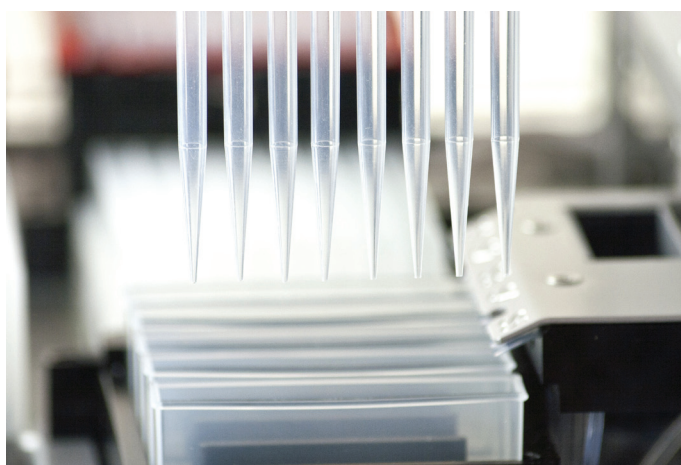


Biotage® Extrahera™ Precision and Accuracy Performance

This document details an example of the pipetting precision and accuracy data for four specified volumes across a full 96 well plate.

Experimental Design

- » Precision and accuracy were tested by separately measuring the volume of 96 transfers of 50 µL, 100 µL, 500 µL and 1000 µL.
- » Water was dispensed sequentially (8 channels simultaneously) starting with column 1 (positions A1-H1) and ending with column 12 (positions A12-H12).
- » Performance was assessed by measuring the weights of 96 collection tubes before and after the addition of purified water.
- » Volume data was generated for each position using temperature corrected density values.



Because of the low volumes and weights involved, correction factors for temperature and evaporation rate were applied:

1. Correction for Evaporation

- a. The first 8 tubes (position A1-H1) were re-weighed after all 96 tubes had been measured.
- b. Evaporation rate was calculated as the average weight loss measured in these wells divided by the number of minutes taken for 96 weight measurements.
- c. This was then multiplied by the time taken between sample addition and weighing for each tube.
- d. The mass of water calculated to have evaporated was then added to the unadjusted weight.

2. Temperature Correction

- a. Water temperature was measured inside the Extrahera cabinet, to reflect that being dispensed.
- b. An accurate density was calculated for water at this temperature.

Table 1. Summary Data

Specified Volume (µL)	Average Measured Volume (µL) n=96	Standard Deviation	Specified Precision (% RSD)	Measured Precision (% RSD)	Specified Accuracy (Error ± %)	Measured Accuracy (Error ± %)
50	50.2	0.44	1.0	0.87	2.0	0.43
100	99.1	0.44	1.0	0.44	2.0	- 0.94
500	498	0.89	1.0	0.18	1.5	- 0.44
1000	995	2.31	1.0	0.23	1.0	- 0.45

Precision and Accuracy with 50 μ L Transfer Volume

Table 2. Weight of empty tubes

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.7229	0.7039	0.6822	0.6847	0.6942	0.6698	0.6691	0.6881	0.6906	0.6845	0.6884	0.6845
B	0.6757	0.7028	0.6755	0.6744	0.6894	0.6757	0.6884	0.6691	0.6743	0.6691	0.6744	0.6772
C	0.6803	0.7070	0.6816	0.6752	0.6929	0.6781	0.6794	0.6787	0.6748	0.6719	0.6751	0.6943
D	0.6859	0.6985	0.6855	0.6862	0.6769	0.6721	0.6721	0.6913	0.6860	0.6784	0.6859	0.6892
E	0.6994	0.7004	0.6859	0.6856	0.6908	0.6841	0.6778	0.6720	0.6855	0.6838	0.6859	0.6943
F	0.6749	0.6849	0.6750	0.6801	0.6844	0.6802	0.6843	0.6778	0.6792	0.6789	0.6799	0.6845
G	0.6864	0.6939	0.6756	0.6828	0.6815	0.6882	0.6669	0.6668	0.6763	0.6668	0.6756	0.6815
H	0.6743	0.6991	0.6850	0.6747	0.6864	0.6697	0.6757	0.6756	0.6826	0.6755	0.6822	0.6863

