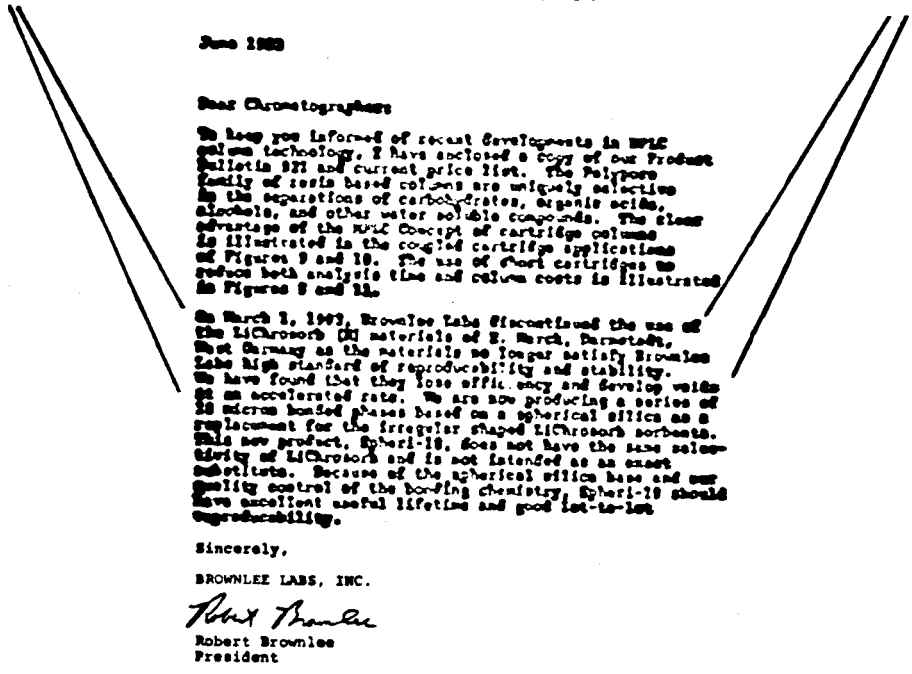
Waters
Lab Highlights
An Internal Communication of Applications and Techniques
LAH 0132 TH 10/83

PERSPECTIVE ON COLUMN QUALITY

The letter below suggests that customers who have purchased Brownlee columns have been very disappointed with the quality/lifetime of their columns, perhaps for a long, long time.

EXCERPT FROM "THE LETTER" OF JUNE 1983

"On March 1, 1983, Brownlee Labs discontinued the use of the LiChrosorb (R) materials of E. Merck, Darmstadt, West Germany, as the materials no longer satisfy Brownlee Labs' high standard of reproducibility and stability. We have found that they lose efficiency and develop voids at an accelerated rate."



June 1983

Dear Chromatographer:

To keep you informed of recent developments in HPLC column technology, I have enclosed a copy of our Product Bulletin 101 and current price list. The Polypore family of resin based columns are uniquely selective for the separations of carbohydrates, organic acids, alcohols, and other water soluble compounds. The clear advantage of the HPLC Concept of cartridge columns is illustrated in the coupled cartridge applications of Figures 9 and 10. The use of short cartridges to reduce both analysis time and column costs is illustrated in Figures 8 and 11.

On March 1, 1983, Brownlee Labs discontinued the use of the LiChrosorb (R) materials of E. Merck, Darmstadt, West Germany as the materials no longer satisfy Brownlee Labs high standard of reproducibility and stability. We have found that they lose efficiency and develop voids at an accelerated rate. We are now producing a series of 10 micron bonded phases based on a spherical silica as a replacement for the irregular shaped LiChrosorb sorbents. This new product, Spheri-10, does not have the same selectivity of LiChrosorb and is not intended as an exact substitute. Because of the spherical silica base and our quality control of the bonding chemistry, Spheri-10 should have excellent useful lifetime and good lot-to-lot reproducibility.

Sincerely,

BROWNLEE LABS, INC.

Robert Brownlee
President

Clearly, other manufacturers have big problems controlling quality.

At Waters. Insuring column reproducibility and stability is of the utmost concern. This is why we do a large number of quality control checks during the manufacturing process (e.g. µBondapak™ C_{18} involves over 40 tests). Waters has also established a column stability program to further insure that customers receive high quality columns with a long, useful lifetime.

Occasionally, even Waters has problems and we respond. During these "problem times" it is important to keep a proper perspective and remember our long-term commitment to overall high product quality and customer success.