

## MEMORANDUM

DATE: April 8, 2008

TO: Joni Chan, Vice President, Lewis Operating Corp.

FROM: Steve Conkling, Principal, LSA Associates, Inc.

SUBJECT: Status Report of Paleontological Grading Monitoring for Work Completed-to-date for "The Resort at Mira Loma" Project of Lewis Operating Corp.

The sediments that underlie The Resort project area are from the Late Pleistocene, and are approximately 14,000 years old. Over the last two years, approximately 150 fossil specimens have been collected during an on-going paleontological mitigation program from The Resort project. A Paleontological Resources Impact Mitigation Program (PRIMP) was initiated by Paleo Environmental Associates (PEA) in 2006. LSA is currently under contract to Lewis Operating Corp for the continuation of the fossil salvage program, approximately one-third of the overall paleontology project budget has been expended to date, and the remaining monies appear sufficient for the remainder of excavation monitoring.

The initial fossil salvage by PEA recovered just over one hundred and thirty specimens (some of which were broken and have been joined with other specimens in the laboratory). During three weeks in 2007, additional monitoring produced approximately 20 additional specimens. Preparation and identification has been completed for those specimens recovered from The Resort. Sediment screening was also conducted on sediments determined to contain small, vertebrate fossils. All of the fossils identified to date have been attributed to seven different animals (see included faunal list). Presence of bison in the fauna indicates the sediments are from the Rancholabrean Land Mammal Age and are less than 14,000 years old. Similar faunas of this age have been found throughout southern California and are relatively common in western Riverside County. Fossil rodents from the project area suggest a scrub-woodland environment interspersed with grassland.

Preparation of fossils was conducted both by LSA staff and volunteers at local museums. These museums include the Riverside Metropolitan Museum, the Mojave River Valley Museum at Barstow, and the Raymond Alf Museum in Claremont.

A partial vertebrate faunal list for The Resort includes both isolated limbs and jaws; and articulated specimens of mammals:

- Imperial Mammoth
- Western Camel
- Bison
- Large-species of Horse
- Small-species of Horse
- Pocket Gopher
- Wood Rat

Fossil invertebrates (specifically snails) were also recovered from The Resort. These fossils help describe the habitat of the area at the time the sediments were being deposited. Fossil snails (*Vertigo modesto*, *Pupisoma* sp., *Succinea* sp., *Catinella* sp., *Columella* sp. cf. *alticola*) indicate that The Resort area retained marshy areas interspersed with scrub brush and copses of trees.