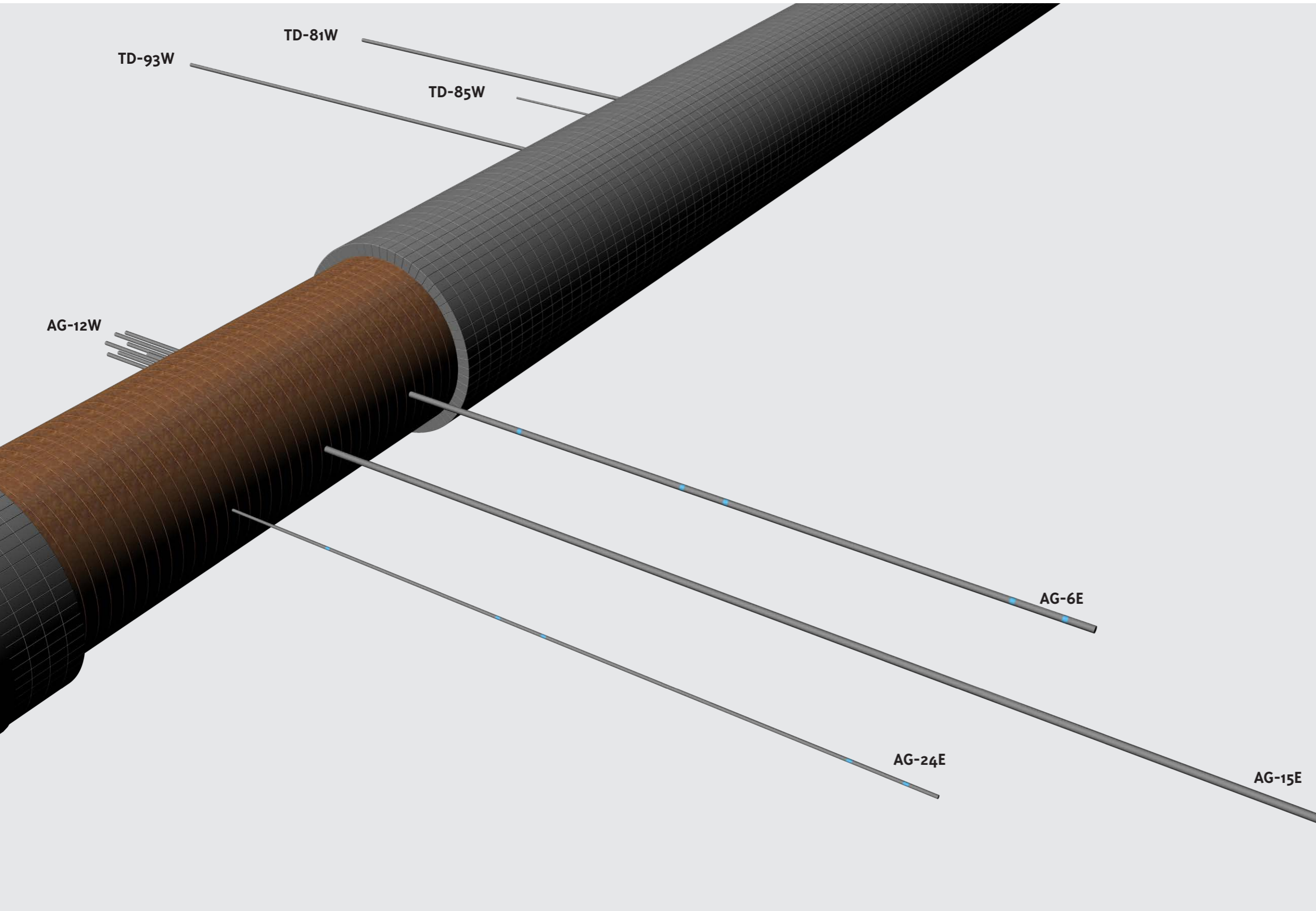


ARCHIMEDES

1991 - 1995

Acquisition and regulation of water chemistry
in a clay formation



GOAL

Study of the composition of Boom Clay pore water. Geochemical characterization of the interstitial fluid. Mineralogical and physico-chemical characterization of the solid phase.

