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Analytic Summary

HERNÁNDEZ BARREÑA, D.; ALONSO GAVILÁN, G.; BÉCARES PÉREZ, J. & MARTÍN VISO, I. (2013): Geoarchaeological analysis of tombs of El Encinar excavated in the Aldeadávila de la Ribera Granite, Salamanca: context and working protocol. *Stud. Geol. Salmant.*, 49 (2): pp. 87-134. Salamanca.

ABSTRACT: In the southern of the township of Aldeadávila de la Ribera exist a small antique cemetery consists of five tombs engrave in rock, the most exempt. It's a site not previously studied and archaeological completely decontextualized, of which location respond a rule expected for this type of antiques cemeteries (for agricultural crops, stream or river in the proximities and presence of the nearby road access), although not found near village that gives meaning to the cemetery. The absence of human remains had impede make a dating, but this cemeteries usually belong to the High Middle Age. Petrographically the rock is a porphyritic two micas granite, too similar in its features to the massif granite over settle, which suggest that this is the same rock. The differences between the massif itself and the tomb's granite seem to respond to differences in the facies chosen for the sculpt tombs, searching for the easiest rock sculpt without being too breakable. Has been studied, with the tombs, a near shack, a vaulted and conical built of which basis is circular that the shepherds use for the refuge. Its building carried out using granitic rock fragments, in the walls and the roof, although the constructions of the each one respond to different methods. It was also found ceramic fragments which had made a chemistry study reveal a similar composition to all of them, but could not establish the source of the clay used.

Key words: Geoarchaeology; tomb; shack; ceramic; Granite of the Aldeadávila; Aldeadávila de la Ribera; Salamanca; Spain.

FERNÁNDEZ DÍAZ, P. R.; ALONSO GAVILÁN, G.; JIMÉNEZ FUENTES, E. & MARTÍN DE JESÚS, S. (2013): Preliminary analysis of a new vertebrate bed (Arenal del Ángel-3, AA3) from the Middle Eocene of the Cabrerizos Sandstone Fm (Salamanca, Spain): stratigraphy and fossil content. *Stud. Geol. Salmant.*, 49 (2): pp. 135-155. Salamanca.

ABSTRACT: Cabrerizos Sandstone Formation, Middle Eocene, is one of the richest paleontological (reptiles and mammals) lithostratigraphic units of the Duero basin. It represents a fluvial system that evolve thought time and space

that constituted, by the own dynamics of the system, traps for vertebrate remains accumulations. These deposits were originated by the infilling of ponds or abandoned channels due to the overflow of the principal, active channel or, due to the development of megabodies inside these channels during the active stage. Is in this latter context where the macrovertebrate fossil bed AA-3 is formed. In this study, the fallen blocks have been identified and correlate with their original levels and the fossil remains have been study. The study and the analysis of the fossil remain will improve the knowledge of the fossil content and also, can help for a future, more detailed, datation of the Formation that could be obtained from them.

Key words: Stratigraphy; Mammals; Arenal del Ángel; Cabrerizos Fm; Eocene; Duero basin; Salamanca; Spain.

MENDOZA DELGADILLO, J. (2013): From the batholith to a monument: Machu Picchu. *Stud. Geol. Salmant.*, 49 (2): pp. 157-190. Salamanca.

ABSTRACT: Machu Picchu was built on the Machu Picchu batholith in the Vilcabamba cordillera, which is the regional name of the oriental Andean chain of mountains in South Peru. Vilcabamba cordillera is composed of paleozoic and cenozoic rocks and permo-triasic and hercinian batholiths, of which plutons intruded paleozoic rocks. Machu Picchu is located in a periglacial area, where we distinguish 2 very diferents parts, namely the urban part and the agriculture part. The urban part, almost 100% of granite, was constructed on a glacial meseta situated between Huayna Picchu and Machu Picchu mountains, in the middle of a "granitic caos" that made easier the construction labors. It was not necessary for the incas to transport the rocks material for long distances as when they made the building of others important sites; Machu Picchu case was really a construction directly "from the batholith to a monument".

The study of the granites of Machu Picchu city reveals and confirms the exact petrography and geochemical nature of the rocks used by the incas: they are sienogranites that belong to a calcoalcaline serie, one of the 2 series found in the permo-triasic batholiths. The radiometric age of Machu Picchu granite is 246 ± 10 Ma. determined by Rb/Sr method (EGELER & DE BOOY, 1961).

Key words: Peru; Machu Picchu; Paleozoic; Permo-Triassic batholiths; Petrology; Geochemistry.

