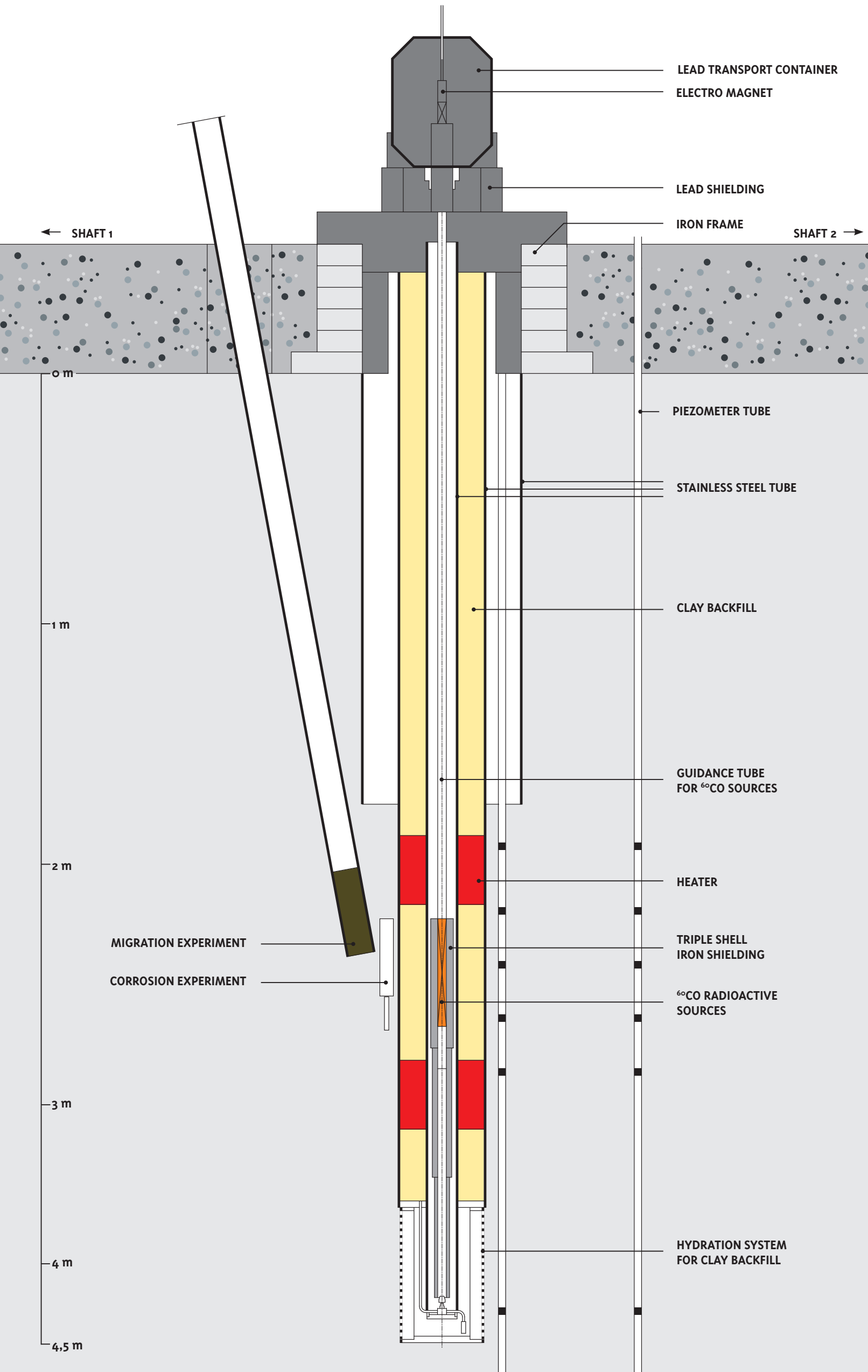


CERBERUS

1985 - 1998

Control Experiment with Radiation for the BELgian Repository for Underground Storage of heat-emitting radioactive waste



GOAL

Demonstration of combined effects of radiation, heat, and drilling on Boom Clay properties.

PHASE 1: 1987 – 1989
Design and installation of the experimental set-up

PHASE 2: 1989 – 1994
Heating and irradiation (simulation of HLW disposal)
1989: installation of ^{60}Co -sources
1989-1994: heating ($90\text{ }^{\circ}\text{C}$) and gamma irradiation
1994: sampling of heated and irradiated Boom Clay and Boom Clay pore water

PHASE 3: 1995 - 1996
Study of the effect of heat and radiation on the near field: chemical, mineralogical and mechanical analyses of heated and irradiated clay

During CERBERUS, a migration test using ^{241}Am and ^{99}Tc was performed and the behavior of backfill material, waste matrix, overpack and canister material were tested.

