



Sault-Brénaz dam

Leak detection: measurement of the conductivity of water and tracer dyes

Transforming your infrastructure into living assets



Sault-Brénaz dam



Measuring device for the electrical tracing method

Engineering Services

Monitoring Services

Platform Solutions

Mapping Services



**Sault-Brénaz (01)
France**



**Started in 2015
1 months**



CNR

Key figures

10
tracings (1 per day)

150kg
of salt for 1m³ of
brine for each
tracing

10
conductivity points
for each tracing

Dam on the Rhone

The Sault Brénaz dam or Villebois dam or Sault-Brénaz development is a hydroelectric development on the Rhone, directed and managed by the 'Compagnie Nationale du Rhône (CNR)' and located near Sault Brénaz and Villebois, in Ain. It includes a dam and a hydroelectric plant.

Inaugurated in 1986, it is the last stage of the development of the upper Rhone by the CNR. With an installed capacity of 45 MW and an annual production of 245 GWh / year, the plant is the smallest in this section of the river.

The dam was built between the island of Serre and the right bank of the Rhone, while the plant is built on the other arm of the river.

Leaks in the dyke

The dyke gate is the source of the leaks downstream from the dam. This phenomenon appeared at the time of commissioning the development in July 1986.

A study area was defined on the left bank immediately downstream of the dam. An analysis of the incident was followed by a preliminary stabilisation and additional geotechnical and geophysical studies were made between 2002 and 2007.

From the results of these investigations, a test with water reactive resin was recommended as a pretreatment for blocking the most significant flows. This treatment was carried out in October 2007.

Analysis of the results of the test, with geophysical measurements before and after, showed that resin treatment is generally effective, even if not 100% continuous.

contact@sixense-group.com
sixense-group.com