Table 3. Weight of tubes plus 50 μ L deionized water

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.7723	0.7536	0.7320	0.7345	0.7434	0.7193	0.7188	0.7373	0.7395	0.7338	0.7381	0.7342
B	0.7256	0.7526	0.7257	0.7244	0.7394	0.7258	0.7382	0.7189	0.7237	0.7184	0.7235	0.7273
C	0.7300	0.7570	0.7318	0.7254	0.7433	0.7284	0.7288	0.7283	0.7244	0.7204	0.7252	0.7431
D	0.7356	0.7485	0.7357	0.7360	0.7272	0.7223	0.7225	0.7414	0.7346	0.7277	0.7357	0.7388
E	0.7493	0.7500	0.7357	0.7357	0.7405	0.7343	0.7279	0.7222	0.7355	0.7331	0.7357	0.7441
F	0.7249	0.7351	0.7252	0.7303	0.7345	0.7299	0.7338	0.7275	0.7286	0.7284	0.7301	0.7346
G	0.7361	0.7439	0.7255	0.7326	0.7308	0.7378	0.7163	0.7159	0.7248	0.7157	0.7255	0.7310
H	0.7244	0.7484	0.7347	0.7250	0.7365	0.7199	0.7263	0.7247	0.7317	0.7246	0.7317	0.7343

Table 4. Weight of water (g) unadjusted

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.0494	0.0497	0.0498	0.0498	0.0492	0.0495	0.0497	0.0492	0.0489	0.0493	0.0497	0.0497
B	0.0499	0.0498	0.0502	0.0500	0.0500	0.0501	0.0498	0.0498	0.0494	0.0493	0.0491	0.0501
C	0.0497	0.0500	0.0502	0.0502	0.0504	0.0503	0.0494	0.0496	0.0496	0.0485	0.0501	0.0488
D	0.0497	0.0500	0.0502	0.0498	0.0503	0.0502	0.0504	0.0501	0.0486	0.0493	0.0498	0.0496
E	0.0499	0.0496	0.0498	0.0501	0.0497	0.0502	0.0501	0.0502	0.0500	0.0493	0.0498	0.0498
F	0.0500	0.0502	0.0502	0.0502	0.0501	0.0497	0.0495	0.0497	0.0494	0.0495	0.0502	0.0501
G	0.0497	0.0500	0.0499	0.0498	0.0493	0.0496	0.0494	0.0491	0.0485	0.0489	0.0499	0.0495
H	0.0501	0.0493	0.0497	0.0503	0.0501	0.0502	0.0506	0.0491	0.0491	0.0491	0.0495	0.0480

Table 5. Weight of water (g) corrected for evaporation between dispensing and weighing (1.442 mg/h)

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.0495	0.0498	0.0500	0.0500	0.0495	0.0498	0.0501	0.0496	0.0494	0.0498	0.0503	0.0503
B	0.0500	0.0499	0.0504	0.0502	0.0503	0.0504	0.0502	0.0502	0.0499	0.0498	0.0497	0.0507
C	0.0498	0.0501	0.0504	0.0504	0.0507	0.0506	0.0498	0.0500	0.0501	0.0490	0.0507	0.0494
D	0.0498	0.0501	0.0504	0.0500	0.0506	0.0505	0.0508	0.0505	0.0491	0.0498	0.0504	0.0502
E	0.0500	0.0498	0.0500	0.0503	0.0500	0.0505	0.0505	0.0506	0.0505	0.0498	0.0504	0.0504
F	0.0501	0.0504	0.0504	0.0505	0.0504	0.0501	0.0499	0.0501	0.0499	0.0500	0.0508	0.0507
G	0.0498	0.0502	0.0501	0.0501	0.0496	0.0500	0.0498	0.0496	0.0490	0.0494	0.0505	0.0501
H	0.0502	0.0495	0.0499	0.0506	0.0504	0.0506	0.0510	0.0496	0.0496	0.0497	0.0501	0.0487

