



CLEAN OIL  
BRIGHT IDEAS

Application Study  
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# Hydraulic Oil Hydroelectric Dam, River Level Regulation Valve

## CJC™ Application Study

### THE CUSTOMER

EDF - Hydraulics Operations Group Lot Truyère  
Site: Villeneuve sur Lot  
Contact person: Mr. Christophe Berlib

### THE SYSTEM

**Système:** Hydraulic cylinder, plate mounted valve  
**Type:** Hydraulic Oil DTE 13M  
**Volume:** 600 L

### THE PROBLEM

Ingress of water in oil through the seals in hydraulic cylinders as well as a generally high humidity in the environment lead to wear on components and an increased risk of failure on critical components.

### THE SOLUTION

A CJC™ Filter Separator PTU2 27/27 PV4-14-4 Mobile with a flow of 90 L/h and CJC™ Filter Insert 27/27 BLAT was installed.

### THE TEST

The first application was a bulk of yellow oil at 9°C with 3,960 ppm of water, almost ten times the maximum recommended for manifolds and pumps. After 24 hours of circulation through the offline CJC™ Filter Separator, the water content in oil had been reduced to 517 ppm.

In the weeks that followed, winter began and the temperature outdoor became very low, and the oil temperature dropped to 3°C. Despite this, using the CJC™ technology and not applying heating, the water content was further reduced below the target (< 400 ppm) in two weeks.

### THE RESULT

With a mobile CJC™ Filter Separator, many oils tanks were treated with the same result; Clean and dry oil by a simple offline circulation, whatever the temperature was.

### COMMENTS

*Mr. Christopher Berlib, responsible for the maintenance of dams from Villeneuve and Temple sur Lot:*

*«The laboratory reports have confirmed our first-hand impression: From day one, the effect was evident. We returned to good values, and it allowed us to operate with oil of the right quality. We treated 2 tanks in a month with the same ease and the same result. Components such as flow-blocks and pumps are now preserved.»*



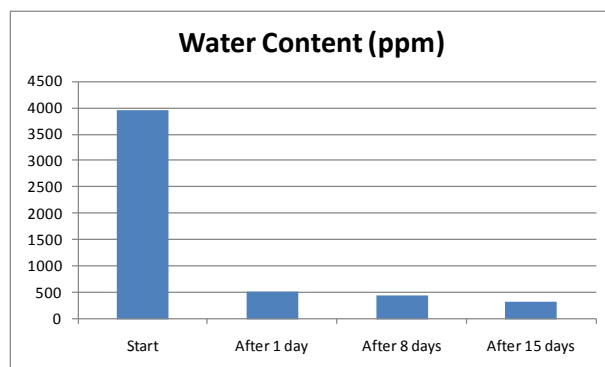
EDF Hydroelectric Dam France



CJC™ Filter Separator PTU 27/27 Mobile



Oil samples before and after one day with CJC™ Filtration



### THE RESULT

	Start, BEFORE CJC™ Filtration	AFTER one day CJC™ Filtration
Water content, ppm	3,960 ppm	517 ppm
ISO Code	17/16/11	14/13/8

Analysis taken by Filtrex, Netherlands