

Factory Dust Sample



Uplifted from machine surface

This image at 100X indicates the average wear debris and contamination deposited on the analysis filter from 1 CC of the sample being forced through the 3- $\mu m$  Membrane Analysis Filter.

The brightness of microscope's bottom Green/Blue light shining up through the sample provides an indication of the level of wear debris and contamination per CC of sample.

100 µm



Uplifted from machine surface

## Organic Debris & Fibres @ 200X Sized 0.5-230 µm

There was a light amount of these light airborne organic fibres in the sample.

50 µm



Tape sample





Organic Debris & Fibres @ 200X Sized 0.5-300 μm

There was a light amount of these light airborne organic fibres in the sample.

50 µm









There was a moderate amount of these glass fibres deposited upon machine surface.

50 µm





Tape sample

Uplifted from machine surface

### Organic Fibres & Glass Fibres @ 200X Sized 0.5-150 µm

There was a moderate amount of these glass fibres deposited upon machine surface.

50 µm





# Uplifted from machine surface

#### Organic Fibres & Glass Fibres @ 200X Sized 0.5-150 µm

There was a moderate amount of these glass fibres deposited upon machine surface.







# 010715 Results Conclusions and Recommendations

The Factory Dust Sample Oil Sample indicates factory dust include organic debris, glass reinforcement fibres from the plastic, a few polymer particles and a light to moderate amount of fine hard silica type crystals found on the tape sample. The majority of this dirt and debris will either damage the lubricant and or damage the hydraulic pump indicating hydraulic reservoir breathers will be best upgraded to prevent any environmental contamination entry.

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Rob Simmonds Reliability Manager

The analysis provided is indicative of conditions based upon sample information received and quality of sample processed. Recommendations are provided as a guide only. Any decisions relating to repair of components or changes to procedures are entirely at the discretion of the customer.