



FM2 Bypass Oil Filter Metering Valve, Cat 160 H : JR Hale Contracting, Albuquerque

On January 2004 , installed a Kleen Systems KS-100A-FM2 metering valve and Filter Technology Australia FM 2 bypass oil filter on a Caterpillar 160H motor grader.

At 1509 hours a scheduled oil sample indicated an ISO code of 21/16 with 5-micron count of 10,621ppm. Terrill Wade, maintenance superintendent, alarmed with the ISO levels in his Hydraulic System fitted the OEM's two micron filter to endeavor to reduce ISO levels further this was achieved reducing it to 19/17 at 1841 hours with the 5-micron count now at 4,666 ppm. Not happy with this result Terrill installed the Kleen System his first sample was taken at 1951 hours, 110 hours after installing the Kleen System the ISO was reduced to 16/13 with the 5-micron count is now 341ppm.

In 110 hours after installing the Kleen Systems KS-100A-FM2 the particulate contamination has been reduced by 93%.

The Kleen Systems valve was pre-set to flow 1 LPM and used FTA FM2 a two-element oil filter.

Easy access is provided to the Cat sample port and pressure gauge on the valve. Also, very easy access to the particle trap for easy element changes.



Each element will hold about two pounds of particle contamination.



Terrill Wade will do his first element change at 250 hours and his scheduled change goal is 1000-hour intervals.

Further monitoring of the Hydraulic System using Oil Analysis will determine if oil life can be extended further early results indicate this will be achieved.