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DATE: April 21, 2010

RE: CL Viscosity Reference Fluid raw material change.

Dear Cannon Customer,

Over the next year, Cannon Instrument Company will shift the CL Reference Fluid line to exclusively synthetic fluids.

- We believe this will benefit the user by providing a reference fluid that is more consistent in its viscometric properties from lot to lot.
- With this change, the CL reference oils will have a higher Viscosity Index (VI). This VI will more closely correspond to that of commercial multi-grade engine oil products.
- As this change is made, there will be slight changes in the viscosities on the CL labels for some of the test temperatures. This is due to the higher VI for synthetic base stocks.
- Approximately 50% of our CL standards have always been blended synthetic fluids. All of the lower viscosity reference fluids, CL080 through CL140, are now made from synthetic stocks as is CL740. The change will progress from CL160 through CL600 in order as subsequent lots are blended.
- This change is due in part to increasing difficulties in sourcing traditional base oils with acceptable low temperature properties, ie low wax. There appears to be an increasing tendency for base oil suppliers to blend mineral base oils with significantly different viscosities to obtain products with intermediate viscosities. While this has little or no effect in many applications, in the CCS this can be seen as a significant discrepancy between viscosity measurement in glass capillary viscometers and the apparent viscosity measurement obtained in the Cold Cranking Simulator. A similar discrepancy can also be caused by wax in the fluid.

Feel free to contact us with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "M. T. Zubler".

M. T. Zubler

Director of Quality Assurance