



CLEAN OIL
BRIGHT IDEAS

CJC™ Application Study

Application Study
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CUSTOMER

Power Station

THE SYSTEM

Diesel backup storage tank.
Tank volume: 4,000,000 L.

THE PROBLEM

3 times every year the power station run their gas turbine for 3-5 days on diesel to test their gas supply failure plan. Unfortunately, the diesel quality was not up to standard level for use in the turbine. The power station had no choice but to clean the oil. Large amounts of water, diesel bugs (microbial contamination) and particles were detected in the diesel oil, plus high levels of sodium and potassium.

THE SOLUTION

A CJC™ Filter Separator PTU3 2x27/108 MZ-E2PTWXY with a pump flow of 1,680 L/h was installed, using CJC™ Filter Inserts F 27/27.

THE TEST

Due to the large amounts of water and sludge, some filter insert changes were expected in the beginning. 3 sets of filter inserts were used to remove the worst of the dirt and water.

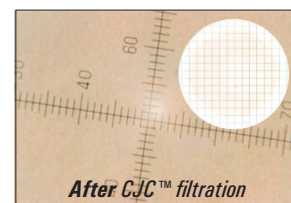
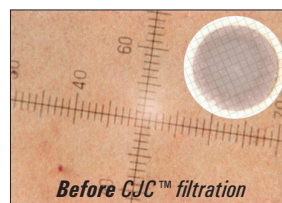
THE RESULT

In only one passing through the filter, the water level was reduced from 702 ppm to 71 ppm. Approximately 1,500 L of water were removed from the diesel oil.

The 2 micron particle contamination was reduced from 28,860 to 17,041. Sodium and potassium levels decreased to below recommend levels.



OIL SAMPLES



THE RESULT

| | BEFORE | AFTER |
|------------------|----------|----------|
| ISO Code | 15/14/11 | 15/13/10 |
| Particles, 2 µm | 28860 | 17041 |
| Particles, 5 µm | 13468 | 7696 |
| Particles, 15 µm | 1040 | 650 |
| Water, ppm | 702 | 71 |

WATER DEVELOPMENT

