1 BACKGROUND
A mining truck fleet customer contacted Schroeder Industries with interest in cost-savings by reducing unscheduled truck maintenance, extending the service life of critical components and fluids and increasing availability and efficiency of mining truck fleet with hydraulic drive systems.

2 PROBLEM
This customer was spending an unnecessary amount of time and money with unscheduled truck maintenance due to excessive contamination in their fluid. They had no processes and procedures set in place to monitor the condition of their fluids at the points of use.

3 SOLUTION
It was determined that a Fluid Condition Monitoring (FCM) process should be put in place. This included the use of portable and in-line particle counters in the trucks’ hydraulic system, as well as off-line filtration systems for fluid conditioning.

4 RESULTS
With a low conversion cost, Schroeder and the customer were able to convert the fleet of mining trucks to support an FCM. This allowed the customer to monitor and treat the hydraulic fluid in their system regularly and perform preventative maintenance to reduce unscheduled maintenance work. With limited unscheduled maintenance time, this helped the customer maintain fleet availability. The component service life also increased. With the help of Schroeder, the customer looked at a direct cost savings of $222,429 in a 12-month timespan.