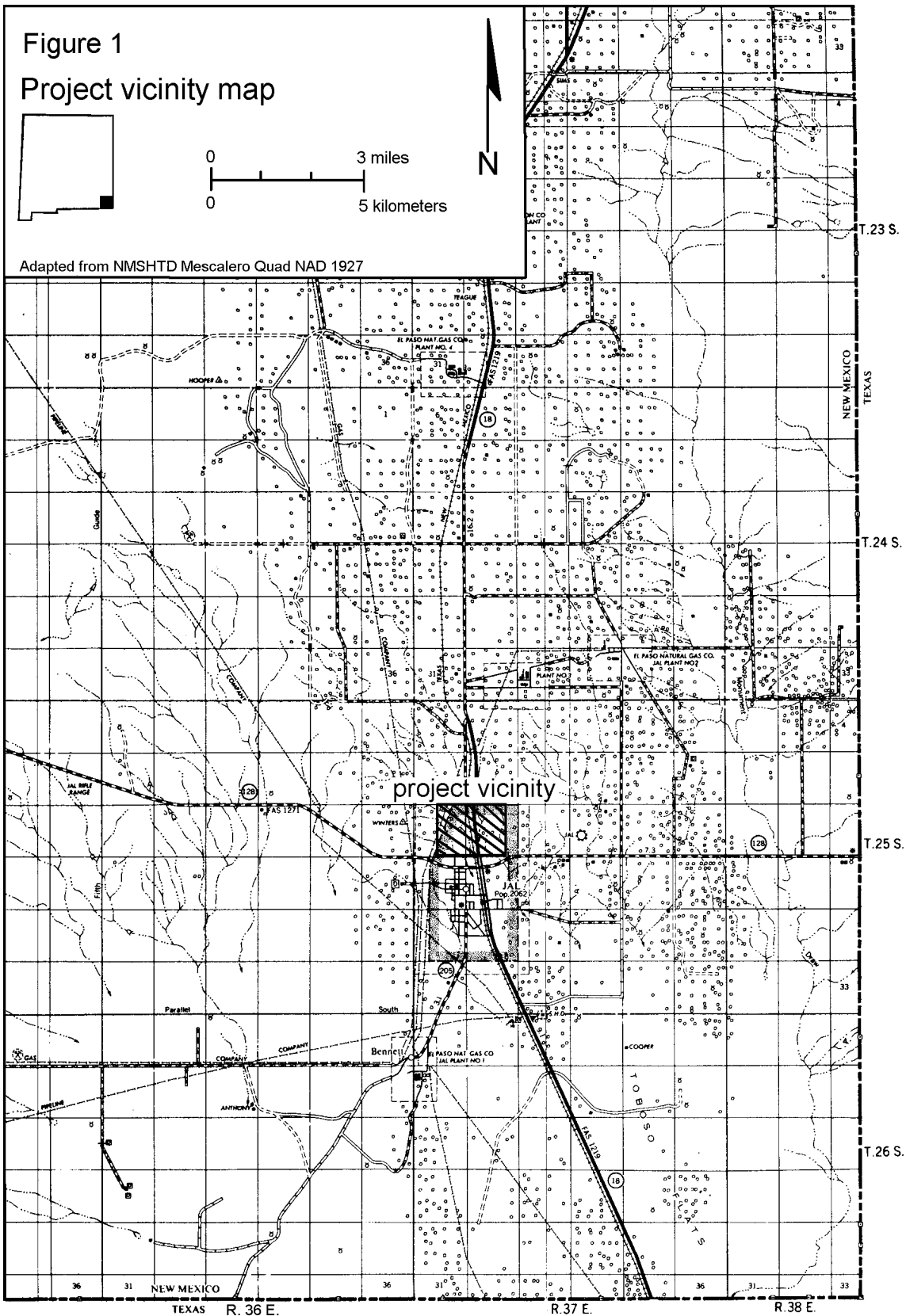
At the request of Blake Roxlau, environmental program manager, New Mexico State Highway and Transportation Department (NMSHTD), a limited testing program was conducted at LA 129126 to determine the extent and importance of the portion of the site within the proposed project limits. The site is within the area of proposed right-of-way improvements on NM 18 near Jal, New Mexico (Fig. 1 and Appendix 1).

Limited testing was conducted under CPRC Archaeological Excavation Permit No. SE-161. Fieldwork took place between August 14 and August 18, 2000, conducted by Peter Y. Bullock. Yvonne Oakes acted as principal investigator. Maps were drafted by Ann Noble, and the report was edited by Tom Ireland.

