

ILC/PT Final Report

Gage Block Set / NAPT-GAGE-105

Date of Issue: 11/28/2007

National Association for Proficiency Testing

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This report presents the measurement results submitted to NAPT along with associated uncertainties. Two comparisons are presented. First, each measurement data point is compared against the established reference value, both in the value reported and the uncertainty associated with that value. Second, each measurement data point is compared to all other test participants along with a comparison of their reported uncertainties.

To add clarity and simplification in understanding the results, several additional indicators are included for each reported data point. These include: Participant E_n values, S/U (satisfactory/unsatisfactory) ratings, I W O (in/within/out) ratings, Z-score, mean value of satisfactory results and mean values of all participant reported results. Each set point also has a graph showing additional illustration of the measurement.

The Final Report indicates the performance and capability of multiple laboratories performing like calibrations on a single type of artifact. Results also give each participant a basis for evaluation and perhaps improvement of their calibration performance.

All NAPT ILC/PTs are conducted in accordance with ISO/IEC Guide 43-1 and ILAC-G13:2000, requirements for proficiency testing providers.

Thank you for participating in this evaluation. We hope this process has given you a better understanding of your processes. We look forward to your participation in additional NAPT-Sponsored ILC/PTs.

If you have any comments, concerns, or questions regarding this ILC/PT please do not hesitate to contact the Managing Director who is responsible for the content of this report.

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Organization Participating:
Results Reported To:
ILC/PT Performed By:
Date of Participation:

ABC Calibrations
John Doe
Jane Doe
04/02/2007



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FINAL REPORT

Gage Block Set/NAPT-GAGE-105
ABC Calibrations

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Your organization has been identified as **Lab: B21566** throughout the report.

All artifacts used in this ILC/PT are commercially available instruments, chosen based on their ability to provide the wide characterization and spectrum needed. Specific nominal set points for measurements were determined prior to distribution of the artifact(s). A description of the artifacts is listed below.

Model	Serial Number	Attribute	Manufacturer
Various	NA	Dimensional	Weber, Pratt, Select, DoAll

Participants were instructed to calibrate the artifact(s) using their standard calibration procedures.

Established reference values were established in accordance with NAPT Quality Procedure 200-306 and NAPT work instruction 304-1. For additional guidance on this report, please refer to NAPT's Supplemental Guide to Interpretation of Reports.

The final results presented here may be different from the values issued in your Preliminary Report. The reason is because during the course of each ILC/PT, thorough technical reviews are conducted by NAPT's Technical Director and the Technical Advisor(s) assigned to the ILC/PT. This is done to assure test integrity and look for trends and/or anomalies in the data. By performing these reviews on a scheduled basis we are better able to assist you in the event prompt corrective action is necessary. Any change in the established reference value is based on those reviews.

Notes / Table Descriptors: The following bullets are meant to assist reader in reviewing tables.

- Values are rounded to the resolution of the reference data. Rounding does not effect the data analysis and is for reporting purposes only
- All uncertainties are at (or normalized to) $K=2$ (coverage factor associated with a 2-sigma, 95%, normal distribution)
- $E_n = (\text{Participant's Reported Value} - \text{Reference Value}) / \text{SQRT}(\text{Participant's Reported Uncertainty}^2 + \text{Reference Uncertainty})$
- S (Satisfactory): Participant's Computed E_n is within range of +1 to -1
- U (Unsatisfactory): Participant's Computed E_n is outside range of +1 to -1
- I (In Range): Participant's Reported Value falls in range of (Reference Uncertainty)
- W (Within Range): Participant's Reported Value and Reported Uncertainty overlaps range of Reference Value \pm Reference Uncertainty
- O (Out of Range): neither Participant's Reported Value nor Uncertainty falls in range of (Reference Value \pm Reference Uncertainty)
- One star "*" present indicates that the test value is an outlier and falls outside +/- 2 Standard Deviations from the Mean. Two stars "**" present indicates that the test/lab was manually excluded from the calculations and is considered an extreme outlier
- Z-Score = $(\text{Participant's Reported Value} - \text{Mean Reference Value}) / \text{Standard Deviation}$
- Blue Text Indicates Revised Data / Red Values Indicate E_n is greater than one



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FINAL REPORT: BLOCK COMPARISON

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Date of Participation in ILC/PT: 04/02/2007

Analysis of the data ABC Calibrations submitted to NAPT is shown below. In this table, your reported values are compared against the established reference values only.

Individual performance indicators include:

- Your measurement data at each nominal set point
- Reference values and uncertainties of test artifact(s)
- Participant's E_n values, S/U (satisfactory/unsatisfactory) ratings, IWO (in/within/out of range) ratings and Z score

Measurement Description	Reported Value / Reference Value	Reported Uncertainty / Reference Uncertainty	E_n	S/U	IWO	Z Score
1) 0.100200 in	0.1002060 / 0.1002060	0.0000041 / 0.0000041	0.00	S	I	0.00
2) 0.142000 in	0.1419948 / 0.1419948	0.0000041 / 0.0000041	0.00	S	I	0.00
3) 0.350000 in	0.3499923 / 0.3499923	0.0000044 / 0.0000044	0.00	S	I	0.00
4) 0.500000 in	0.4999996 / 0.4999996	0.0000045 / 0.0000045	0.00	S	I	0.00
5) 0.550000 in	0.5500012 / 0.5500012	0.0000045 / 0.0000045	0.00	S	I	0.00
6) 0.900000 in	0.9000045 / 0.9000045	0.0000048 / 0.0000048	0.00	S	I	0.00
7) 2.000000 in	1.9999996 / 1.9999996	0.0000465 / 0.0000465	0.00	S	I	0.00
8) 3.000000 in	2.9999951 / 2.9999951	0.0000087 / 0.0000087	0.00	S	I	0.00
9) 4.000000 in	4.0000048 / 4.0000048	0.0000106 / 0.0000106	0.00	S	I	0.00
10) 25.000 mm	25.000109 / 25.000109	0.000105 / 0.000105	0.00	S	I	0.00

In the following pages, your reported values are compared to the values reported by other participants enrolled in this ILC/PT. For each nominal set point, mean values of all satisfactory results and mean values of all participant reported results are presented.



