



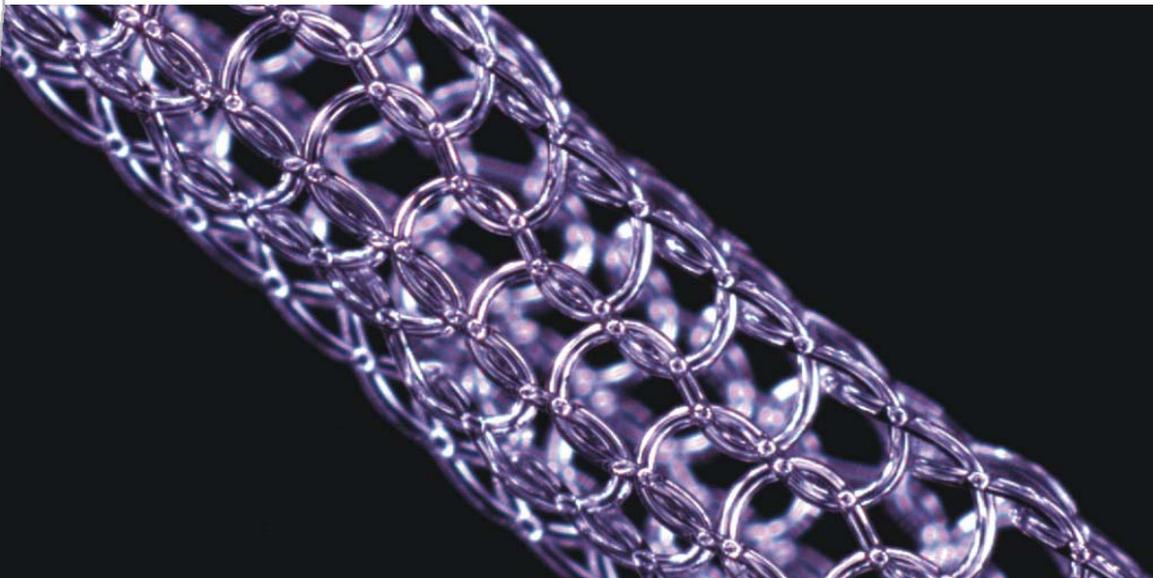
## Microscopy Report

Materials Science & Engineering  
Report Number: 2558  
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Client Name: Amazing Turf

CSIRO Contact: Colin Veitch

Commercial-in-confidence



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A piece of each component of the sample was placed on conductive carbon tape on a sample holder. This was then placed in the Hitachi S4300 SE/N Scanning Electron Microscope (SEM). The microscope is equipped with a TSI WinEDS Energy Dispersive X-ray System (EDXS) which was used to perform the elemental analysis of the sample.

The following figures show images and spectra from each sample – dark green “grass” (figures 1 and 2), light green “grass” (figures 3 and 4), brown “grass” (figures 5 and 6), the black ribbon like material from the base (figures 7 and 8), the fibres from the base (figures 9 and 10) and the rubber base (figures 11 and 12). The rectangular box in each image indicates the area which was used for analysis.

In each case the large peak at the low energy end of the spectrum is carbon. There were traces of sulphur in the two green “grasses”, with even smaller traces of titanium and chromium in the lighter shade. These presumably come from the pigment. Aside from a small amount of calcium in the black ribbon fabric, some oxygen in the black fibres and some oxygen, magnesium, aluminium, silicon and calcium there were no other elements detected. No heavy metals were detected in the sample.





