



**Level 4-Premium Multi  
Service Documentation**

Service Information	
Service Date	29/Mar/2019
Certificate ID #	1296-██████-07
Test Technician	Elizabeth D.
Next Due Date	30/Sep/2019

Client Information	
Account Number	██████
Company	██████████
Address	████████████████████ ████████████████████ ████████████████████
Phone	██████████
Client Instrument	
Manufacturer	Sartorius
Model	eLine e120 ul /12
Serial #	15011813
ID/User	PP-1122
Laboratory Test Conditions	
Water Temperature (19-24°C)	21
Relative Humidity (45-75%)	48
Bar. Pressure (kPa)	100.2
Water Den. (gm/ml)	0.9969
Density Correction (z-factor)	1.0031
Water Conductivity (µS)	1.72
Evaporation Rate (mg)	0.002
Laboratory Test Equipment	
Test Balance Serial #	1124024733
Test Balance Model	Station 10-MCP-1S
Test Balance Readability (mg)	0.01
Test Balance NIST Cert. Date	26/Sep/2018
Test Balance NIST Cert Due	30/Sep/2019

AS FOUND RESULTS					
Test Vol	Mean µL	SD	CV%	M.U.	Result
12 µL	11.76 – 12.24	.18	1.50		PASS
Ch 1	11.93	0.0435	0.3657	± 0.1	Pass
Ch 2	11.94	0.0668	0.5616	± 0.11	Pass
Ch 3	11.91	0.0622	0.5239	± 0.11	Pass
Ch 4	11.95	0.0370	0.3103	± 0.099	Pass
Ch 5	11.84	0.0332	0.2810	± 0.097	Pass
Ch 6	12.03	0.0695	0.5790	± 0.11	Pass
Ch 7	11.78	0.0585	0.4984	± 0.11	Pass
Ch 8	11.87	0.0486	0.4102	± 0.1	Pass
Ch 9	11.95	0.0520	0.4361	± 0.11	Pass
Ch 10	11.78	0.0332	0.2824	± 0.097	Pass
Ch 11	11.84	0.0624	0.5283	± 0.11	Pass
Ch 12	11.77	0.0525	0.4476	± 0.11	Pass

AS LEFT RESULTS					
Test Vol	Mean µL	SD	CV%	M.U.	Result
12 µL	11.76 – 12.24	.18	1.50		PASS
Ch 1	11.89	0.0432	0.3646	± 0.095	Pass
Ch 2	11.93	0.0411	0.3456	± 0.095	Pass
Ch 3	11.90	0.0569	0.4793	± 0.098	Pass
Ch 4	11.89	0.0483	0.4076	± 0.096	Pass
Ch 5	11.87	0.0467	0.3947	± 0.096	Pass
Ch 6	11.90	0.0438	0.3690	± 0.096	Pass
Ch 7	11.80	0.0395	0.3354	± 0.095	Pass
Ch 8	11.85	0.0385	0.3260	± 0.095	Pass
Ch 9	11.88	0.0348	0.2938	± 0.094	Pass
Ch 10	11.87	0.0360	0.3047	± 0.094	Pass
Ch 11	11.89	0.0372	0.3136	± 0.094	Pass
Ch 12	11.80	0.0341	0.2903	± 0.094	Pass

Test Vol	Mean µL	SD	CV%	M.U.	Result
60 µL	59.58 – 60.42	.18	0.30		PASS
Ch 1	60.02	0.0942	0.1574	± 0.13	Pass
Ch 2	60.06	0.0704	0.1176	± 0.12	Pass
Ch 3	60.06	0.0822	0.1373	± 0.12	Pass
Ch 4	60.06	0.0852	0.1424	± 0.13	Pass
Ch 5	60.12	0.0837	0.1396	± 0.12	Pass
Ch 6	59.99	0.0873	0.1460	± 0.13	Pass
Ch 7	59.83	0.0690	0.1157	± 0.11	Pass
Ch 8	59.97	0.1135	0.1899	± 0.15	Pass
Ch 9	60.02	0.0869	0.1453	± 0.13	Pass
Ch 10	59.96	0.0768	0.1284	± 0.12	Pass
Ch 11	59.99	0.0538	0.0899	± 0.11	Pass
Ch 12	59.96	0.0959	0.1605	± 0.13	Pass

Test Vol	Mean µL	SD	CV%	M.U.	Result
60 µL	59.58 – 60.42	.18	0.30		PASS
Ch 1	60.11	0.0725	0.1210	± 0.1	Pass
Ch 2	60.05	0.0871	0.1455	± 0.11	Pass
Ch 3	60.00	0.0664	0.1110	± 0.1	Pass
Ch 4	60.01	0.0621	0.1038	± 0.1	Pass
Ch 5	60.06	0.0694	0.1159	± 0.1	Pass
Ch 6	60.01	0.0544	0.0909	± 0.098	Pass
Ch 7	59.65	0.0648	0.1090	± 0.1	Pass
Ch 8	59.93	0.0491	0.0822	± 0.097	Pass
Ch 9	60.00	0.0601	0.1004	± 0.099	Pass
Ch 10	60.09	0.0633	0.1056	± 0.1	Pass
Ch 11	60.04	0.0567	0.0948	± 0.098	Pass
Ch 12	60.00	0.0665	0.1111	± 0.1	Pass