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FINAL REPORT: BLOCK COMPARISON

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ABC Calibrations

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 1) 0.100200 in

Discipline: Dimensional Length

Nominal Value: 0.1002000

Measurement Units: in

Established Reference Value: 0.1002060

Established Reference Uncertainty: 0.0000041

Mean Value (Satisfactory Results): 0.1002078

Mean Uncertainty (Satisfactory Results): 0.0000121

Mean Value (All Participants): 0.1002078

Mean Uncertainty (All Participants): 0.0000121

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	0.1002056	0.0000030	-0.07	S	I	-0.12
A04464	0.1002090	0.0000122	0.23	S	I	1.00
A50780	0.1002088	0.0000035	0.52	S	I	0.93
A61769	0.1002067	0.0000030	0.14	S	I	0.24
A62072	0.1002080	0.0000033	0.38	S	I	0.67
A63419	0.1002050	0.0000650	-0.01	S	I	-0.32
B11960	0.1002060	0.0000040	0.00	S	I	0.01
B14090	0.1002050	0.0000052	-0.15	S	I	-0.32
B14835	0.1002052	0.0000030	-0.15	S	I	-0.26
B21566	0.1002060	0.0000041	0.00	S	I	0.00
B22080	0.1002083	0.0000019	0.51	S	I	0.77
B24667	0.1002090	0.0000039	0.53	S	I	1.00
B32031	0.1002070	0.0000070	0.13	S	I	0.34
*B33263	0.1002300	0.0000800	0.30	S	W	7.95
B34378	0.1002080	0.0000040	0.35	S	I	0.67
B52972	0.1002050	0.0000062	-0.13	S	I	-0.32
B53112	0.1002032	0.0000053	-0.41	S	I	-0.92
B64154	0.1002052	0.0000030	-0.15	S	I	-0.26



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FINAL REPORT: BLOCK COMPARISON

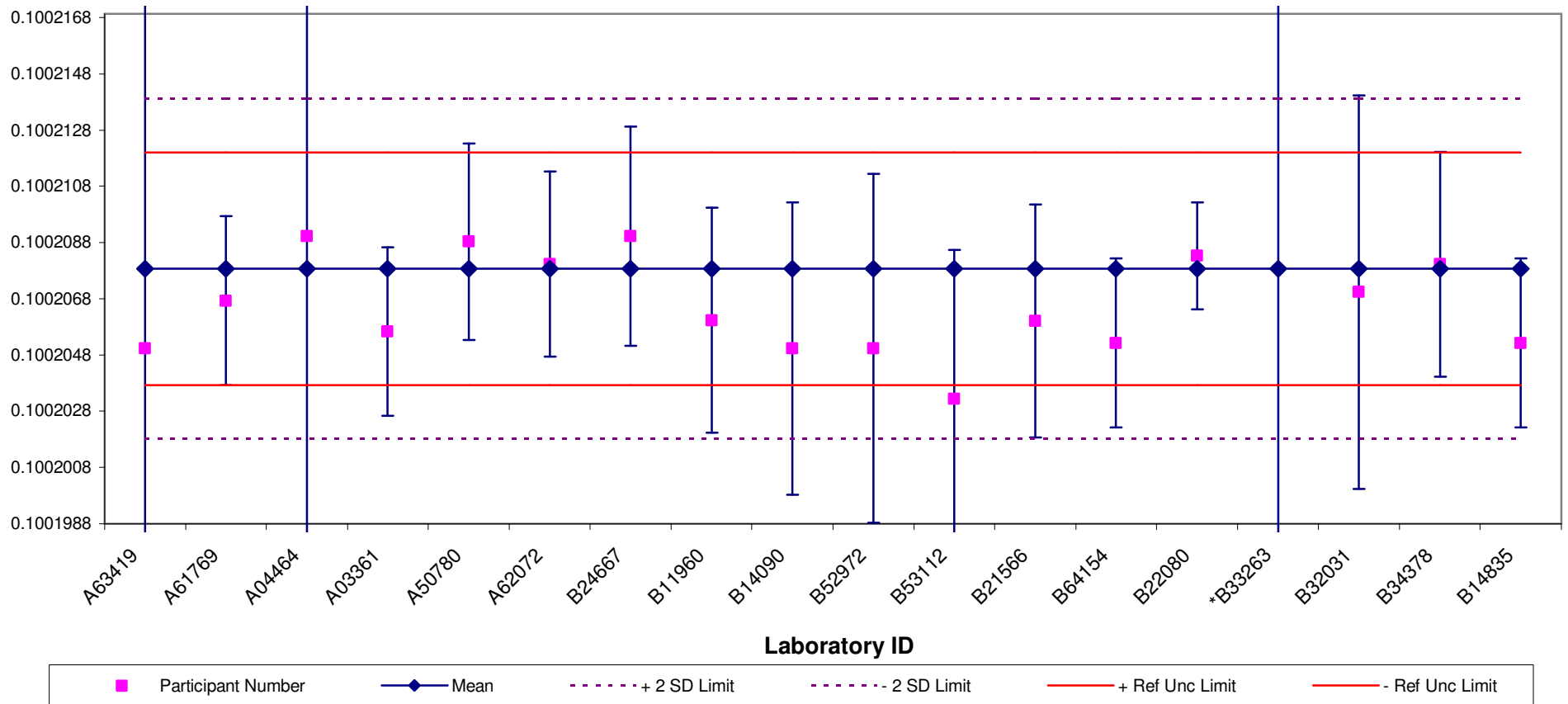
Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 1) 0.100200 in

BLOCK COMPARISON:





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ABC Calibrations

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 2) 0.142000 in

Discipline: Dimensional Length

Nominal Value: 0.1420000

Established Reference Value: 0.1419948

Mean Value (Satisfactory Results): 0.1419955

Mean Value (All Participants): 0.1419959

Measurement Units: in

Established Reference Uncertainty: 0.0000041

Mean Uncertainty (Satisfactory Results): 0.0000127

Mean Uncertainty (All Participants): 0.0000122

Test ID #	Reported Value	Reported Uncertainty	E _n	S/U	IWO	Z Score
A03361	0.1419939	0.0000030	-0.18	S	I	-0.26
A04464	0.1420000	0.0000124	0.40	S	W	1.43
A50780	0.1420020	0.0000035	1.33	U	W	1.99
A61769	0.1419935	0.0000030	-0.26	S	I	-0.37
A62072	0.1419940	0.0000034	-0.16	S	I	-0.23
A63419	0.1419930	0.0000670	-0.03	S	I	-0.51
B11960	0.1419960	0.0000040	0.20	S	I	0.32
B14090	0.1419920	0.0000047	-0.45	S	I	-0.79
B14835	0.1419941	0.0000030	-0.14	S	I	-0.20
B21566	0.1419948	0.0000041	0.00	S	I	0.00
B22080	0.1419956	0.0000019	0.17	S	I	0.21
B24667	0.1419920	0.0000039	-0.50	S	I	-0.79
B32031	0.1419940	0.0000070	-0.10	S	I	-0.23
*B33263	0.1420100	0.0000800	0.19	S	W	4.21
B34378	0.1419960	0.0000040	0.20	S	I	0.32
B52972	0.1419950	0.0000062	0.02	S	I	0.05
B53112	0.1419959	0.0000054	0.16	S	I	0.30
B64154	0.1419937	0.0000030	-0.22	S	I	-0.31