Figure 1

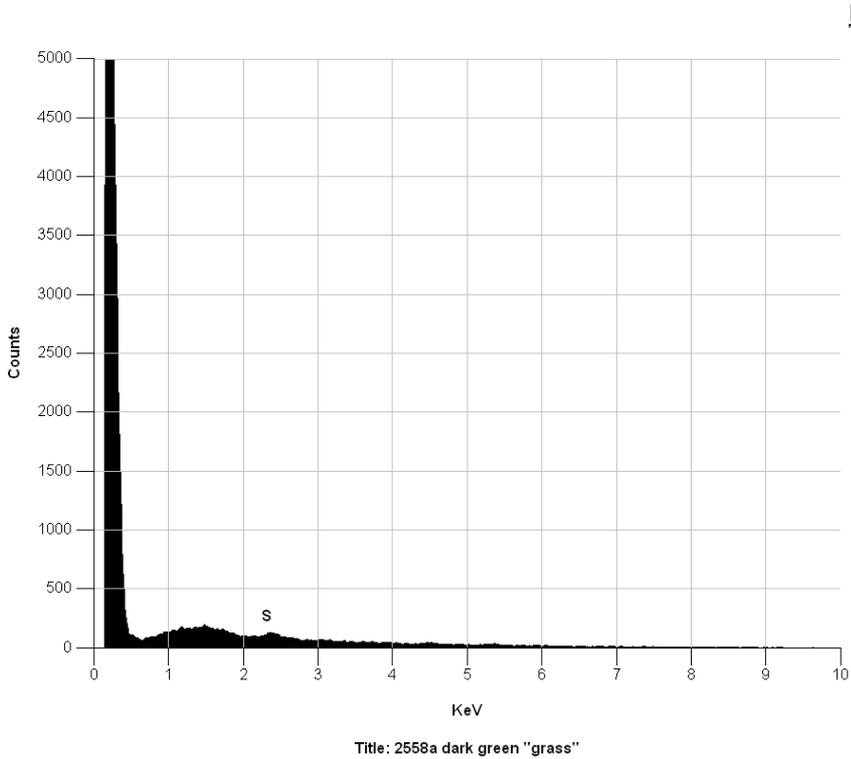


Figure 2



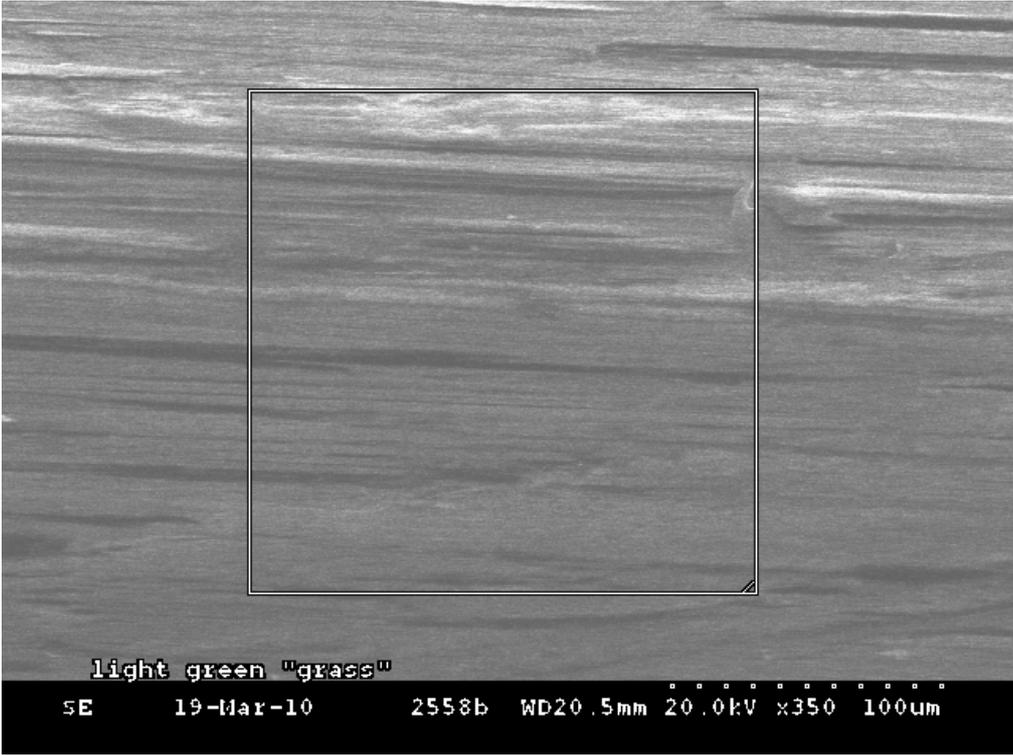


Figure 3

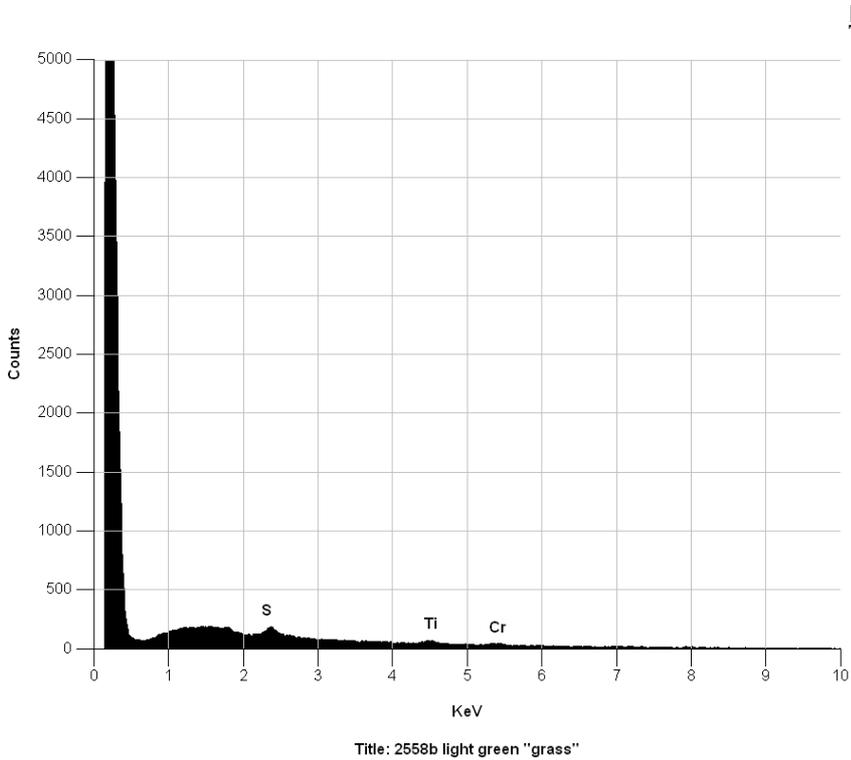


Figure 4



