SciLog DN 3135: SciTemp Luer Sensor, 100 Hour Exposure Test, 7/24/09
1.0 M NaOH at 22°C.
All Tested Sensors w/o In-Mold Vent-Holes

Sensor ID	25 Hours			50 Hours			75 Hours			100 Hours			Sensor Average	Sensor SD
	NIST	SciTemp	Δ	NIST	SciTemp	Δ	NIST	SciTemp	Δ	NIST	SciTemp	Δ		
A1-21002-0709	25.02	24.99	-0.03	25.07	25.02	-0.05	25.03	24.95	-0.08	25.06	25.08	0.02	25.01	0.05
A1-21003-0709	25.03	25.00	-0.03	25.07	25.03	-0.04	25.02	24.95	-0.07	25.07	25.10	0.03	25.02	0.06
A1-21004-0709	25.03	25.03	0.00	25.07	25.05	-0.02	25.04	25.06	0.02	25.07	25.07	0.00	25.05	0.02
A1-21005-0709	25.04	25.01	-0.03	25.07	25.03	-0.04	25.04	24.96	-0.08	25.07	25.02	-0.05	25.01	0.03
A1-21006-0709	25.03	24.93	-0.10	25.07	25.02	-0.05	25.02	25.02	0.00	25.06	24.99	-0.07	24.99	0.04
Group Ave	**25.03**	**24.99**	**-0.04**	**25.07**	**25.03**	**-0.04**	**25.03**	**24.99**	**-0.04**	**25.07**	**25.05**	**-0.01**	**25.02**	**0.04**
SD	**0.006**	**0.034**		**0.000**	**0.011**		**0.009**	**0.044**		**0.005**	**0.041**		**0.02**	
%SD	**0.03%**	**0.13%**		**0.00%**	**0.04%**		**0.04%**	**0.18%**		**0.02%**	**0.16%**		**0.09%**	

SUMMARY: The SciTemp sensor response data, collected over 100 hours of continuous NaOH exposure, show a stable sensor accuracy and precision level. For individual sensors, the average sensor response, measured at 25°C, stays within established limits of +/- 0.10 °C. The same holds for the sensor group averages based on the response of five sensors. The long-term stability of the SciTemp sensor pre-calibration is verified by the above sensor data.

NOTE: SciLog Sensor have been design for single-use applications. However, with proper care, the sensors can be re-used repeatedly while maintaing good accuracy and precision. If required, sensors can be re-calibrated using the monitor "Custom Calibration" feature.
CAUTION: Do Not Exceed Maximum Pressure of 60 psi

Test Protocol: Five, pre-calibrated SciTemp Luer sensors (w/o vent-holes) were removed from inventory and exposed to 1.0 molar NaOH for 100hours at 22°C . The 1.0 molar NaOH solution was continuously pumped/re-circulated (100ml/min) through the in-line sensor assembly using a peristaltic pump. At 25 hour intervals, the test was briefly interupted, the sensors were flushed 3x with distilled water and purged for 10 minutes. In a temperature-controlled glove box, distilled, temperature-equilibrated (25° C +/- 1.0°C) water was re-circulated through the in-line sensor assembly which included a NIST traceable reference thermistor. Sensor and reference thermistor readings were recorded.