

EXPLORATION AND SURVEYING IN LECHUGUILLA CAVE 2002 - 2004

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PHOTO: GARY WHITBY

Big Mothers of Pearls, Mother Lode Chamber, Lechuguilla Cave, New Mexico USA.

Photo Competition First Prize for a digital photograph in the Cave Decorations, Formations and Deposits category.

Spanning three expeditions over the last 26 months, two Australians have participated in project trips into Lechuguilla Cave, New Mexico, USA spending a total of 23 days in the cave.

This cave is different to most as it was eroded by highly corrosive sulphuric acid, created when hydrogen sulphide gas rose from deep underground pools of oil to mix with surface water leaching downward.

The unique conditions of Lechuguilla have been ideal for the growth of extraordinarily large and well-developed speleothems.

The result is one of the most aesthetically beautiful, min-

erally and geologically diverse, and challenging cave systems to explore in the world.

The known length of this cave today (November 2004) is over 184 km, and at a depth of 489 metres, it is the deepest cave in mainland USA, and is the fifth longest cave in the world. The expeditions featured in this presentation were all to the Western branch of Lechuguilla Cave. As a result of these trips 3.1 km of new passage was discovered, surveyed and inventoried, and 2.0 km was resurveyed. There are still many leads left for future expeditions. The presentation gave an insight into experiences and sights of exploration in Lechuguilla. ■