Table 6. Water volume (mL) allowing for a density of 0.99777 g/mL at 22 °C

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.0497	0.0500	0.0502	0.0502	0.0497	0.0500	0.0503	0.0498	0.0495	0.0500	0.0504	0.0504
B	0.0502	0.0501	0.0506	0.0504	0.0505	0.0506	0.0503	0.0504	0.0500	0.0500	0.0498	0.0509
C	0.0500	0.0503	0.0506	0.0506	0.0508	0.0508	0.0499	0.0502	0.0502	0.0492	0.0508	0.0496
D	0.0499	0.0503	0.0505	0.0502	0.0507	0.0507	0.0509	0.0507	0.0492	0.0500	0.0505	0.0504
E	0.0501	0.0499	0.0501	0.0505	0.0501	0.0507	0.0506	0.0508	0.0506	0.0500	0.0505	0.0506
F	0.0502	0.0505	0.0505	0.0506	0.0505	0.0502	0.0500	0.0503	0.0500	0.0502	0.0509	0.0509
G	0.0499	0.0503	0.0502	0.0502	0.0497	0.0501	0.0499	0.0497	0.0491	0.0496	0.0506	0.0503
H	0.0503	0.0496	0.0500	0.0507	0.0505	0.0507	0.0511	0.0497	0.0497	0.0498	0.0502	0.0488

Precision and Accuracy with 100 µL Transfer Volume

Table 7. Weight of empty tubes

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.6827	0.7041	0.6824	0.6846	0.6941	0.6668	0.6690	0.6881	0.6847	0.6884	0.6845	0.6908
B	0.6760	0.7027	0.6757	0.6742	0.6892	0.6757	0.6884	0.6690	0.6743	0.6692	0.6742	0.6772
C	0.6800	0.7053	0.6798	0.6749	0.6928	0.6780	0.6781	0.6784	0.6748	0.6719	0.6749	0.6931
D	0.6855	0.6985	0.6855	0.6861	0.6769	0.6721	0.6720	0.6839	0.6858	0.6785	0.6859	0.6894
E	0.6993	0.6991	0.6858	0.6856	0.6905	0.6841	0.6778	0.6719	0.6855	0.6838	0.6856	0.6941
F	0.6750	0.6849	0.6749	0.6800	0.6843	0.6786	0.6841	0.6778	0.6793	0.6778	0.6798	0.6843
G	0.6865	0.6937	0.6756	0.6826	0.6814	0.6881	0.6668	0.6667	0.6761	0.6667	0.6754	0.6814
H	0.6743	0.6987	0.6850	0.6746	0.6864	0.6697	0.6759	0.6757	0.6822	0.6756	0.6822	0.6861

Table 8. Weight of tubes plus 100 µL deionized water

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.7806	0.8023	0.7803	0.7827	0.7920	0.7642	0.7671	0.7859	0.7821	0.7869	0.7828	0.7883
B	0.7742	0.8014	0.7742	0.7726	0.7882	0.7737	0.7872	0.7677	0.7728	0.7682	0.7729	0.7759
C	0.7783	0.8037	0.7785	0.7732	0.7914	0.7768	0.7768	0.7766	0.7718	0.7696	0.7734	0.7910
D	0.7841	0.7975	0.7843	0.7846	0.7758	0.7709	0.7708	0.7824	0.7847	0.7775	0.7847	0.7881
E	0.7978	0.7978	0.7843	0.7843	0.7890	0.7822	0.7763	0.7706	0.7840	0.7823	0.7842	0.7918
F	0.7737	0.7839	0.7735	0.7788	0.7831	0.7769	0.7819	0.7771	0.7783	0.7759	0.7787	0.7834
G	0.7847	0.7926	0.7740	0.7810	0.7800	0.7861	0.7655	0.7653	0.7747	0.7649	0.7729	0.7801
H	0.7731	0.7977	0.7837	0.7733	0.7850	0.7685	0.7749	0.7745	0.7805	0.7748	0.7806	0.7841

