# 1. BY POST AND BY EMAIL

Mr D. Stock, Barrister and Solicitor, PO Box 13852, Christchurch, 1/03/2011

Dear Mr Stock,

The Commerce Commission has received three submissions which refer to my own earlier opinion. I would like you to provide the following additional points to the commission in this regard.

## The Submission by Mr Ranford.

Firstly Mr Ranford should have made it known to the Commission that we are former colleagues. Although Mr Ranford was a relatively junior member of the WRONZ staff and reported to me by a more senior intermediary, I had line responsibility professionally for the oversight of his area of work and indeed most of the research work in wool testing and textile physics in general for approximately twenty years.

Mr Ranford confirms that there are a variety of possible reasons why the base Y value might be affected by changes in chemical usage or blend composition during scouring.

He confirms that the retest precision is 3 units of Y.

#### The Submission by Mr Fookes.

Mr Fookes says that there are a variety of techniques which may be used to influence Y during scouring. I also made that point in some detail in my letter to you, so this is not in fact a point of disagreement as stated by Mr Fookes.

Mr Fookes also confirms that the retest precision is 3 units of Y. I pointed out in my letter to you that in assessing the statistical significance of the reported changes in post scouring Y values, one also had to make allowance for the averaging effects of the central limit theorem. Mr Fookes correctly notes that this improves the precision by the square root of the number of samples used.

In essence the only point of disagreement between my submission and these other two technical submissions is in relation to whether the post scouring change in Y is statistically significant, and if it is, to what can it be ascribed. I remain of the opinion that the change in Y reported over a ten year period is so trivially small that there is doubt as to its significance. Whilst it may be that a very small real improvement has indeed taken place, say of 0.8 units, as I suggested in my earlier letter, it is just not possible from the Cavalier application, in my opinion, to conclude why this has occurred. There are numerous possible causes of such a minor change in Y, most of which have been described to the commission by myself and now confirmed by Messer's Ranford and Fookes.

## The Letter Submitted by Bell Gully

There is no technical disagreement, as claimed by Bell Gully, between my comments to you and the submissions by Mr Fookes and Mr Ranford regarding the retest precision of the colour test. They both agree that the retest precision is 3 units. My purpose in citing the figure of 3 units for the retest precision was to put into context the scale of any improvement which might have been achieved. Of even more significance in this regard is the point I made that most observers cannot distinguish two different wools by eye if they are within 1.8 units of Y of each other. In other words the claimed improvement in base Y would not be apparent by eye to most observers.

I did not imply, or attempt to imply, or assert in my letter that CWH had mistaken an increase in "As is Y" as being an increase in base Y.

## The Annexure to the Bell Gully Letter

It is correct that I have from time to time provided consultancy services to NZWSI mainly in relation to scouring technology matters. It is also the case that I have in the past been engaged professionally by CWH, and indeed had a working relationship with this company for over twenty years. Their scouring plant at Awatoto was the site of the first trials of the computer wool blending technology I developed whilst employed by WRONZ, and early WRONZ needle trials were conducted by me at their tufting plant in Auckland. I have also provided consultancy services to SGS-WTS, the main competitor in wool testing to Mr Fookes former employer, NZWTA.

As stated by Bell Gully in section 1.3 of the Annexure, the primary difference in the expert advice concerns whether a small difference in base Y has been achieved and if so to what can it be ascribed.

It is not correct to say that I believe the change, if it exists at all, is for reasons other than the modifications made to the scours by Cavalier. Indeed I have set out a possible reason why this might have occurred through reduced iron staining. However given the range of alternative explanations, the triviality of the possible improvement, and the length of time over which others factors might have drifted slowly, I remain of the opinion that there is insufficient evidence to draw any particular conclusion as to causality.

Bell Gully state in section 1.5 of the Annexure that there seems to be no dispute that CWH has developed its scour lines to a greater degree than WSI. They also suggest in section 2.2 b (iii), that changing the WSI scour lines might achieve a 2 unit increase on WSI wools without increasing the use of peroxide.

On the contrary, I made it quite clear in my letter to you that, "it is my opinion that no relevant information has been provided in the application to support the contention that the Cavalier scours can achieve a base colour result, Y, different from that achieved with the NZWSI scours as they are presently configured. I consider that there are sound scientific grounds for doubting that this is the case." This remains my opinion. There is in fact still no evidence whatsoever presented by CWH, or before the Commission, as to whether or not the same lot of wool scoured in a NZWSI plant would have a lower, equal, or higher Y result than might be achieved by CWH in any of their plants. There is no information reported either as to what changes NZWSI have also made over the last ten years in their plants, apart from having developed and launched their Glacial<sup>TM</sup> product.