

Magnetic Filtration Case Study

Update May 2013

There have been no pump or seal failures in the hydraulic system in the past 6 years.

Calfrac(Previously Frac Source) Coil Tube Service Truck Red Deer, Alberta

APPLICATION: Hydraulic Filtration

PROBLEM: Ferrous Metal Contamination during pre-commissioning test of new equipment.

SOLUTION: Rob McQuinn of Wajax, a distributor for OEI, suggested the installation of an OEI 3000 series magnetic filter rod in the hydraulic reservoir. The removal of this contamination down to submicron level will extend hydraulic fluid and component life and increase system reliability.

RESULTS: The magnetic filter rod was installed for warranty protection when the truck was built for Calfrac. The senior design engineer Oleg Tsvik was so impressed he assigned the OEI filter as an OEM part. Photo A was taken after 20 months in the field. The Calfrac maintenance manager Colin Penz observed this significant amount of ferrous metal and stated **"it sure shows what traditional filters miss", if the metal was left in the system we may have lost a pump, not to mention seals"**.

The hydraulic system, pumps, and seals have been protected from failure and the system has operated without downtime since the installation of OEI's magnetic filtration technology in 2007. Photo B, taken in May 2013, shows the contamination collected on the rod since its last PM period.

RECOMMENDATION: The OEI magnetic filter is easily cleaned and the trapped contamination can be analyzed for component wear identification allowing predictive maintenance planning.

For further information contact our office or visit our website www.OneEyeIndustries.com.

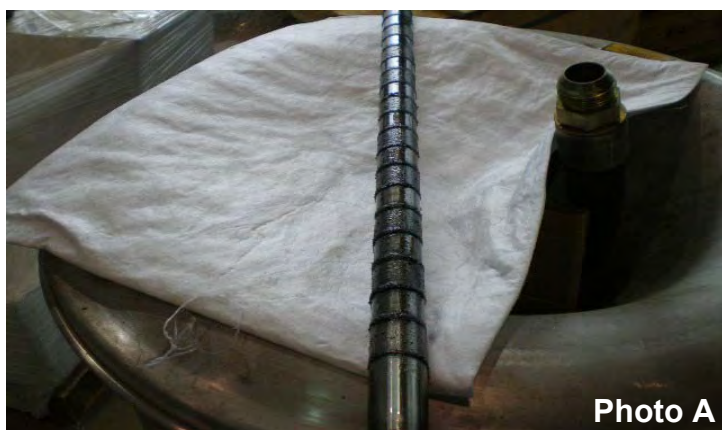


Photo A



Photo B