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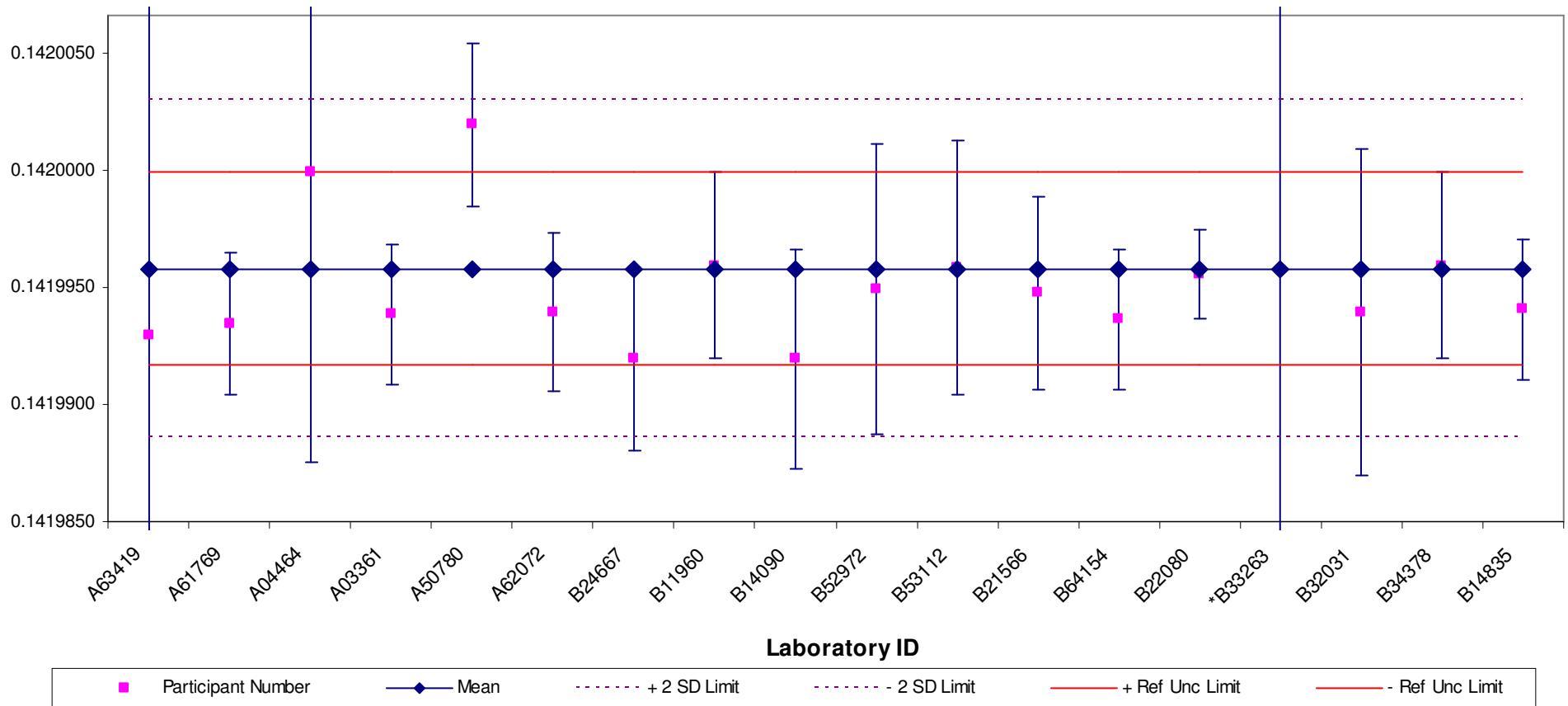
Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
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Measurement Description: 2) 0.142000 in

BLOCK COMPARISON:





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ABC Calibrations

Report Date: 11/28/2007
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Measurement Description: 3) 0.350000 in

Discipline: Dimensional Length

Nominal Value: 0.3500000

Measurement Units: in

Established Reference Value: 0.3499923

Established Reference Uncertainty: 0.0000044

Mean Value (Satisfactory Results): 0.3499925

Mean Uncertainty (Satisfactory Results): 0.0000129

Mean Value (All Participants): 0.3499925

Mean Uncertainty (All Participants): 0.0000129

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	0.3499902	0.0000030	-0.39	S	I	-0.42
A04464	0.3500000	0.0000124	0.59	S	W	1.59
A50780	0.3499977	0.0000035	0.97	S	W	1.11
A61769	0.3499897	0.0000030	-0.48	S	I	-0.52
A62072	0.3499940	0.0000039	0.30	S	I	0.36
A63419	0.3499930	0.0000770	0.01	S	I	0.15
B11960	0.3499940	0.0000040	0.29	S	I	0.36
B14090	0.3499890	0.0000060	-0.44	S	I	-0.67
B14835	0.3499908	0.0000030	-0.28	S	I	-0.30
B21566	0.3499923	0.0000044	0.00	S	I	0.00
B22080	0.3499952	0.0000019	0.62	S	I	0.60
B24667	0.3499880	0.0000039	-0.73	S	I	-0.87
B32031	0.3499900	0.0000070	-0.27	S	I	-0.46
B33263	0.3499900	0.0000800	-0.03	S	I	-0.46
B34378	0.3499940	0.0000040	0.29	S	I	0.36
B52972	0.3499910	0.0000062	-0.17	S	I	-0.26
B53112	0.3499946	0.0000060	0.32	S	I	0.48
B64154	0.3499910	0.0000030	-0.24	S	I	-0.26



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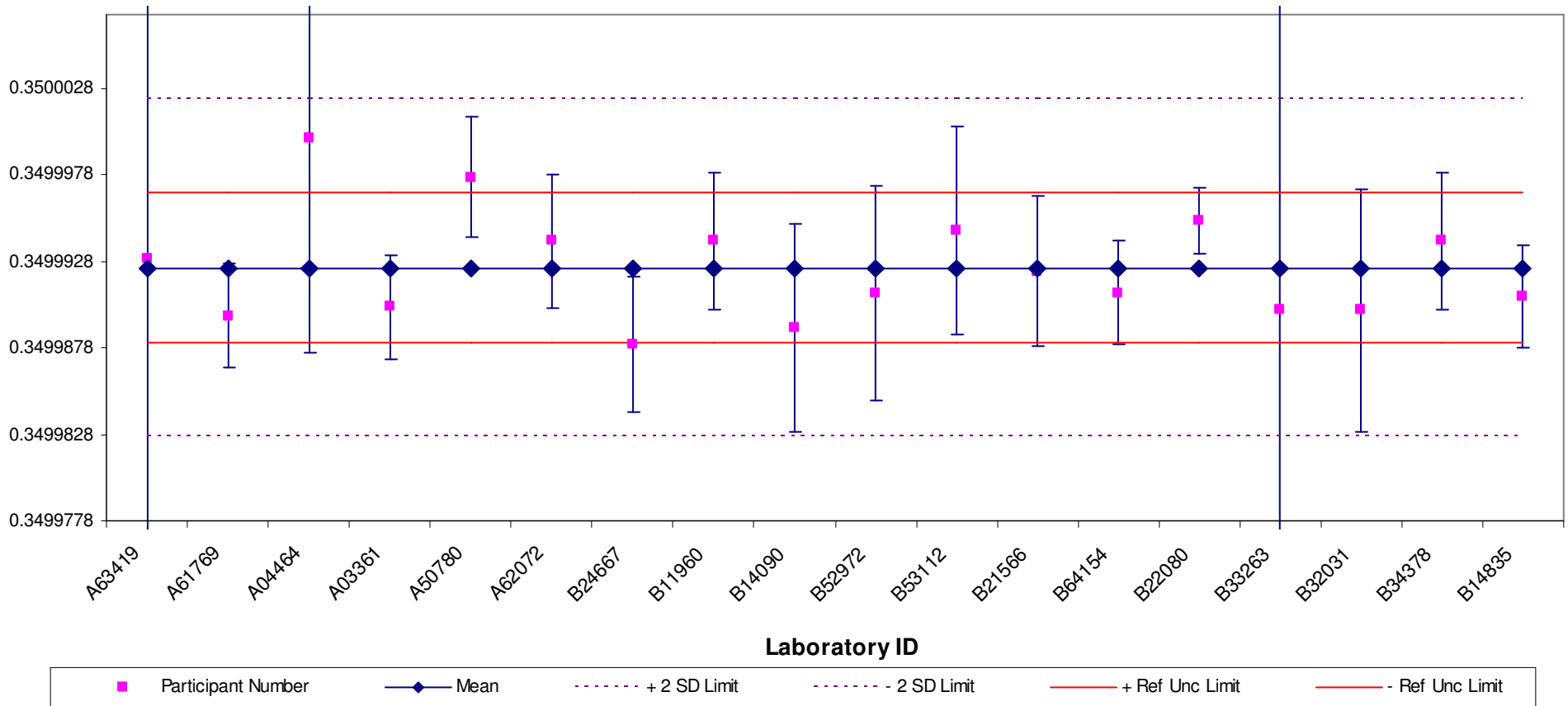
Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
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Measurement Description: 3) 0.350000 in