Prior to fieldwork, current listings of the *National Register of Historic Places*, the *State Register of Cultural Properties*, and the site files of the New Mexico Cultural Resource Information System were consulted. No properties listed as eligible for, nominated to, or approved for submission to either inventory are in the vicinity of LA 129126.

This undertaking complies with the provisions of the Historic Preservation Act of 1966, as amended through 1992, and applicable regulations. The report is consistent with applicable federal and state standards for cultural resource management.

Figure 1
Project vicinity map



ENVIRONMENT

The project area is in the far southeastern portion of New Mexico in Lea County, within the Monumental Oil Field. This is an area of flatland broken by arroyos (Nicholson and Clebsch 1961). The elevation at LA 129126 is 945 m (3,100 ft). The climate in the project area is semiarid, with summer temperatures of 90 degrees F and higher for two months and freezing winter temperatures for two months (Turner et al. 1974:86).

Vegetation and fauna within the general project area reflect the general Chihuahuan desert biome. The immediate site area is dominated by mesquite and prickly pear indicative of soil disturbance.

Soil in the project area is typically comprised of the Simona-Tonuco association. Loam and sand are found on nearly level to gently sloping or undulating landforms. Soils within this association tend to be shallow to undurated or solid caliche (Turner et al. 1974:6-7).

A cultural history of the Jal area is available in Russell (2000).

TESTING PROGRAM

Limited testing followed the procedures and practices outlined in Testing and Site Evaluation Proposal (SHPO Log 43648) and further outlined by Zamora (2000) in her application to the CPRC for an excavation permit. A main datum and baseline was established for the site. Surface artifacts were pinflagged to locate artifact clusters and assist in recording and mapping site limits. A map of the site was produced using a transit, stadia rod, and a 50 m tape. All test units, artifacts, and cultural features were mapped. Surface artifacts were analyzed in the field and left in place.

Three hand-excavated test units measuring 1 by 1 m were dug at the site. These were placed adjacent to concentrations of surface artifacts, in areas of possible intact soil deposits.

Auger holes were hand-excavated in patterned transects of staggered rows dug at 2 m intervals. These were dug across the site in the area with possible intact soil deposits. Each auger hole was dug until culturally sterile soil was reached. All of the excavated soil was screened, and any artifacts present were collected and analyzed in the field. Soil descriptions were recorded.

All excavated areas were backfilled when excavation was completed. Cultural material recovered through these excavations originally was to be curated at the Archaeological Records Collections at the Laboratory of Anthropology, Museum of New Mexico. However, no cultural material was found in any of the excavations. Field and analysis records will be on file at the State Historic Preservation Division, Archaeological Records Management Section, Santa Fe, New Mexico.

TESTING RESULTS

LA 129126, a lithic artifact scatter (Fig. 2), measures 25 by 20 m. The site has been heavily modified by human action. The whole site area has been mechanically scrapped and the upper 60 cm of soil removed, exposing the underlying caliche. There has been some recent eolian sand deposition, particularly in the areas of existing vegetation (primarily mesquite and prickly pear). The