AG-24E & AG-6E

Stainless steel sterile piezometers (15m) with multiple filters at 3, 7, 8, 14 and 15 meters

AG-15E

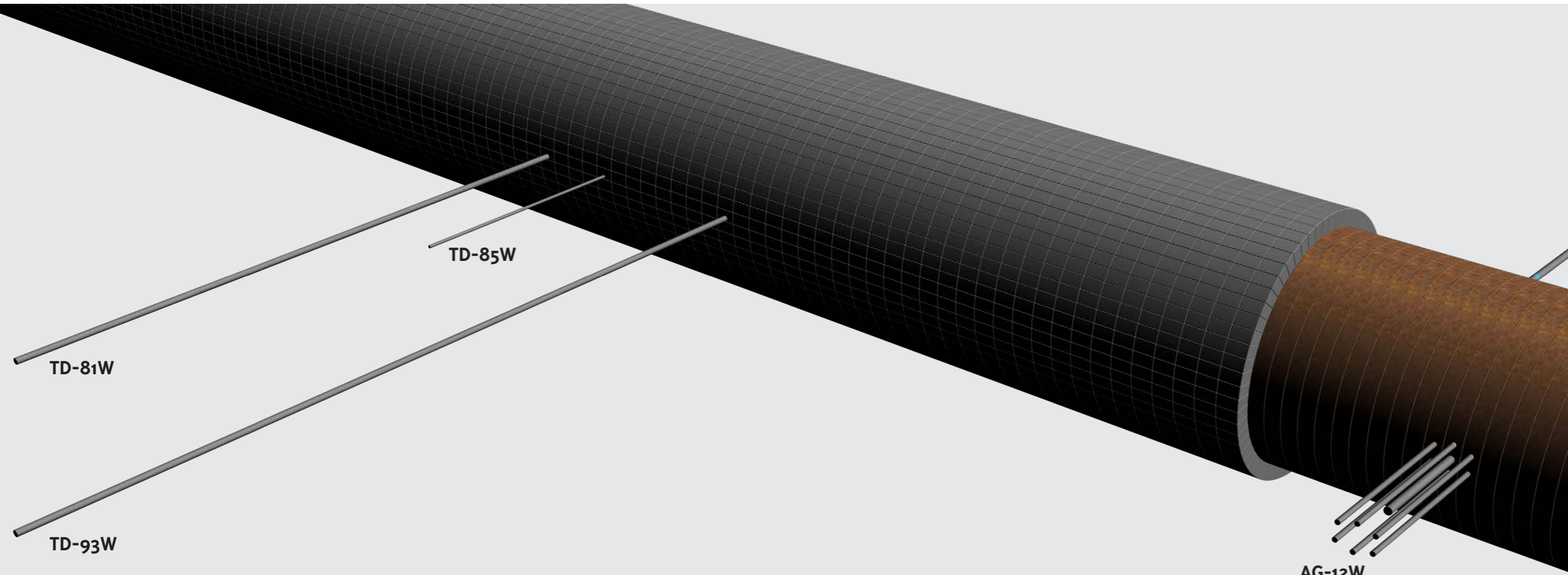
First and successful use of an optode (optical pH electrode) to measure the pH of interstitial water at a hydraulic pressure of 17,6 bar



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GOAL

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chemical characterization
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TD-81W
“Metal-free” dialysis piezometer (CEA)
for H₂O analysis

TD-85W
Follow-up of the cation exchange capacity
of the host rock (BRGM)

TD-93W
Dialysis piezometer

AG-12W
Central tube surrounded by 6 freezing tubes
Analysis of hydrogen and oxygen isotopes
on frozen clay cores (BRGM)
Isotopic measurements on clay water (CEA)

