

Installation of four Piezometers at the Arbón Dam (Asturias)

Property:	Viesgo Generación, S.L.
Project:	D. Eduardo Ortega Gómez
Works Management:	D. Eduardo Ortega Gómez
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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.

To 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)	72.5 IM.
INSTALLED VIBRATING WIRE PIEZOMETERS,	4 units.
CABLE FOR 4 CONDUCTS,	323 LM.
READ-OUT CENTRALIZATION POINT,	1 unit.
DIGITAL PORTABLE VIBRATING WIRE READER,	1 unit.
PASS CLEARING AT CROWING FOR CABLE CONDUCT,	23 LM.

Vibrating wire piezometer