Table 9. Weight of water (g) unadjusted

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.0979	0.0982	0.0979	0.0981	0.0979	0.0974	0.0981	0.0978	0.0974	0.0985	0.0983	0.0975
B	0.0982	0.0987	0.0985	0.0984	0.0990	0.0980	0.0988	0.0987	0.0985	0.0990	0.0987	0.0987
C	0.0983	0.0984	0.0987	0.0983	0.0986	0.0988	0.0987	0.0982	0.0970	0.0977	0.0985	0.0979
D	0.0986	0.0990	0.0988	0.0985	0.0989	0.0988	0.0988	0.0985	0.0989	0.0990	0.0988	0.0987
E	0.0985	0.0987	0.0985	0.0987	0.0985	0.0981	0.0985	0.0987	0.0985	0.0985	0.0986	0.0977
F	0.0987	0.0990	0.0986	0.0988	0.0988	0.0983	0.0978	0.0993	0.0990	0.0981	0.0989	0.0991
G	0.0982	0.0989	0.0984	0.0984	0.0986	0.0980	0.0987	0.0986	0.0986	0.0982	0.0975	0.0987
H	0.0988	0.0990	0.0987	0.0987	0.0986	0.0988	0.0990	0.0988	0.0983	0.0992	0.0984	0.0980

Table 10. Weight of water (g) corrected for evaporation between dispensing and weighing (1.010 mg/h)

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.0980	0.0983	0.0981	0.0983	0.0981	0.0976	0.0984	0.0981	0.0977	0.0988	0.0987	0.0979
B	0.0983	0.0988	0.0986	0.0986	0.0992	0.0982	0.0991	0.0990	0.0988	0.0994	0.0991	0.0991
C	0.0984	0.0985	0.0988	0.0985	0.0988	0.0990	0.0990	0.0985	0.0973	0.0981	0.0989	0.0983
D	0.0987	0.0991	0.0989	0.0987	0.0991	0.0990	0.0991	0.0988	0.0992	0.0994	0.0992	0.0991
E	0.0986	0.0988	0.0986	0.0989	0.0987	0.0983	0.0988	0.0990	0.0988	0.0989	0.0990	0.0981
F	0.0988	0.0991	0.0987	0.0990	0.0990	0.0985	0.0981	0.0996	0.0993	0.0985	0.0993	0.0995
G	0.0983	0.0990	0.0985	0.0986	0.0988	0.0982	0.0990	0.0989	0.0989	0.0986	0.0979	0.0991
H	0.0989	0.0991	0.0988	0.0989	0.0988	0.0990	0.0992	0.0991	0.0986	0.0996	0.0988	0.0984

Table 11. Water volume (mL) allowing for a density of 0.99665 g/mL at 26.5 °C

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.0983	0.0986	0.0984	0.0986	0.0984	0.0979	0.0987	0.0984	0.0981	0.0992	0.0990	0.0982
B	0.0986	0.0991	0.0990	0.0989	0.0995	0.0986	0.0994	0.0993	0.0992	0.0997	0.0994	0.0994
C	0.0987	0.0988	0.0992	0.0988	0.0991	0.0994	0.0993	0.0988	0.0977	0.0984	0.0992	0.0987
D	0.0990	0.0994	0.0993	0.0990	0.0994	0.0994	0.0994	0.0991	0.0996	0.0997	0.0995	0.0995
E	0.0989	0.0991	0.0990	0.0992	0.0990	0.0987	0.0991	0.0993	0.0992	0.0992	0.0993	0.0985
F	0.0991	0.0994	0.0991	0.0993	0.0993	0.0989	0.0984	0.0999	0.0997	0.0988	0.0996	0.0999
G	0.0986	0.0993	0.0989	0.0989	0.0991	0.0986	0.0993	0.0992	0.0993	0.0989	0.0982	0.0995
H	0.0992	0.0995	0.0992	0.0992	0.0991	0.0994	0.0996	0.0994	0.0989	0.0999	0.0991	0.0988

