## Installation of four Piezometers at the Arbón Dam (Asturias)



Property:Viesgo Generación, S.L.Proyect:D. Eduardo Ortega GómezWorks Management:D. Eduardo Ortega Gómez

Contractor: Terratest Técnicas Especiales, S.A.

Auscultation of the Arbón Dam was reinforced by placing 4 vibrating wire piezometers in the abutments of the clay core.

The piezometers were embedded at the bottom of 4 bore holes executed from the crowning. Perforation was in dry and with continuous extraction of the check sample.

The placing sequence was as follows: each piezometer, once placed at the bottom of its bore hole, was surrounded by a layer of filter strained sand. A bentonite stopper was then placed and the remaining bore hole was backfilled with a combination of cement-bentonite.

The avoid the cabling from interfering with the road traffic at the crowning, a series of clearing passes were executed in the pavement, equipping each bore hole with a manhole at its head.

Read-out was centralized in a terminal box installed in the control hall at the dam's crowning.

## **GENERAL CHARACTERISTICS**

ROTATION PERFORATION FOR EXTRACTION OF CHECK SAMPLE (Ø 86)

INSTALLED VIBRATING WIRE PIEZOMETERS,

CABLE FOR 4 CONDUCTS,

READ-OUT CENTRALIZATION POINT,

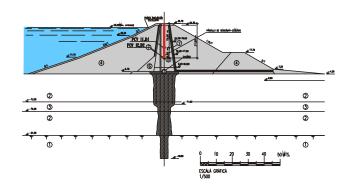
DIGITAL PORTABLE VIBRATING WIRE READER,

PASS CLEARING AT CROWING FOR CABLE CONDUCT,

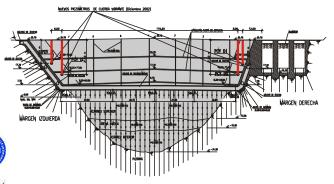
25 IM.

26 JM.

## Vibrating wire piezometer









Exp. A-02-014-P