Possible Lithic Artifacts from 2005–07 Excavations at the Wenas Creek Mammoth Site

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Annual field investigations at the Wenas Creek Mammoth site in central Washington State since 2005 have recovered bones of mammoth (Mammuthus sp.) and large bovid (cf. Bison) from a loess matrix-supported diamict (Stratum II) interpreted as colluvium (Lubinski et al. 2007). The 2σ age range from three bone dates is 15,547–17,097 CALYBP. The site sediment includes small cryptocrystalline rocks, most rounded or fractured through natural processes (unambiguous geofacts), but also some exhibiting characteristics consistent with human modification. The relationship (if any) of the possible artifacts to the bones is unclear, but they should be evaluated in light of their spatial proximity and potential association. Here we describe two possible artifacts from the 2005–07 field seasons. We note that the presence of geofacts does not preclude the possibility that these two are genuine artifacts, as a mixture is common at other locales with naturally occurring chert, including quarry sites (e.g., Andrews et al. 2004).

The best candidate for an artifact is specimen 176 (Figure 1A) found in situ. This flake fragment (Sullivan and Rosen 1985) lacking cortex has one intact lateral margin parallel with two prominent dorsal arrises, like a blade fragment. The length of one of these arrises has been traversed by a 1-mm-wide scar. A proximal notch-like feature exhibits 2–3 regular 1-mm-long unifacial flake scars. This feature and the intact lateral margin also exhibit discontinuous, unifacial chipping damage with scars < 0.5 mm. The specimen is made of red translucent chert, unique among the rocks found in the excavated matrix. The combination of patterned features, flake scars parallel to the medial axis, apparently non-local raw material, and lack of cortex imply this is an artifact (Patterson 1983; Peacock 1991), while the notch and edge chipping are more ambiguous (see Hosfield and Chambers 2003). This find was made about 15 cm above a mammoth-size metapodial within the same stratum (II).

Specimen 327 (Figure 1B) was recovered from 1/8-inch screen. It is a
broken flake exhibiting a flat platform with an angle of 55°, an éraillure scar on a diffuse bulb of percussion, 5 dorsal flake scars (including two 1-mm-long scars adjacent to the platform), feather termination, and no cortex. All intact edges exhibit discontinuous chipping damage, with scars < 0.5 mm. The specimen is made of translucent tan chert visually similar to natural material in the excavation matrix. The éraillure, platform angle, and lack of cortex imply this is an artifact, while the diffuse bulb of percussion and apparently local raw material imply a geofact (Patterson 1983; Peacock 1991). The edge damage is ambiguous. The flake was found near the contact of Stratum II and the underlying, higher energy, alluvial Stratum III.

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