Precision and Accuracy with 500 µL Transfer Volume

Table 12. Weight of empty tubes

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.6824	0.7029	0.6845	0.6756	0.6945	0.6935	0.6698	0.6895	0.6744	0.6863	0.6817	0.6866
B	0.6987	0.6995	0.6886	0.6845	0.6740	0.6988	0.6822	0.6843	0.6771	0.6860	0.6894	0.7044
C	0.6995	0.6994	0.6669	0.6898	0.6752	0.6845	0.6788	0.6781	0.6853	0.6773	0.6783	0.6858
D	0.6990	0.7054	0.6800	0.6846	0.6931	0.6857	0.6992	0.6800	0.6986	0.6748	0.6720	0.6818
E	0.6849	0.6937	0.6865	0.6995	0.6758	0.6983	0.6990	0.6886	0.6787	0.6695	0.6945	0.6698
F	0.6938	0.7045	0.7055	0.6847	0.7045	0.6786	0.6760	0.6853	0.6884	0.7029	0.6801	0.6760
G	0.6753	0.6985	0.6931	0.6721	0.6904	0.6944	0.6815	0.6753	0.6846	0.6750	0.6867	0.6669
H	0.6937	0.6771	0.7054	0.7028	0.6743	0.6670	0.6907	0.6823	0.6908	0.6784	0.6845	0.6722

Table 13. Weight of tubes plus 500 µL deionized water

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.1770	1.1974	1.1788	1.1710	1.1896	1.1886	1.1648	1.1850	1.1692	1.1815	1.1771	1.1814
B	1.1935	1.1949	1.1837	1.1804	1.1700	1.1948	1.1782	1.1806	1.1734	1.1823	1.1850	1.2001
C	1.1941	1.1944	1.1614	1.1854	1.1706	1.1801	1.1741	1.1733	1.1805	1.1733	1.1740	1.1817
D	1.1940	1.2007	1.1758	1.1812	1.1901	1.1825	1.1957	1.1770	1.1958	1.1717	1.1685	1.1785
E	1.1798	1.1889	1.1821	1.1955	1.1721	1.1947	1.1946	1.1847	1.1735	1.1653	1.1906	1.1660
F	1.1898	1.2006	1.2020	1.1817	1.2019	1.1760	1.1724	1.1821	1.1846	1.1988	1.1776	1.1725
G	1.1702	1.1932	1.1882	1.1677	1.1862	1.1899	1.1772	1.1712	1.1802	1.1705	1.1807	1.1615
H	1.1894	1.1729	1.2016	1.1996	1.1716	1.1636	1.1874	1.1793	1.1878	1.1751	1.1808	1.1688

Table 14. Weight of water (g) unadjusted

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.4946	0.4945	0.4943	0.4954	0.4951	0.4951	0.4950	0.4955	0.4948	0.4952	0.4954	0.4948
B	0.4948	0.4954	0.4951	0.4959	0.4960	0.4960	0.4960	0.4963	0.4963	0.4963	0.4956	0.4957
C	0.4946	0.4950	0.4945	0.4956	0.4954	0.4956	0.4953	0.4952	0.4952	0.4960	0.4957	0.4959
D	0.4950	0.4953	0.4958	0.4966	0.4970	0.4968	0.4965	0.4970	0.4972	0.4969	0.4965	0.4967
E	0.4949	0.4952	0.4956	0.4960	0.4963	0.4964	0.4956	0.4961	0.4948	0.4958	0.4961	0.4962
F	0.4960	0.4961	0.4965	0.4970	0.4974	0.4974	0.4964	0.4968	0.4962	0.4959	0.4975	0.4965
G	0.4949	0.4947	0.4951	0.4956	0.4958	0.4955	0.4957	0.4959	0.4956	0.4955	0.4940	0.4946
H	0.4957	0.4958	0.4962	0.4968	0.4973	0.4966	0.4967	0.4970	0.4970	0.4967	0.4963	0.4966

