

Effect of Sample Temperatures on Serim's 5152 Monitor for QAC Test Strip Results

QAC samples at 0, 50, 100, 200, 400 and 1000 ppm were prepared and 1 mL aliquots were equilibrated to the appropriate temperatures. Following the directions on the Monitor for QAC Test Strips label, triplicate determinations were made and results were averaged and recorded below:

QAC, ppm	Sample Temperature			
	4°C/39°F	23°C/72°F (Room Temp)	40°C/104°F	70°C/158°F
0	0	0	0	3.3
50	45	50	53.3	53.3
100	91.7	100	100	110
200	177	220	233	287
400	353	387	393	480
1000	800	860	920	880

In the ice bath at 4° C the strips read about 10% low, while at 70° C they read about 10-20% high, except at 1000 ppm. The pad colors for the 70° C samples at 1000 ppm were more blue than the color block, making it difficult to assess a proper value. The readings for the room temperature and 40° C samples are similar.