Replacement Parts		
Part Name	Part Description	Qty.
Filter		12.00
Battery		1.00
Quality Control Authorization		
QC Reviewer	Aubrey Carr	
QC Date	1/Apr/2019	

The calibration service results published in this certificate were obtained gravimetrically using Grade 3 purified water, equipment manufacturer or validated substitute tips, and ISO8655 compliant test equipment that is traceable to NIST and through NIST to the International System of Units (SI). TTE certifies that the above measuring device meets or exceeds all measurement tolerances, unless otherwise noted. TTE prohibits the reproduction of this document, except in its entirety.

Test Vol	Mean µL	SD	CV%	M.U.	Result
120 µL	119.40 – 120.60	.24	0.20		PASS
Ch 1	120.46	0.0585	0.0487	± 0.12	Pass
Ch 2	120.45	0.0686	0.0571	± 0.12	Pass
Ch 3	120.39	0.0676	0.0563	± 0.12	Pass
Ch 4	120.41	0.0826	0.0688	± 0.12	Pass
Ch 5	120.39	0.0737	0.0614	± 0.12	Pass
Ch 6	120.45	0.0918	0.0764	± 0.13	Pass
Ch 7	119.92	0.0741	0.0620	± 0.12	Pass
Ch 8	120.53	0.0845	0.0703	± 0.12	Pass
Ch 9	120.48	0.0435	0.0362	± 0.12	Pass
Ch 10	120.47	0.0787	0.0656	± 0.12	Pass
Ch 11	120.52	0.0634	0.0528	± 0.12	Pass
Ch 12	120.58	0.1002	0.0833	± 0.14	Pass

Test Vol	Mean µL	SD	CV%	M.U.	Result
120 µL	119.40 – 120.60	.24	0.20		PASS
Ch 1	120.55	0.1143	0.0951	± 0.12	Pass
Ch 2	120.43	0.1130	0.0941	± 0.12	Pass
Ch 3	120.36	0.1116	0.0930	± 0.12	Pass
Ch 4	120.30	0.1124	0.0937	± 0.12	Pass
Ch 5	120.36	0.1010	0.0842	± 0.12	Pass
Ch 6	120.34	0.0724	0.0603	± 0.12	Pass
Ch 7	119.73	0.0811	0.0679	± 0.12	Pass
Ch 8	120.16	0.0632	0.0528	± 0.12	Pass
Ch 9	120.26	0.0752	0.0628	± 0.12	Pass
Ch 10	120.42	0.0711	0.0592	± 0.12	Pass
Ch 11	120.36	0.0999	0.0833	± 0.12	Pass
Ch 12	120.25	0.0883	0.0737	± 0.12	Pass

PASS grade denotes that tolerances have been met according to OEM specifications. When accounting for measurement uncertainty, results may be outside of reported tolerance limits. The risk for reporting a false PASS result is calculated to be < 2%. The reported expanded uncertainty value uses a coverage factor k = 2 to a coverage probability of approximately 95%.

Procedure: SOP 02 TTEPCS0113.1

Certificate ID	
Comments	
PM Service performed.	



Level 4-Premium Multi Service Documentation

Service Information	
Service Date	29/Mar/2019
Certificate ID #	1296-██████-07
Test Technician	Elizabeth D.
Next Due Date	30/Sep/2019

Client Information	
Account Number	██████
Company	██████████████████
Address	██████████████████ ██████████████████ ██████████████████
Phone	██████████
Client Instrument	
Manufacturer	Sartorius
Model	eLine e120 ul /12
Serial #	15011813
ID/User	CB-1137
LABORATORY TEST CONDITIONS	
Water Temperature (19-24°C)	21
Relative Humidity (45-75%)	48
Bar. Pressure(kPa)	100.2
Water Den.(gm/ml)	0.9969
Density Correction(z-factor)	1.0031
Water Conductivity(µS)	1.72
Evaporation Rate(mg)	0.002