Table 15. Weight of water (g) corrected for evaporation between dispensing and weighing (2.135 mg/h)

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.4948	0.4947	0.4946	0.4957	0.4956	0.4956	0.4956	0.4961	0.4955	0.4959	0.4963	0.4957
B	0.4950	0.4956	0.4954	0.4962	0.4964	0.4965	0.4966	0.4969	0.4970	0.4970	0.4965	0.4966
C	0.4948	0.4952	0.4948	0.4959	0.4958	0.4961	0.4959	0.4958	0.4959	0.4968	0.4965	0.4968
D	0.4952	0.4955	0.4961	0.4970	0.4974	0.4973	0.4971	0.4976	0.4979	0.4977	0.4973	0.4976
E	0.4950	0.4954	0.4959	0.4964	0.4967	0.4969	0.4962	0.4967	0.4955	0.4966	0.4969	0.4971
F	0.4961	0.4963	0.4968	0.4974	0.4978	0.4979	0.4969	0.4974	0.4969	0.4967	0.4983	0.4974
G	0.4950	0.4949	0.4954	0.4960	0.4962	0.4960	0.4962	0.4966	0.4963	0.4963	0.4948	0.4955
H	0.4958	0.4961	0.4965	0.4972	0.4977	0.4971	0.4972	0.4977	0.4977	0.4975	0.4971	0.4975

Table 16. Water volume (mL) allowing for a density of 0.99717 g/mL at 24.5 °C

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.4962	0.4961	0.4960	0.4971	0.4970	0.4970	0.4970	0.4975	0.4969	0.4973	0.4977	0.4971
B	0.4964	0.4970	0.4968	0.4976	0.4979	0.4979	0.4980	0.4983	0.4984	0.4985	0.4979	0.4980
C	0.4962	0.4966	0.4962	0.4973	0.4972	0.4975	0.4973	0.4972	0.4973	0.4982	0.4980	0.4982
D	0.4966	0.4969	0.4975	0.4984	0.4988	0.4987	0.4985	0.4990	0.4993	0.4991	0.4988	0.4990
E	0.4965	0.4968	0.4973	0.4978	0.4981	0.4983	0.4976	0.4981	0.4969	0.4980	0.4983	0.4985
F	0.4975	0.4977	0.4982	0.4988	0.4992	0.4993	0.4984	0.4989	0.4983	0.4981	0.4997	0.4988
G	0.4964	0.4963	0.4968	0.4974	0.4976	0.4974	0.4976	0.4980	0.4977	0.4977	0.4962	0.4969
H	0.4972	0.4975	0.4979	0.4986	0.4991	0.4985	0.4986	0.4991	0.4991	0.4989	0.4985	0.4989