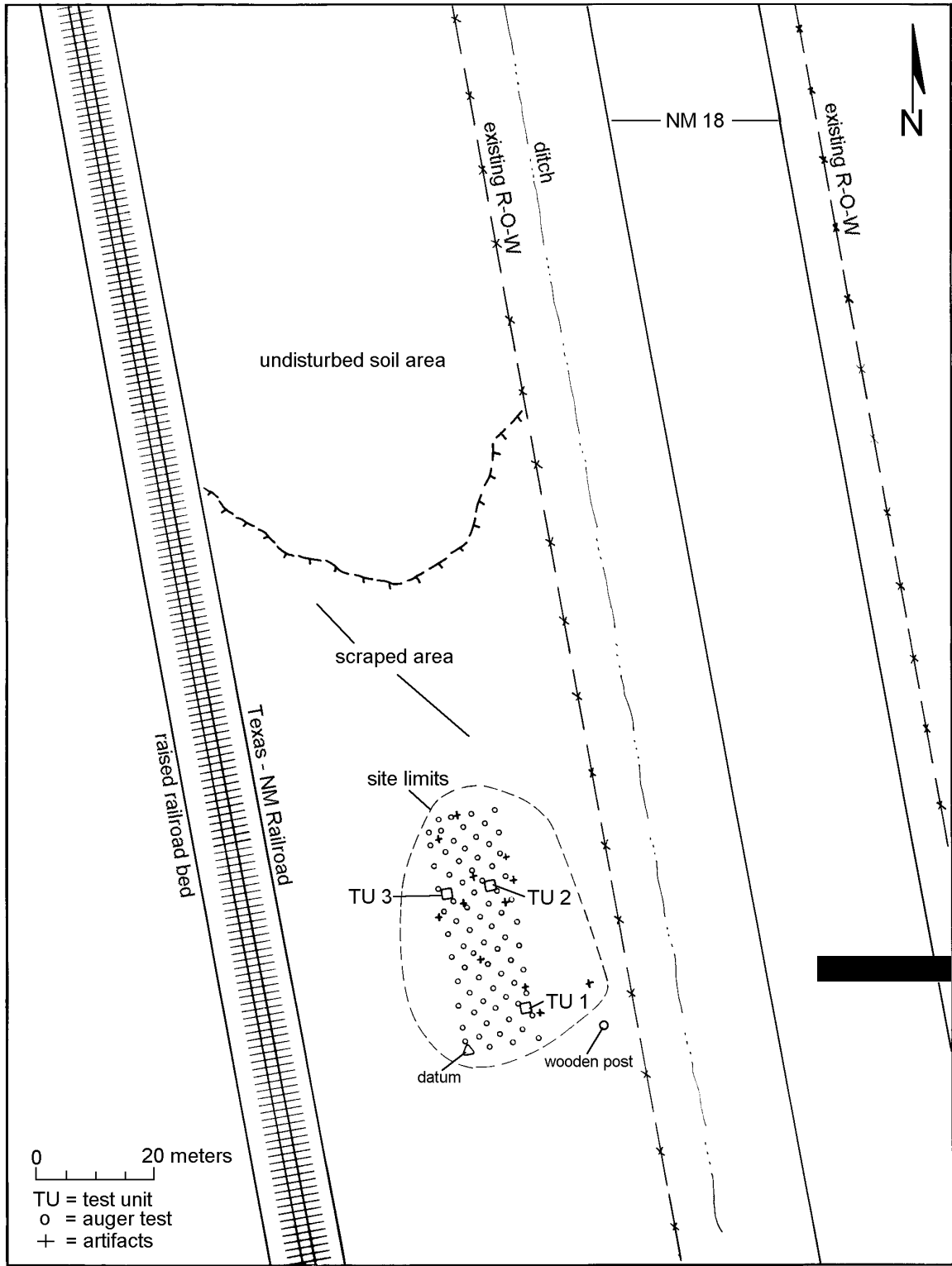


Figure 2. LA 129126 site map.

site has also experienced extensive surface churning of this eolian sand and caliche, caused by vehicular traffic associated with railroad maintenance. The artifacts present are redeposited from a now-removed surface and exposed on a culturally sterile caliche and churned caliche-sand surface.

A total of 12 lithic artifacts were recorded on the surface of LA 129126. Russell (2000) originally recorded 18 lithic artifacts on the surface of this site; however, recent heavy rains may have covered some and exposed others. No subsurface artifacts, cultural deposits, or features were found. Three 1 by 1 m test units were dug by hand adjacent to recorded concentrations of surface artifacts. In addition, 72 auger tests were hand excavated at LA 129126 to locate buried cultural features or deposits.

Test Units

Three test units were hand excavated adjacent to concentrations of surface artifacts in areas of possible remaining soil integrity. Each test unit was dug in 10 cm levels until cultural material, or a depth of 20 cm, was reached. Two strata of soil were present within each test unit. Stratum 1 was a tan, fine, eolian sand containing broken pieces of caliche in a variety of sizes. This stratum measured 1 to 8 cm in depth. Stratum 2 was a fine solid caliche deposit. No cultural features or deposits were found within either test unit.

Auger Tests

A total of 72 auger tests were hand dug at LA 129126 at 2 m intervals in a series of staggered transects spaced 1 m apart. These were dug in the area of the site with possible remaining soil integrity. Auger tests were hand dug until cultural material or culturally sterile soil was reached. No artifacts or cultural material were found in any of the auger tests at LA 129126.

Cultural Features

No cultural features or deposits were found in any of the test units or auger tests at LA 129126.

LITHIC ARTIFACT ANALYSIS

A total of 12 lithic artifacts were recorded at LA 129126. Attributes chosen for lithic analysis reflect the desire to achieve the greatest return of useful information within the available time constraints. The guidelines and format of *Standardized Lithic Artifact Analysis: Attributes and Variable Code Lists* (OAS 1994) were followed. Definitions used in lithic analysis are also included in that volume.