BLOCK COMPARISON:





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Gage Block Set/NAPT-GAGE-105
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Report Date: 11/28/2007
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Measurement Description: 4) 0.500000 in

Discipline: Dimensional Length

Nominal Value: 0.5000000

Established Reference Value: 0.4999996

Mean Value (Satisfactory Results): 0.4999996

Mean Value (All Participants): 0.4999996

Measurement Units: in

Established Reference Uncertainty: 0.0000045

Mean Uncertainty (Satisfactory Results): 0.0000134

Mean Uncertainty (All Participants): 0.0000134

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	0.4999975	0.0000030	-0.39	S	I	-0.49
A04464	0.5000020	0.0000122	0.19	S	I	0.57
A50780	0.5000039	0.0000035	0.76	S	I	1.03
A61769	0.4999983	0.0000030	-0.24	S	I	-0.30
A62072	0.5000010	0.0000043	0.23	S	I	0.34
A63419	0.5000000	0.0000840	0.00	S	I	0.10
B11960	0.5000000	0.0000040	0.07	S	I	0.10
B14090	0.4999970	0.0000064	-0.33	S	I	-0.61
B14835	0.4999977	0.0000030	-0.35	S	I	-0.45
B21566	0.4999996	0.0000045	0.00	S	I	0.00
B22080	0.5000009	0.0000019	0.27	S	I	0.31
B24667	0.4999990	0.0000039	-0.10	S	I	-0.14
B32031	0.4999960	0.0000070	-0.43	S	I	-0.85
B33263	0.5000000	0.0000800	0.01	S	I	0.10
B34378	0.5000010	0.0000050	0.21	S	I	0.34
B52972	0.5000000	0.0000062	0.05	S	I	0.10
B53112	0.5000012	0.0000064	0.21	S	I	0.38
B64154	0.4999970	0.0000030	-0.48	S	I	-0.61



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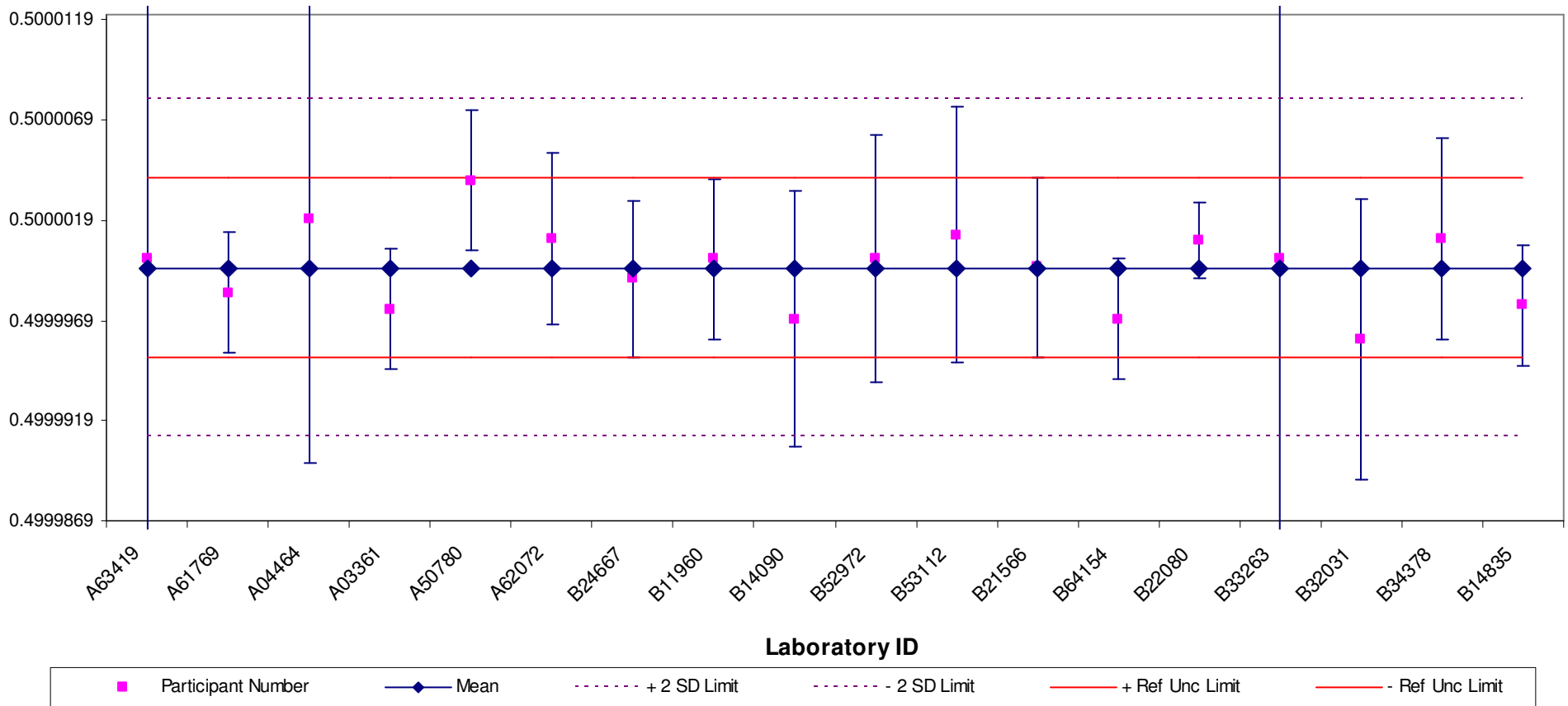
Gage Block Set/NAPT-GAGE-105
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OUTLIERS EXCLUDED