Precision and Accuracy with 1000 µL Transfer Volume

Table 17. Weight of empty tubes

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.6759	0.6724	0.6745	0.6776	0.6848	0.6826	0.6945	0.6800	0.6865	0.7056	0.6818	0.7031
B	0.6848	0.6747	0.6907	0.6848	0.6987	0.6943	0.6897	0.6784	0.6946	0.6863	0.6849	0.6816
C	0.6996	0.6759	0.6899	0.7030	0.7046	0.6999	0.6786	0.6790	0.6865	0.6934	0.6746	0.6696
D	0.6775	0.7057	0.6948	0.6726	0.6946	0.6846	0.6989	0.6911	0.6751	0.6932	0.6850	0.6745
E	0.6988	0.6995	0.6897	0.6856	0.6759	0.6672	0.6672	0.6997	0.6857	0.6986	0.6774	0.6910
F	0.6785	0.6912	0.6774	0.6756	0.6754	0.6865	0.6786	0.6885	0.6990	0.6848	0.7048	0.6806
G	0.6849	0.6947	0.6697	0.6803	0.6945	0.6997	0.7055	0.6894	0.6942	0.6847	0.6826	0.6804
H	0.6820	0.6898	0.6856	0.6886	0.6760	0.6931	0.6671	0.6862	0.6820	0.6912	0.6934	0.7046

Table 18. Weight of tubes plus 1000 µL deionized water

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.6646	1.6604	1.6635	1.6667	1.6742	1.6719	1.6834	1.6688	1.6752	1.6939	1.6701	1.6912
B	1.6757	1.6650	1.6819	1.6766	1.6905	1.6858	1.6810	1.6695	1.6853	1.6770	1.6753	1.6720
C	1.6895	1.6651	1.6803	1.6940	1.6953	1.6906	1.6689	1.6693	1.6767	1.6830	1.6642	1.6593
D	1.6697	1.6973	1.6878	1.6661	1.6879	1.6777	1.6916	1.6834	1.6674	1.6849	1.6767	1.6659
E	1.6893	1.6895	1.6808	1.6772	1.6674	1.6584	1.6577	1.6909	1.6763	1.6888	1.6678	1.6811
F	1.6716	1.6839	1.6714	1.6700	1.6697	1.6903	1.6724	1.6822	1.6923	1.6777	1.6978	1.6734
G	1.6748	1.6839	1.6602	1.6716	1.6851	1.6805	1.6957	1.6788	1.6843	1.6744	1.6721	1.6695
H	1.6741	1.6817	1.6787	1.6824	1.6694	1.6863	1.6601	1.6786	1.6744	1.6836	1.6853	1.6967

Table 19. Weight of water (g) unadjusted

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.9887	0.9880	0.9890	0.9891	0.9894	0.9893	0.9889	0.9888	0.9887	0.9883	0.9883	0.9881
B	0.9909	0.9903	0.9912	0.9918	0.9918	0.9915	0.9913	0.9911	0.9907	0.9907	0.9904	0.9904
C	0.9899	0.9892	0.9904	0.9910	0.9907	0.9907	0.9903	0.9903	0.9902	0.9896	0.9896	0.9897
D	0.9922	0.9916	0.9930	0.9935	0.9933	0.9931	0.9927	0.9923	0.9923	0.9917	0.9917	0.9914
E	0.9905	0.9900	0.9911	0.9916	0.9915	0.9912	0.9905	0.9912	0.9906	0.9902	0.9904	0.9901
F	0.9931	0.9927	0.9940	0.9944	0.9943	1.0038	0.9938	0.9937	0.9933	0.9929	0.9930	0.9928
G	0.9899	0.9892	0.9905	0.9913	0.9906	0.9808	0.9902	0.9894	0.9901	0.9897	0.9895	0.9891
H	0.9921	0.9919	0.9931	0.9938	0.9934	0.9932	0.9930	0.9924	0.9924	0.9924	0.9919	0.9921

Table 20. Weight of water (g) corrected for evaporation between dispensing and weighing (2.135 mg/h)