The following attributes were included in analysis: material type, morphology, portion, percentage of dorsal cortex, flake platform, and artifact function.

Results

Material Selection

Lithic artifacts recorded at LA 129126 are comprised of two materials: chert and quartzitic sandstone. Each makes up 50 percent of the assemblage. Both of these materials are available locally in exposed gravels of the Ogallala formation (Nicholson and Clerbsch 1961:Table 3).

Artifact Morphology

The largest morphological group of artifacts is made up of core flakes (83.3 percent, or 10 of 12 artifacts). The other two artifacts are multifaceted cores.

Flake platform types at LA 129126 are restricted to cortical (40 percent) and single-faceted (60 percent). Ninety percent of the flakes recorded are whole, and proximal fragments comprise the other 10 percent.

Dorsal cortex was present on two of the five quartzitic sandstone flakes (in percentages of 10 and 20 percent). However, only one chert flake (out of 5) exhibited any dorsal cortex (30 percent).

Utilization

Four of the 12 lithic artifacts recorded at LA 129126 were utilized. Two flakes (both chert) were modified into graters. Both of these tools exhibited evidence of use in the form of wear. Two additional flakes showed evidence of wear, probably as expedient tools. Wear was present on one chert flake. One flake of quartzitic sandstone had one edge that had been retouched and exhibited wear.

Discussion

The lithic artifact assemblage recorded at LA 129126 during the testing phase of the project is considerably different from that recorded during the archaeological survey (Russell 2000). Even the number of artifacts recorded differs. Russell (2000) recorded 19 during survey, while 12 were recorded during testing.

Different artifacts may have been observed on the site surface. Southeastern New Mexico experienced heavy rains between survey and testing. Some previously recorded artifacts were probably covered, and other artifacts (not previously recorded) were undoubtedly exposed. This would explain differences in the numbers of cores (Russell 1, this report 2), biface thinning flakes (Russell 2, this report 0), and use (Russell 0, this report 4). Other differences are the result of differences in nomenclature. Russell (2000) refers to unidirectional flakes, which may be what are referred to in this report as core flakes. More perplexing are the names used for the materials recorded. In the survey report, Russell refers to all of the artifacts as chalcedony and then separates them by color into white, rose, and mottled. It is possible that chert and white chalcedony are the same, as are quartzitic sandstone and rose chalcedony. It is possible, but unlikely, that all of the artifacts within the two assemblages are different.

The small size of this artifact assemblage, coupled with the extensive recent modifications at LA 129126, make any interpretations based on this data suspect.

It is impossible to date this site given the small artifact assemblage, the lack of diagnostic artifacts, and the extremely heavy site modifications that have taken place.

ASSESSMENTS AND RECOMMENDATIONS

LA 129126 has not been assigned to a cultural period due to the redeposited nature of the artifacts, the lack of diagnostic artifacts, and the highly modified nature of the site itself. The site area has been heavily scraped to a depth of approximately 60 cm below the modern ground surface. The site has also been modified by vehicular traffic connected with railroad maintenance. The artifacts recorded at LA 129126 were all redeposited. No intact cultural features or deposits were found.

Archaeological testing within the proposed project limits at LA 129126 did not reveal any cultural features or deposits likely to yield important information on the prehistory of LA 129126 or of the region. No further investigations are needed.

REFERENCES CITED

Nicholson, Alexander, Jr., and Alfred Clebsch Jr.

1961 *Geology and Ground-Water Conditions in Southern Lea County, New Mexico*. Ground-Water Report No. 6. State Bureau of Mines and Mineral Resources, Socorro.

OAS

1994 *Standardized Lithic Artifact Analysis: Attributes and Variable Code Lists*. Archaeology Notes 24c. Office of Archaeological Studies, Museum of New Mexico, Santa Fe.

Russell, William W.

2000 *Cultural-Resources Inventory for Right-of-Way Requirements for Project CN 3704, New Mexico State Highway 18, between Jal and Eunice, Lea County, New Mexico*. Human Systems Research, Tularosa.

Turner, Millard T., Dellon N. Cox, Brice C. Mickelson, Archie J. Roath, and Carl D. Wilson.

1974 *Soil Survey of Lea County, New Mexico*. U.S. Department of Agriculture, U.S. Soil Conservation Service, Washington, D.C.