Report Date: 11/28/2007
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Measurement Description: 4) 0.500000 in

BLOCK COMPARISON:





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Gage Block Set/NAPT-GAGE-105
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Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 5) 0.550000 in

Discipline: Dimensional Length

Nominal Value: 0.5500000

Measurement Units: in

Established Reference Value: 0.5500012

Established Reference Uncertainty: 0.0000045

Mean Value (Satisfactory Results): 0.5500014

Mean Uncertainty (Satisfactory Results): 0.0000136

Mean Value (All Participants): 0.5500014

Mean Uncertainty (All Participants): 0.0000136

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	0.5500018	0.0000030	0.11	S	I	0.43
A04464	0.5500030	0.0000124	0.14	S	I	1.26
*A50780	0.5500043	0.0000035	0.54	S	I	2.17
A61769	0.5500026	0.0000030	0.26	S	I	0.98
A62072	0.5500020	0.0000044	0.13	S	I	0.56
A63419	0.5500000	0.0000860	-0.01	S	I	-0.83
B11960	0.5500010	0.0000040	-0.03	S	I	-0.13
*B14090	0.5499980	0.0000066	-0.40	S	I	-2.22
B14835	0.5500020	0.0000030	0.15	S	I	0.56
B21566	0.5500012	0.0000045	0.00	S	I	0.00
B22080	0.5500016	0.0000019	0.08	S	I	0.29
B24667	0.5500010	0.0000039	-0.03	S	I	-0.13
B32031	0.5500020	0.0000070	0.10	S	I	0.56
B33263	0.5500000	0.0000800	-0.01	S	I	-0.83
B34378	0.5500010	0.0000050	-0.03	S	I	-0.13
B52972	0.5500010	0.0000062	-0.02	S	I	-0.13
B53112	0.5500003	0.0000066	-0.11	S	I	-0.62
B64154	0.5500020	0.0000030	0.15	S	I	0.56



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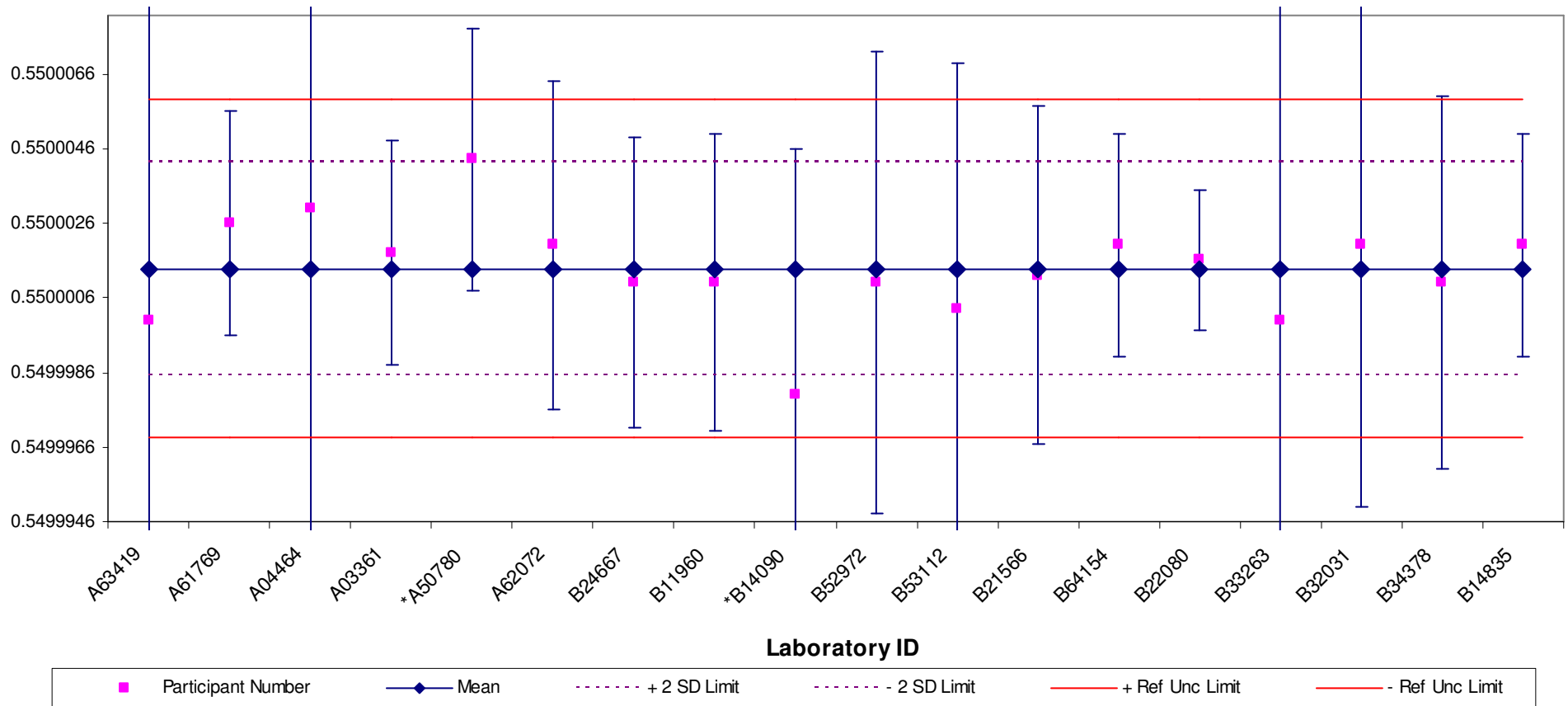
Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
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Measurement Description: 5) 0.550000 in

BLOCK COMPARISON:





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Report Date: 11/28/2007
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Measurement Description: 6) 0.900000 in

Discipline: Dimensional Length

Nominal Value: 0.9000000

Measurement Units: in

Established Reference Value: 0.9000045

Established Reference Uncertainty: 0.0000048

Mean Value (Satisfactory Results): 0.9000039

Mean Uncertainty (Satisfactory Results): 0.0000159

Mean Value (All Participants): 0.9000036

Mean Uncertainty (All Participants): 0.0000152

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	0.9000019	0.0000030	-0.45	S	I	-0.94
A04464	0.9000090	0.0000124	0.34	S	I	1.65
A50780	0.9000036	0.0000035	-0.15	S	I	-0.32
A61769	0.9000019	0.0000030	-0.45	S	I	-0.94
A62072	0.9000040	0.0000053	-0.07	S	I	-0.17
A63419	0.9000060	0.0001030	0.01	S	I	0.56
B11960	0.9000060	0.0000040	0.24	S	I	0.56
B14090	0.9000020	0.0000077	-0.27	S	I	-0.90
B14835	0.9000018	0.0000030	-0.47	S	I	-0.97
B21566	0.9000045	0.0000048	0.00	S	I	0.00
B22080	0.9000065	0.0000019	0.39	S	I	0.74
*B24667	0.8999980	0.0000039	-1.04	U	W	-2.36
B32031	0.8999990	0.0000070	-0.64	S	W	-2.00
*B33263	0.9000100	0.0000900	0.06	S	W	2.01
B34378	0.9000020	0.0000050	-0.36	S	I	-0.90
B52972	0.9000000	0.0000062	-0.57	S	I	-1.63
B53112	0.9000067	0.0000076	0.25	S	I	0.81
B64154	0.9000021	0.0000030	-0.42	S	I	-0.87



