



# Gear Oil Dumper Truck Transmissions

## 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.

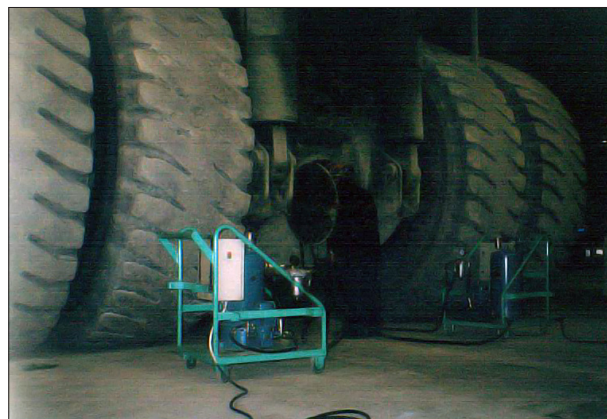
The only way the client could reduce the  
contamination level was by changing oil  
frequently. It is only possible to clean the system  
during service overhauls lasting 1–2 hours a  
week.

### THE SOLUTION

In order to arrest the problems quickly two  
**CJC® Oil Care System 27/54** with **CJC®  
Fine Filter inserts type B** were purchased. The  
fine filter inserts remove particles, water,  
oxidation residues and acids from the oil.  
Filter material: 100 % natural fibres  
Filtration degree: 3 µm absolute, 1 µm nominal  
Dirt holding capacity: up to 20 kg per system  
Water absorption capacity: > 1.8 L per 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 2 CJC® Oil Care Systems on the Dresser  
dumper in "Los Bronces" Mines of Chile.*



*A Caterpillar off-highway truck with similar systems.*

### THE RESULT

	BEFORE	AFTER
Particles, 5 micron	4,794,000	923,300
Particles, 15 micron	96,700	4,300
ISO Code *)	23/17	20/13
Iron	61 ppm	38 ppm

\*) Further information on cleanliness classes are available on request.

### COMMENTS

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