



**CLEAN OIL**  
**BRIGHT IDEAS**

Application Study  
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## CJC™ Application Study

### CUSTOMER

Compañía Minera Disputada de las Condes  
CMD. "Los Bronces" Mines, Chile.

### THE SYSTEM

Transmission system on the Dresser dumper N°21 containing 2 x 40 litres of synthetic oil ISO VG 220.

### THE PROBLEM

Due to the harsh working conditions the oil was extremely contaminated with both wear metals and abrasive dust from the environment.

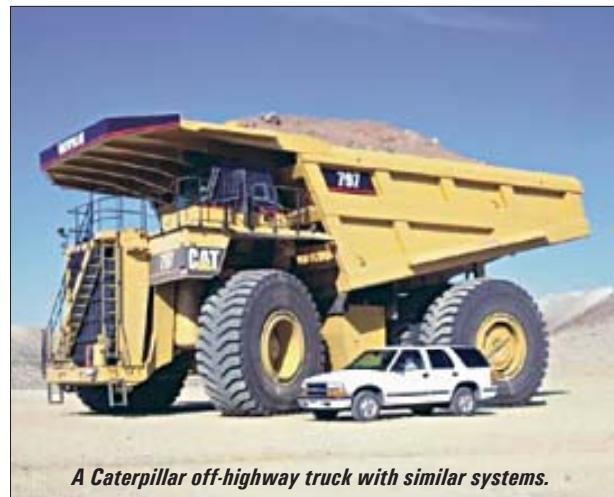
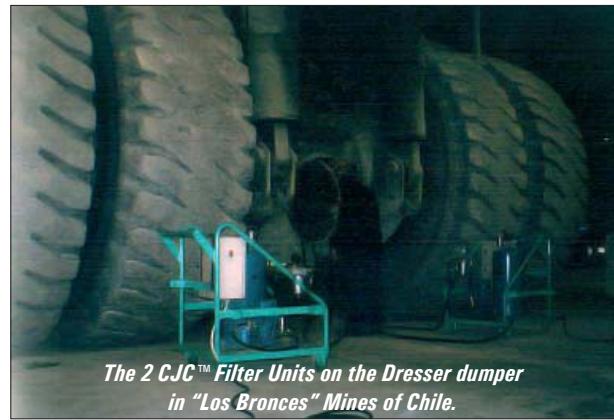
The only way the client could reduce the contamination level was by changing oil frequently. It is only possible to clean the system during service overhauls lasting 1-2 hours a week.

### THE SOLUTION

In order to arrest the problems quickly two **CJC™ Fine Filter HDU 27/54 EH1PTM** were installed. Two cellulose based **CJC™ Filter Inserts B 27/27** (3 micron abs.) were used. Cellulose is a highly polar material which ensures efficient absorption of the resin from the oil system.

### THE RESULT

In the first test, in a 45 minute period, the contamination level decreased 3 ISO codes and iron was reduced by 37%. It is estimated that the above reduction in contamination will result in 3 times longer lifetime on both transmission system and oil.



### THE RESULT

Particles per mL	Before	After
5 micron	47,940	9,233
15 micron	967	43
ISO	23/17	20/13
Iron	61 ppm	38 ppm

### COMMENTS

*The oil in the transmissions are cleaned up to the level of new oil in only 2 hours.*