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FINAL REPORT: BLOCK COMPARISON

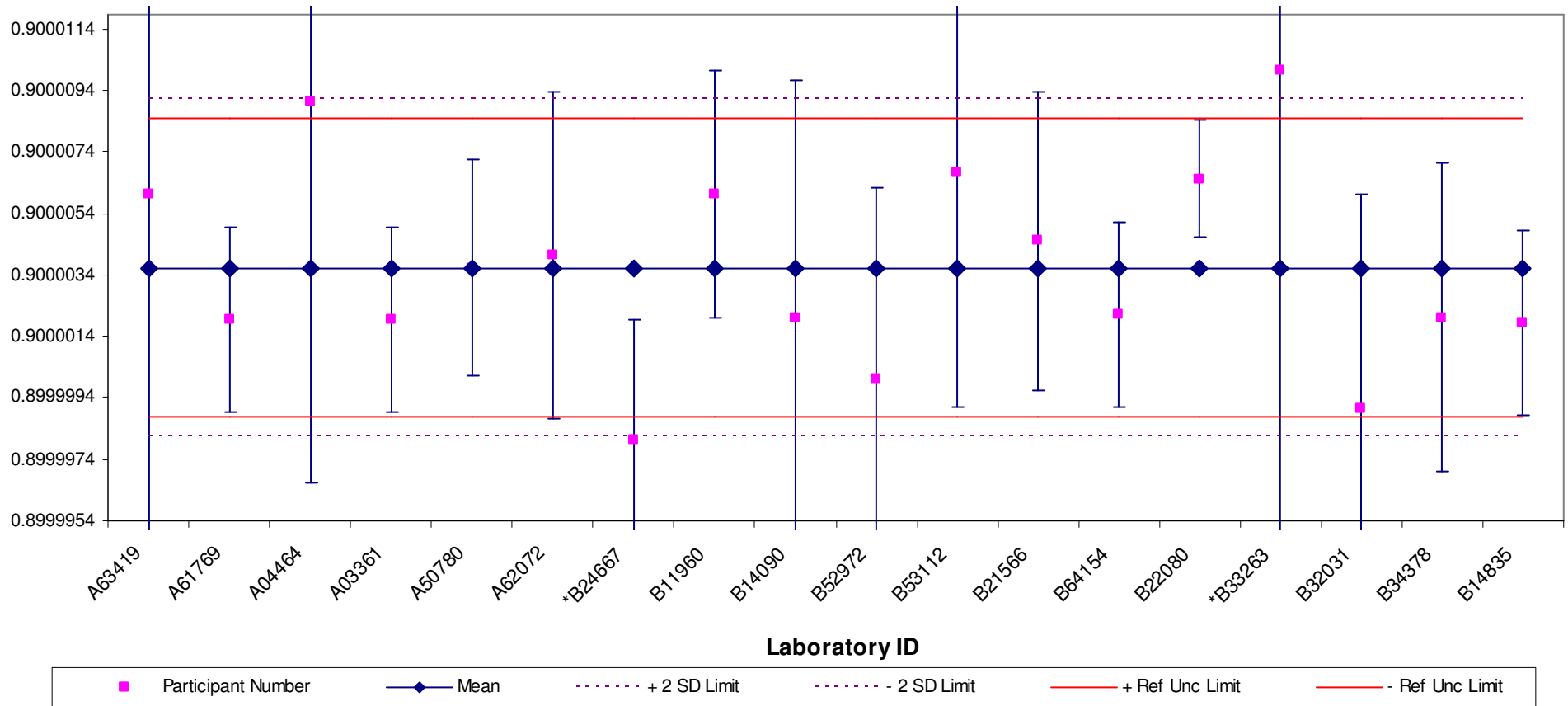
Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 6) 0.900000 in

BLOCK COMPARISON:





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FINAL REPORT: BLOCK COMPARISON

Gage Block Set/NAPT-GAGE-105
ABC Calibrations

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 7) 2.000000 in

Discipline: Dimensional Length

Nominal Value: 2.0000000

Established Reference Value: 1.9999996

Mean Value (Satisfactory Results): 2.0000007

Mean Value (All Participants): 2.0000007

Measurement Units: in

Established Reference Uncertainty: 0.0000465

Mean Uncertainty (Satisfactory Results): 0.0000179

Mean Uncertainty (All Participants): 0.0000179

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	2.0000005	0.0000028	0.02	S	I	0.25
A04464	2.0000010	0.0000127	0.03	S	I	0.38
A50780	2.0000012	0.0000041	0.03	S	I	0.44
A61769	2.0000007	0.0000045	0.02	S	I	0.30
A62072	2.0000000	0.0000100	0.01	S	I	0.11
A63419	1.9999990	0.0001560	0.00	S	I	-0.17
B11960	2.0000010	0.0000060	0.03	S	I	0.38
B14090	1.9999970	0.0000112	-0.05	S	I	-0.72
B14835	2.0000010	0.0000028	0.03	S	I	0.38
B21566	1.9999996	0.0000465	0.00	S	I	0.00
B22080	1.9999968	0.0000042	-0.06	S	I	-0.78
B24667	2.0000070	0.0000048	0.16	S	I	2.04
B32031	1.9999950	0.0000100	-0.10	S	I	-1.27
B34378	2.0000020	0.0000080	0.05	S	I	0.66
B52972	2.0000050	0.0000071	0.11	S	I	1.49
B53112	2.0000038	0.0000106	0.09	S	I	1.16
B64154	2.0000005	0.0000028	0.02	S	I	0.25



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FINAL REPORT: BLOCK COMPARISON