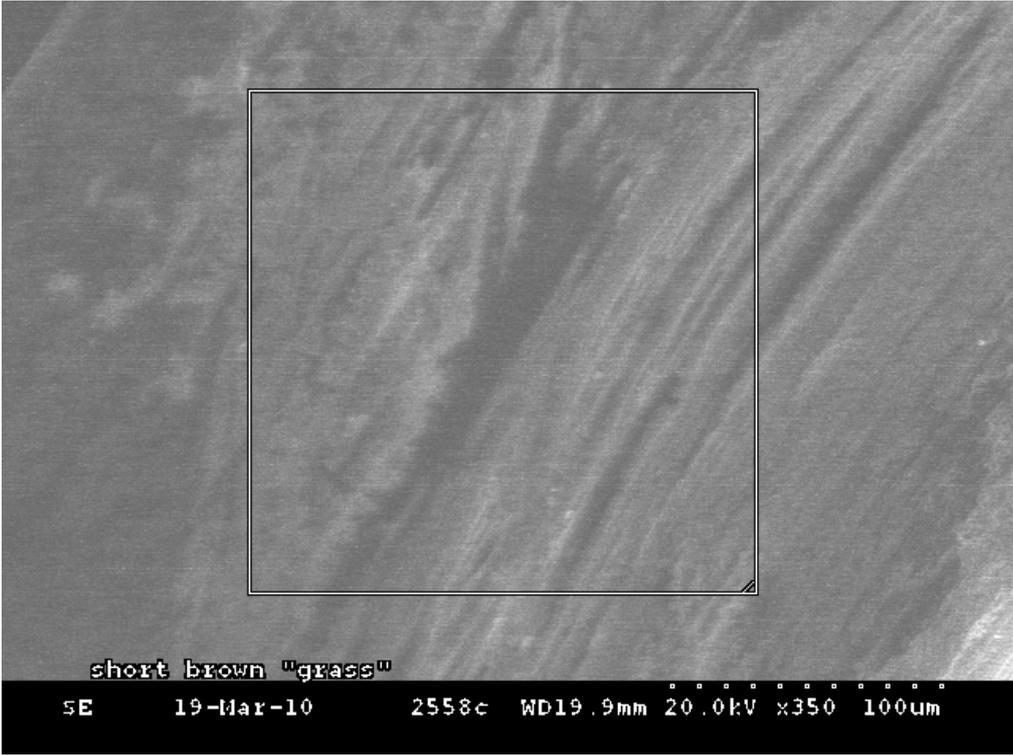


Figure 5

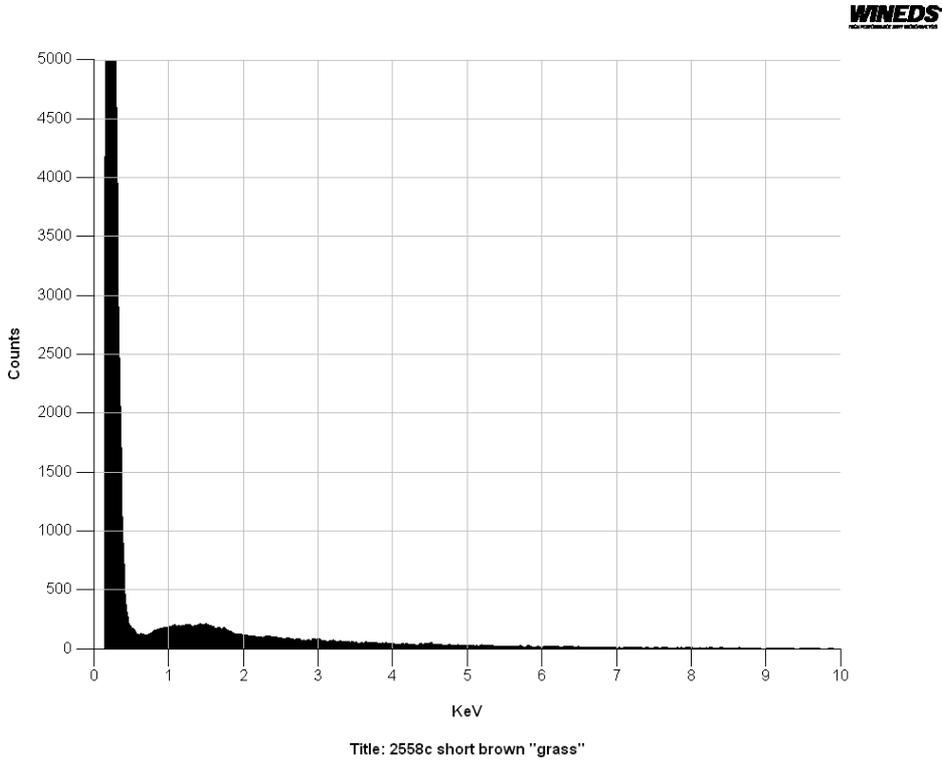


Figure 6



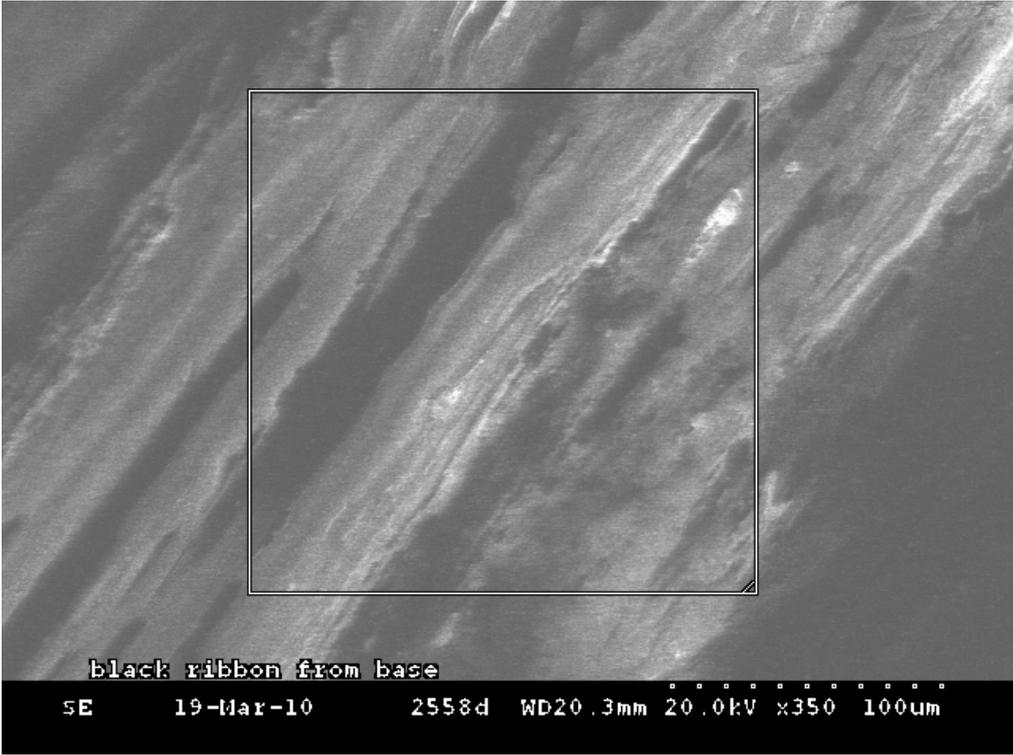


Figure 7

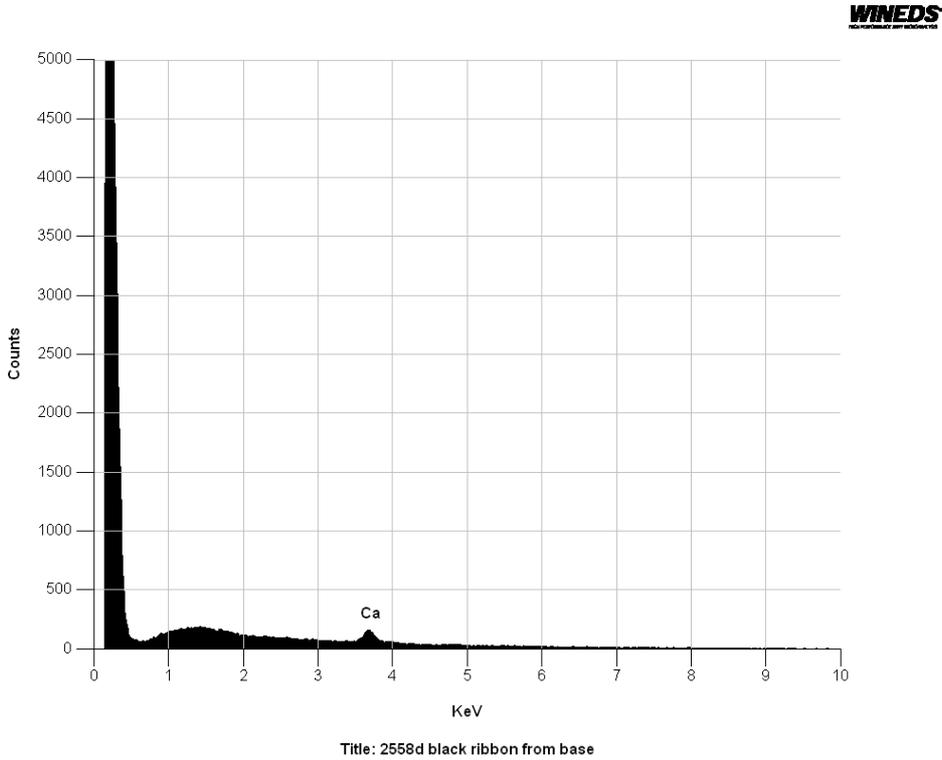


Figure 8



