
APPENDIX E2

PALEONTOLOGICAL RECORDS SEARCH

Steve Oneil

From: Bromm, George <gbromm@sierracollege.edu>
Sent: Tuesday, February 13, 2024 12:29 PM
To: Steve Oneil; Rodrigo Jacobo
Cc: Hassan Ayati; Gage, Gage
Subject: Re: 7244 -- PALEO RECORDS SEARCH IN CALAVERAS COUNTY
Attachments: SCNHM Invoice 01-13-24 UltraSystems Environmental - Fairfield Hotel-Restaurant, Calaveras County, CA.pdf; Geology of San Andreas, Calaveras County, CA.pdf

Hi Steve,

A search of the Sierra College Natural History Museum's database for paleontological finds from this project area near San Andreas, Calaveras County, CA found no records. Based upon the geology of the area (see attached map) and where the Fairfield Hotel/Restaurant footprint location was estimated, the bedrock has been mapped as Miocene Mehrten formation. The Mehrten formation varies in thickness but generally consists of lahar (volcanic mud flows) in the upper part of the formation and a river deposited conglomerate at the formation's base. In other counties such as Placer and Mono, the lahar material has produced fossil flora in the form of petrified wood/twigs and leaf material. There was one record of a thoracic vertebra neural arch of a gomphothere (elephant) found in the Mehrten in Sacramento county. Provided that the alluvial cover in the project area is not substantial, there may be a chance that fossil material could be found in this formation within this project area. The nearby Paleozoic (Permian) Calaveras formation composed of metamorphic marine sediments generally do not preserve fossils due to metamorphism (cooked); however, limestone lenses have produced recognizable marine invertebrate fossils in other counties. Overall, the likelihood of uncovering substantial fossil resources is slim in this area.

Best,

George

Please find an attached invoice for a \$200 donation. Thank you!



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From: Steve Oneil <soneil@ultrasystems.com>
Sent: Friday, February 9, 2024 9:33 AM
To: Bromm, George <gbromm@sierracollege.edu>; Rodrigo Jacobo <rjacob@ultrasystems.com>
Cc: Hassan Ayati <hayati@ultrasystems.com>
Subject: RE: 7244 -- PALEO RECORDS SEARCH IN CALAVERAS COUNTY

You don't often get email from soneil@ultrasystems.com. [Learn why this is important](#)

LOCAL GEOLOGY

Paleozoic Calaveras Formation Pzcv
(purple): pyroclastic rocks—
nonfossiliferous

SAN ANDREAS

Miocene Mehrten Formation Tm
(pink): lahar (mud flow) contains
fossil flora in other counties

Approximate location of
the proposed Fairfield
Hotel/Restaurant

Paleozoic Calaveras Formation Pzc(blue):
metamorphic rocks—nonfossiliferous

Green schist gs (orangish)—
nonfossiliferous

Ref: Geology of the San Andreas 15-minute Quadrangle,
Calaveras County, California. California Division of Mines
and Geology, Bulletin B-195. Scale 1:62,500