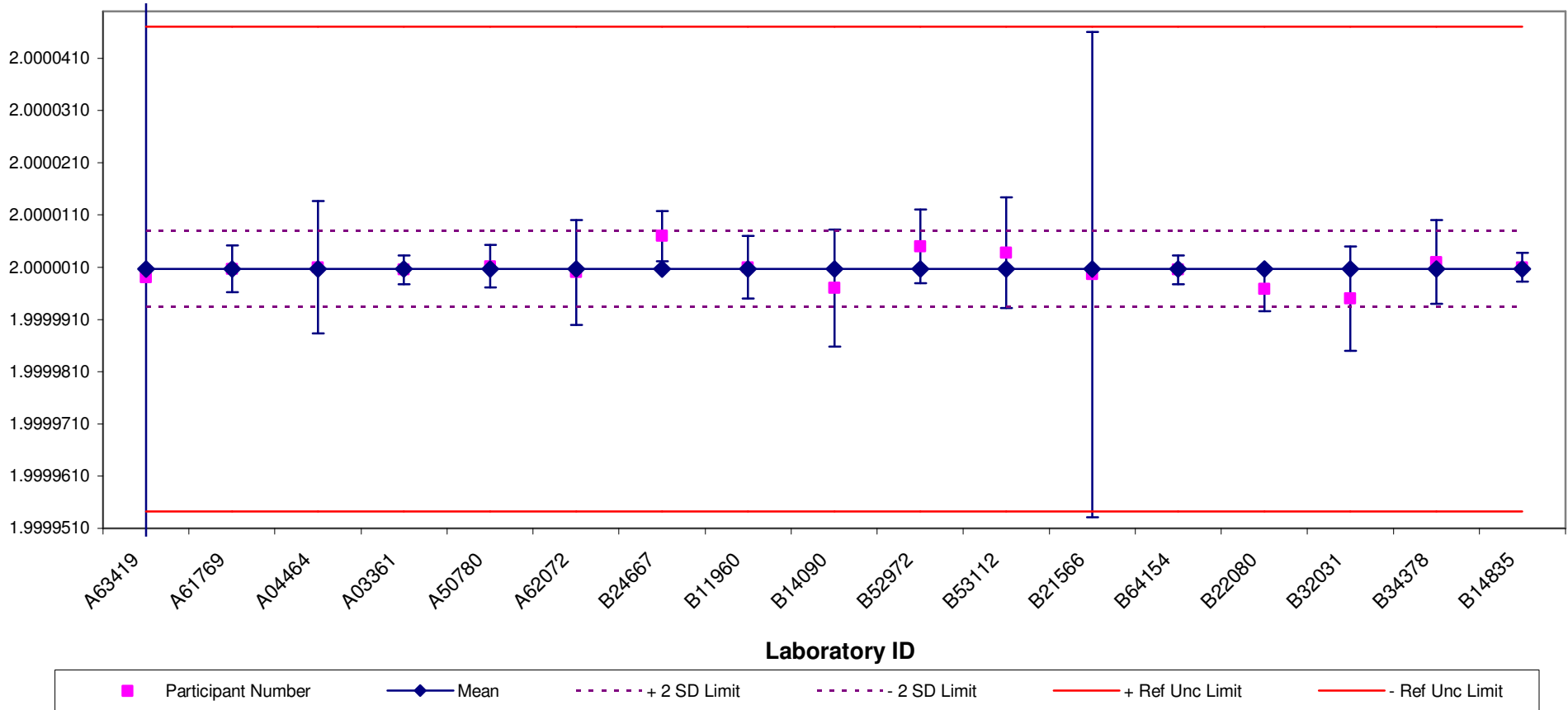
Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 7) 2.000000 in

BLOCK COMPARISON:





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FINAL REPORT: BLOCK COMPARISON

Gage Block Set/NAPT-GAGE-105
ABC Calibrations

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 8) 3.000000 in

Discipline: Dimensional Length

Nominal Value: 3.0000000

Measurement Units: in

Established Reference Value: 2.9999951

Established Reference Uncertainty: 0.0000087

Mean Value (Satisfactory Results): 2.9999932

Mean Uncertainty (Satisfactory Results): 0.0000221

Mean Value (All Participants): 2.9999925

Mean Uncertainty (All Participants): 0.0000202

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	2.9999924	0.0000042	-0.28	S	I	-0.32
A04464	3.0000010	0.0000128	0.38	S	I	0.68
A50780	2.9999910	0.0000051	-0.41	S	I	-0.48
A61769	2.9999850	0.0000060	-0.96	S	W	-1.18
A62072	2.9999970	0.0000140	0.11	S	I	0.22
A63419	2.9999950	0.0002040	0.00	S	I	-0.01
B11960	2.9999960	0.0000070	0.08	S	I	0.10
B14090	2.9999880	0.0000144	-0.42	S	I	-0.83
B14835	2.9999927	0.0000042	-0.25	S	I	-0.28
B21566	2.9999951	0.0000087	0.00	S	I	0.00
B22080	2.9999986	0.0000065	0.32	S	I	0.41
B24667	2.9999810	0.0000053	-1.39	U	O	-1.64
*B32031	2.9999710	0.0000150	-1.39	U	O	-2.81
B34378	2.9999960	0.0000100	0.07	S	I	0.10
B52972	2.9999840	0.0000080	-0.94	S	W	-1.29
*B53112	3.0000165	0.0000134	1.34	U	W	2.49
B64154	2.9999929	0.0000042	-0.23	S	I	-0.26



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FINAL REPORT: BLOCK COMPARISON

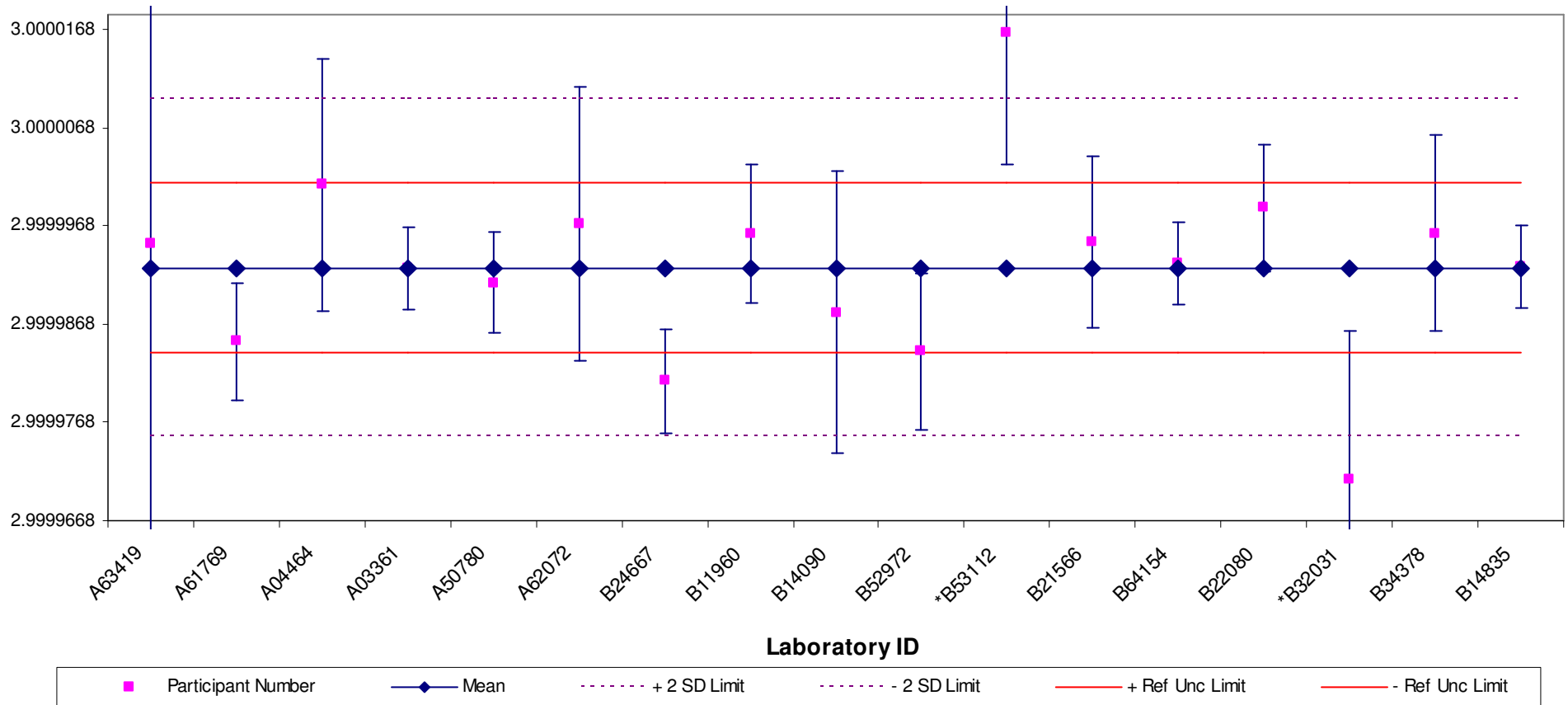
Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 8) 3.000000 in