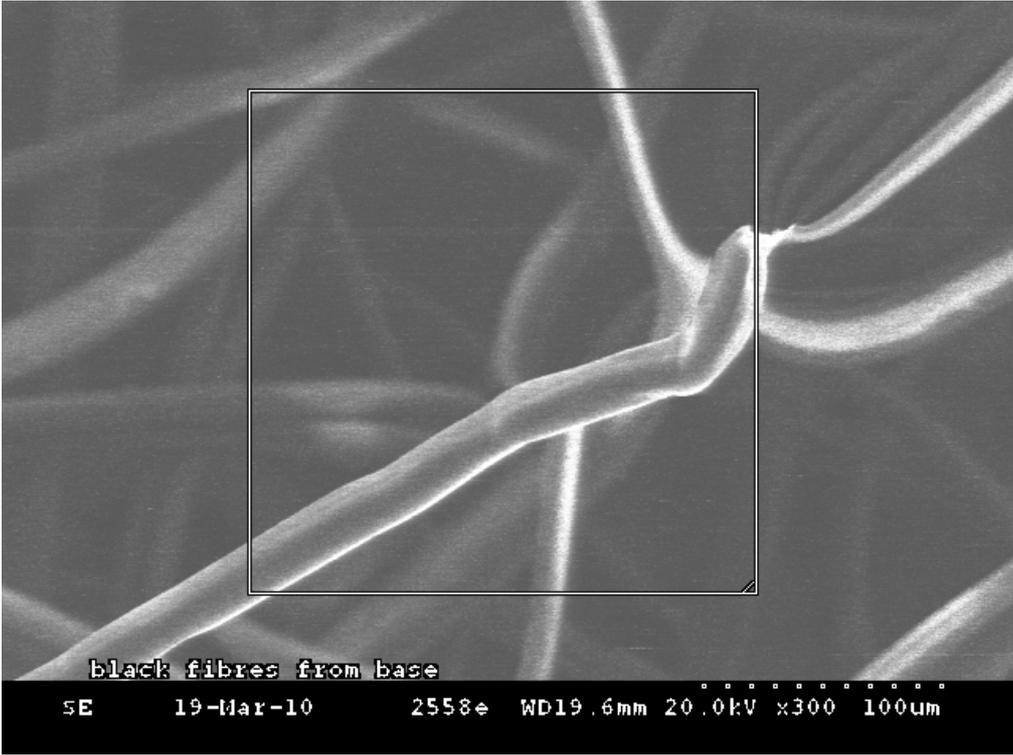


Figure 9

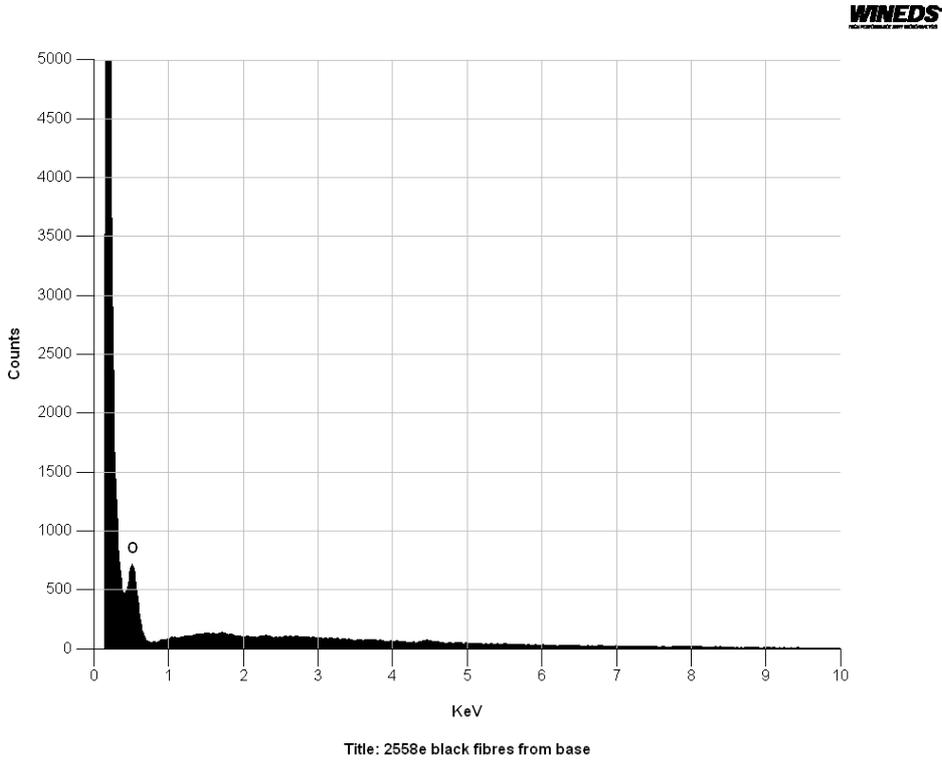


Figure 10



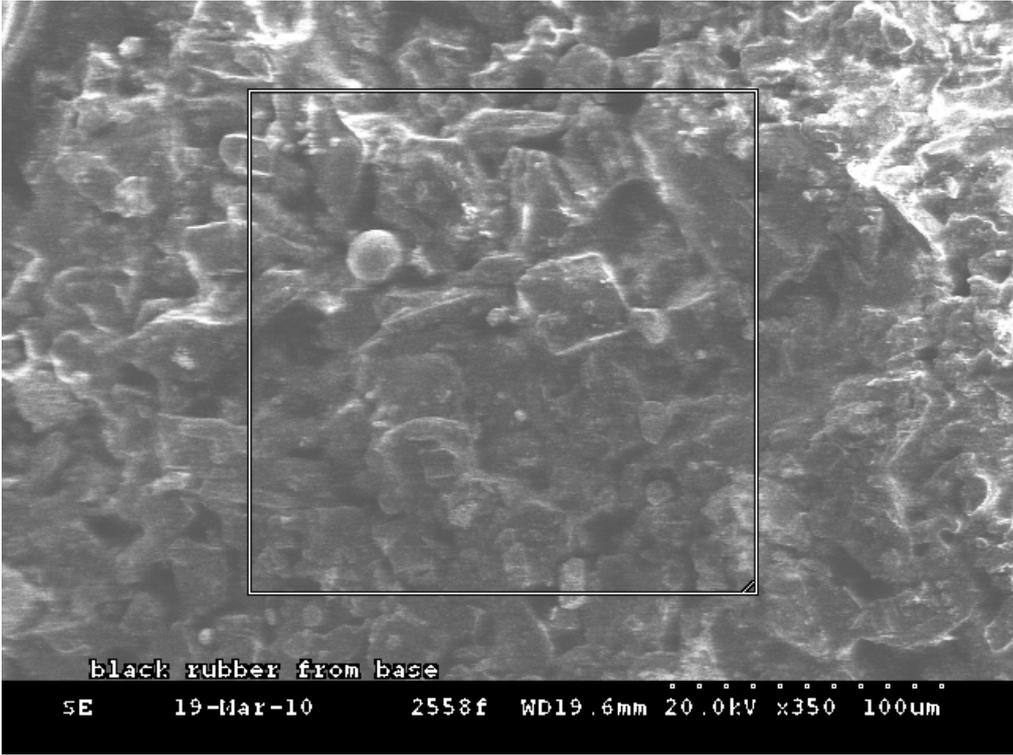


Figure 11

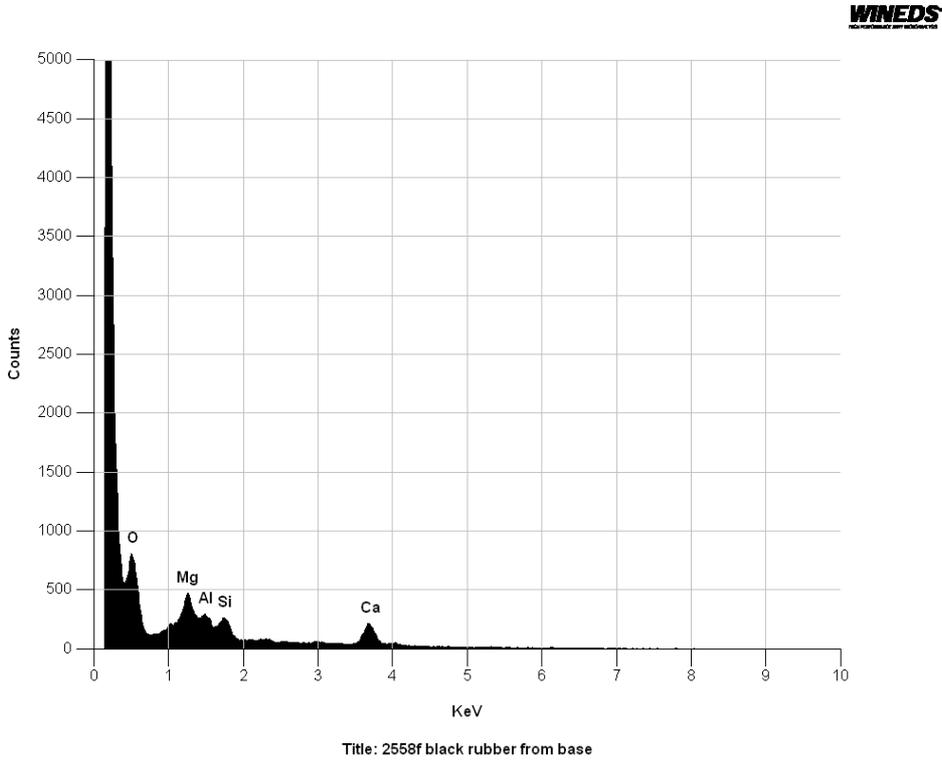


Figure 12



*This Report is a summary of the results obtained from the Services carried out on the Client Contributions both of which are described above. CSIRO will accept no responsibility for any interpretation, opinion or conclusion that any person forms as a result of reading this Report. The results contained in this Report apply only to the sample submitted to the laboratory. This Report must not be reproduced without the written authority of CSIRO and then must only be reproduced in full.*



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