Haul Truck Brake Filtration Operational & Component Improvement

Prepared by: Contamination Control Services, LLC

Problem

A large mining customer was experiencing short component life in their haul truck fleet. One issue was contamination related to wear in the brake packs causing premature failure in the final drives. The final drive life was averaging 1612 hours.

Solution

Pall Athalon filters were installed in the brake cooling circuit of the final drives. They were equipped with a 35 PSID differential pressure monitor with a light wired to the cab.





Results

Before the drives were failing on average every 1612 hours. After the installation of the Pall Athalon filters the drives have gone over 4200 hours with no failure yet.



Particle Count Summary		
Particle Size	BEFORE Avg. # per ml	AFTER Avg. # per ml
4μm(c)	33,486	781
бµт(с)	8,164	234
14μm(c)	1,204	12