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.9891	0.9884	0.9896	0.9897	0.9903	0.9902	0.9900	0.9899	0.9901	0.9897	0.9899	0.9897
B	0.9913	0.9907	0.9918	0.9925	0.9927	0.9924	0.9924	0.9922	0.9920	0.9921	0.9920	0.9920
C	0.9903	0.9896	0.9910	0.9917	0.9915	0.9916	0.9914	0.9915	0.9915	0.9910	0.9912	0.9913
D	0.9925	0.9920	0.9936	0.9942	0.9941	0.9940	0.9938	0.9935	0.9936	0.9931	0.9932	0.9930
E	0.9908	0.9905	0.9917	0.9923	0.9923	0.9921	0.9915	0.9924	0.9919	0.9916	0.9919	0.9918
F	0.9934	0.9932	0.9946	0.9951	0.9951	1.0048	0.9948	0.9949	0.9946	0.9943	0.9945	0.9945
G	0.9902	0.9897	0.9910	0.9920	0.9914	0.9818	0.9912	0.9906	0.9914	0.9912	0.9910	0.9908
H	0.9924	0.9924	0.9936	0.9946	0.9942	0.9942	0.9940	0.9936	0.9936	0.9939	0.9934	0.9938

Table 21. Water volume (mL) allowing for a density of 0.99665 g/mL at 26.5 °C

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.9924	0.9917	0.9930	0.9931	0.9936	0.9935	0.9933	0.9932	0.9934	0.9930	0.9932	0.9930
B	0.9946	0.9940	0.9952	0.9958	0.9960	0.9957	0.9957	0.9956	0.9954	0.9954	0.9953	0.9953
C	0.9936	0.9930	0.9943	0.9950	0.9949	0.9949	0.9947	0.9948	0.9949	0.9943	0.9945	0.9947
D	0.9959	0.9954	0.9969	0.9975	0.9975	0.9974	0.9971	0.9968	0.9969	0.9964	0.9966	0.9964
E	0.9942	0.9938	0.9950	0.9956	0.9956	0.9955	0.9949	0.9957	0.9952	0.9950	0.9953	0.9951
F	0.9968	0.9965	0.9979	0.9985	0.9984	1.0081	0.9982	0.9982	0.9979	0.9977	0.9979	0.9978
G	0.9935	0.9930	0.9944	0.9954	0.9947	0.9851	0.9945	0.9940	0.9947	0.9945	0.9943	0.9941
H	0.9957	0.9958	0.9970	0.9979	0.9975	0.9975	0.9973	0.9970	0.9970	0.9972	0.9967	0.9972

Ordering Information

Description	Part Number	Quantity
Biotage Extrahera	414001	1
Configuration Kit 96 Positions	414007	1
Configuration Kit 24 Positions	414008	1
Service Agreement - Priority - Extrahera	SER-EX-SAP	
Service Agreement - Limited - Extrahera	SER-EX-SAL	
First Year Maintenance Package Extrahera	SER-EX-FYMP	
Installation Extrahera	SER-EX-IN	
IV/OV on site Extrahera	SER-EX-IVOV	
Biotage Disposable Tips 1000 µL Clear	414141	10 x Pk/96
Column Rack 24 x 6 mL (tabless)	413640SP	1
Column Rack 24 x 3 mL	414174SP	1
Column Rack 24 x 1 mL	414169SP	1
Column Rack 96 x 1 mL (tabless)	414253SP	1
Sample Rack 16 x 100 mm 24 Positions	414254SP	1
Sample Rack 13 x 100 mm 24 Positions	414255SP	1
Sample Rack 12 x 75 mm 24 Positions	414256SP	1
Collection Rack 18 mm 24 Positions	414257SP	1
Vacuum Pump ME1C, 100 to 230VAC 50/60Hz	356330	1
96-well Collection plate, 1 mL	121-5202	Pk/50
96-well Collection plate, 2 mL	121-5203	Pk/50
12 x 75 mm Test Tubes, Uncapped	C44651	Pk/1000
13 x 100 mm Test Tubes, Uncapped	C40707	Pk/1000
16 x 100 mm Test Tubes, Uncapped	C40708	Pk/1000
Solvent Reservoir 25 mL	414045SP	Pk/25
Flow Through Plate 24	414203SP	1
Flow Through Plate 96	414201SP	1

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