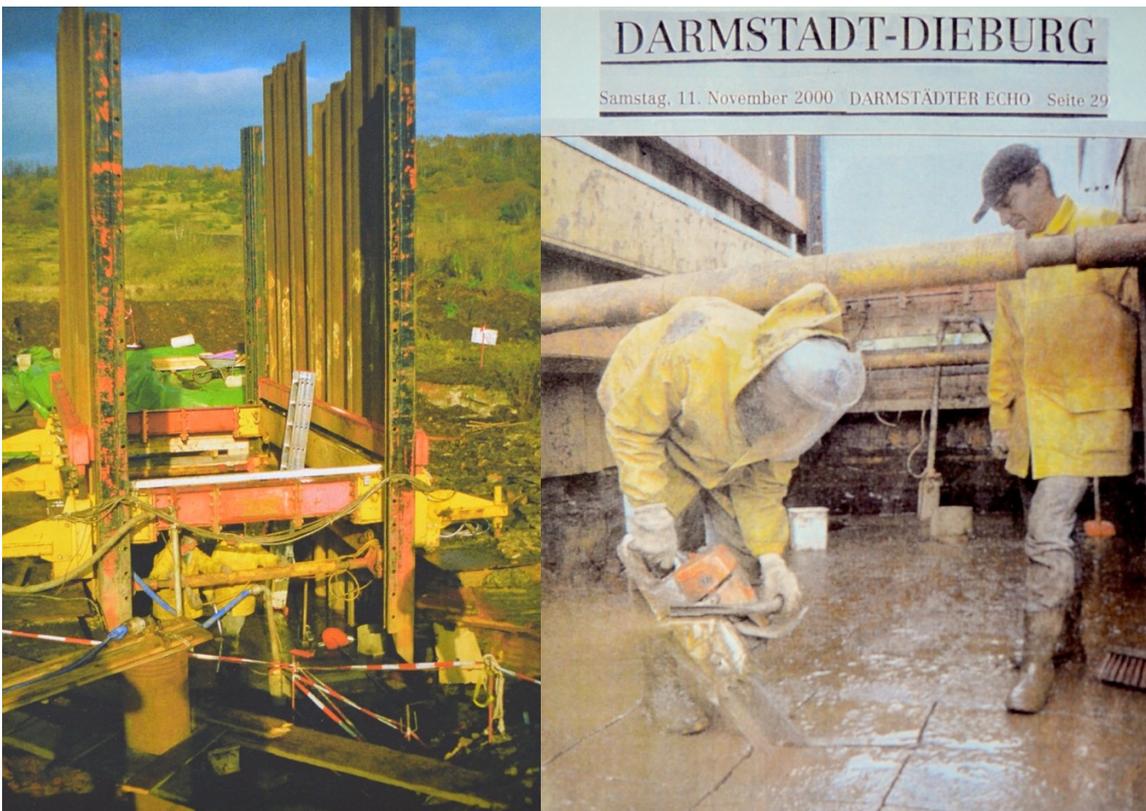


DEEP IN THE GRUBE MESSEL
BY
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This is an account of a deep scientific excavation carried out in The Grube Messel using a hydraulically driven piling machine (Supplied by Krings Verbau GmbH), and was planned and carried out by The Hessisches Landesmuseum Darmstadt Germany. The project leader was Dr Norbert Micklich and two Field Excavation Preparators, Mario Drobek and myself Eric Milsom. The excavation was split into two digging periods, the first began on the 11th September 2000 and ran until the middle of November 2000, the second period was from mid-June 2001 until the 24th October 2001. The Grube Messel is a disused oil shale pit, originally used to produce oil and paraffin, and is 12km from Darmstadt. It was to be used as a waste tip for the cities rubbish, but the Mayor and the residents from the village of Messel stopped this project after a long hard 20year fight. In 1995 the pit came under the protection of U.N.S.C.O and is now safe as a nature reserve and also an area for scientific investigation. (See G.S.I.W = Geological Society of the Isle of of Whight newsletter June 2001 Vol 2 issue 3 pages 13-36 for more details on this subject.) This was not the first time this machine had been used for a scientific investigation, the first time was when I ran the same machine in Burgbrohl in the Eifel Germany, (see G.S.I.W Dec 2000 Vol 2 issue 2) for my account of that dig. The deep in Messel project started with a large digger levelling an area large enough for the piling machine to be placed. The piling machine weighs around 15 tons and has to be assembled on site, this takes one very long day. In Messel we have always a problem with water and as we were going to excavate to a depth of 5mtrs we needed 2 very large 3phase pumps which would run 24hours a day during the digging period. The area inside the machine had to be sectioned by using large chainsaws, and then each block of oil shale was split with knives. On every level (at around 50cm a time) a reference block was cut, and wrapped; these would be split later in the preparation using a scalpel to find very fine details. All vertebrate fossils found were measured in using lasers and G.P.S. We reached our target of 5mtrs deep, and the dig was a great success as many scientific details and important fossils were found.



The Machine at the start of the dig. Cutting our way down me with the chainsaw.