AS-FOUND MEASUREMENT DATA														
Measurement Type					Measured Value					Specification		Mean µL	SD	CV%
Vol 1					12 microliters					»		11.76 – 12.24	.18	1.50
Ch 1	11.90	11.93	11.91	11.83	-	-	-	-	-	-	-	11.93	0.0435	0.3657
Ch 2	11.91	11.99	11.86	11.84	-	-	-	-	-	-	-	11.94	0.0668	0.5616
Ch 3	11.82	11.96	11.84	11.86	-	-	-	-	-	-	-	11.91	0.0622	0.5239
Ch 4	11.95	11.94	11.87	11.90	-	-	-	-	-	-	-	11.95	0.0370	0.3103
Ch 5	11.83	11.80	11.83	11.76	-	-	-	-	-	-	-	11.84	0.0332	0.2810
Ch 6	11.94	12.03	12.08	11.94	-	-	-	-	-	-	-	12.03	0.0695	0.5790
Ch 7	11.67	11.76	11.81	11.73	-	-	-	-	-	-	-	11.78	0.0585	0.4984
Ch 8	11.81	11.82	11.91	11.81	-	-	-	-	-	-	-	11.87	0.0486	0.4102
Ch 9	11.91	11.88	11.99	11.88	-	-	-	-	-	-	-	11.95	0.0520	0.4361
Ch 10	11.79	11.75	11.72	11.72	-	-	-	-	-	-	-	11.78	0.0332	0.2824
Ch 11	11.77	11.87	11.74	11.85	-	-	-	-	-	-	-	11.84	0.0624	0.5283
Ch 12	11.66	11.73	11.78	11.76	-	-	-	-	-	-	-	11.77	0.0525	0.4476
Vol 2					60 microliters					»		59.58 – 60.42	.18	0.30
Ch 1	59.94	59.84	59.71	59.83	-	-	-	-	-	-	-	60.02	0.0942	0.1574
Ch 2	59.88	59.97	59.86	59.80	-	-	-	-	-	-	-	60.06	0.0704	0.1176
Ch 3	59.98	59.78	59.86	59.87	-	-	-	-	-	-	-	60.06	0.0822	0.1373
Ch 4	59.99	59.80	59.82	59.87	-	-	-	-	-	-	-	60.06	0.0852	0.1424
Ch 5	59.99	60.00	59.82	59.91	-	-	-	-	-	-	-	60.12	0.0837	0.1396
Ch 6	59.85	59.91	59.74	59.73	-	-	-	-	-	-	-	59.99	0.0873	0.1460
Ch 7	59.63	59.69	59.55	59.70	-	-	-	-	-	-	-	59.83	0.0690	0.1157
Ch 8	59.85	59.90	59.73	59.65	-	-	-	-	-	-	-	59.97	0.1135	0.1899
Ch 9	59.88	59.93	59.81	59.73	-	-	-	-	-	-	-	60.02	0.0869	0.1453
Ch 10	59.86	59.81	59.76	59.68	-	-	-	-	-	-	-	59.96	0.0768	0.1284
Ch 11	59.75	59.88	59.80	59.80	-	-	-	-	-	-	-	59.99	0.0538	0.0899
Ch 12	59.88	59.82	59.70	59.68	-	-	-	-	-	-	-	59.96	0.0959	0.1605
Vol 3					120 microliters					»		119.40 – 120.60	.24	0.20
Ch 1	120.11	120.04	120.16	120.04	-	-	-	-	-	-	-	120.46	0.0585	0.0487
Ch 2	120.12	120.07	120.13	119.98	-	-	-	-	-	-	-	120.45	0.0686	0.0571
Ch 3	120.10	119.94	120.03	119.99	-	-	-	-	-	-	-	120.39	0.0676	0.0563
Ch 4	120.15	119.96	120.06	120.00	-	-	-	-	-	-	-	120.41	0.0826	0.0688
Ch 5	120.07	119.94	120.09	119.97	-	-	-	-	-	-	-	120.39	0.0737	0.0614
Ch 6	120.16	120.10	120.12	119.95	-	-	-	-	-	-	-	120.45	0.0918	0.0764
Ch 7	119.65	119.50	119.57	119.49	-	-	-	-	-	-	-	119.92	0.0741	0.0620
Ch 8	120.12	120.23	120.23	120.06	-	-	-	-	-	-	-	120.53	0.0845	0.0703
Ch 9	120.15	120.13	120.12	120.05	-	-	-	-	-	-	-	120.48	0.0435	0.0362
Ch 10	120.20	120.11	120.08	120.01	-	-	-	-	-	-	-	120.47	0.0787	0.0656
Ch 11	120.17	120.21	120.15	120.06	-	-	-	-	-	-	-	120.52	0.0634	0.0528
Ch 12	120.24	120.14	120.33	120.11	-	-	-	-	-	-	-	120.58	0.1002	0.0833



Level 4-Premium Multi Service Documentation

Service Information table with fields: Service Date (29/Mar/2019), Certificate ID # (1296-07), Test Technician (Elizabeth D.), Next Due Date (30/Sep/2019)

Client Information and Client Instrument tables. Client Information includes Account Number, Company, Address, Phone. Client Instrument includes Manufacturer (Sartorius), Model (eLine e120 ul /12), Serial # (15011813), ID/User (CB-1137). LABORATORY TEST CONDITIONS include Water Temperature (21), Relative Humidity (48), Bar. Pressure (100.2), Water Den. (0.9969), Density Correction (1.0031), Water Conductivity (1.72), Evaporation Rate (0.002).

AS-LEFT MEASUREMENT DATA table with columns: Measurement Type, Measured Value, Specification, Mean µL, SD, CV%. It contains three sections: Vol 1 (12 microliters), Vol 2 (60 microliters), and Vol 3 (120 microliters), each with 12 channels of data.