BLOCK COMPARISON:





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FINAL REPORT: BLOCK COMPARISON

Gage Block Set/NAPT-GAGE-105
ABC Calibrations

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 9) 4.000000 in

Discipline: Dimensional Length

Nominal Value: 4.0000000

Measurement Units: in

Established Reference Value: 4.0000048

Established Reference Uncertainty: 0.0000106

Mean Value (Satisfactory Results): 4.0000055

Mean Uncertainty (Satisfactory Results): 0.0000281

Mean Value (All Participants): 4.0000055

Mean Uncertainty (All Participants): 0.0000281

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	4.0000040	0.0000049	-0.07	S	I	-0.15
A04464	4.0000010	0.0000133	-0.22	S	I	-0.70
A50780	4.0000040	0.0000630	-0.01	S	I	-0.15
A61769	4.0000107	0.0000075	0.46	S	I	1.09
A62072	4.0000040	0.0000180	-0.04	S	I	-0.15
A63419	3.9999990	0.0002520	-0.02	S	I	-1.07
B11960	4.0000050	0.0000090	0.02	S	I	0.04
B14090	4.0000020	0.0000176	-0.14	S	I	-0.51
B14835	4.0000047	0.0000049	-0.01	S	I	-0.02
B21566	4.0000048	0.0000106	0.00	S	I	0.00
B22080	4.0000051	0.0000088	0.02	S	I	0.06
B24667	4.0000140	0.0000059	0.76	S	I	1.70
B32031	4.0000050	0.0000200	0.01	S	I	0.04
B34378	4.0000020	0.0000120	-0.17	S	I	-0.51
B52972	4.0000050	0.0000089	0.02	S	I	0.04
*B53112	4.0000182	0.0000162	0.69	S	W	2.48
B64154	4.0000057	0.0000049	0.08	S	I	0.17



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FINAL REPORT: BLOCK COMPARISON

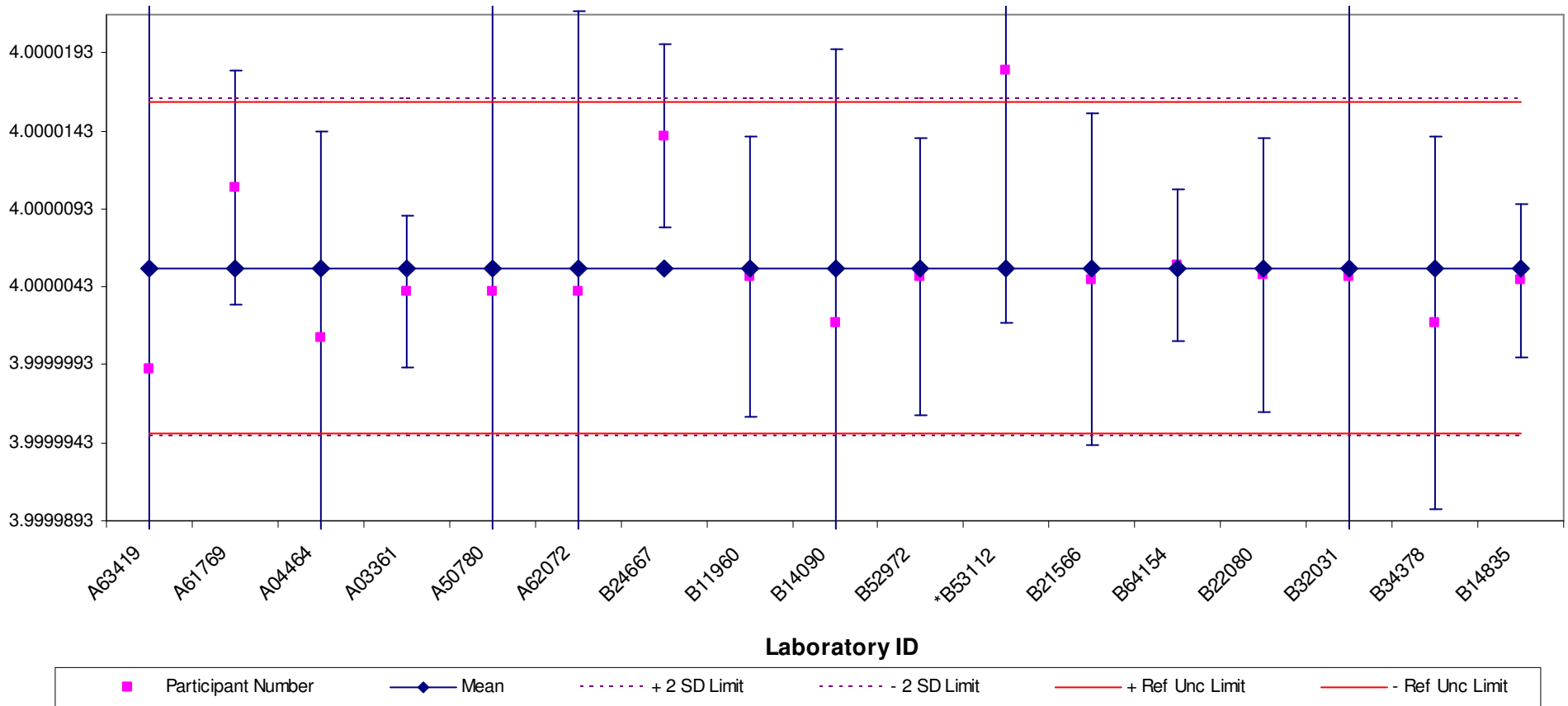
Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 9) 4.000000 in

BLOCK COMPARISON:





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FINAL REPORT: BLOCK COMPARISON

Gage Block Set/NAPT-GAGE-105
ABC Calibrations

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 10) 25.000 mm

Discipline: Dimensional Length

Nominal Value: 25.000000

Measurement Units: mm

Established Reference Value: 25.000109

Established Reference Uncertainty: 0.000105

Mean Value (Satisfactory Results): 25.00011

Mean Uncertainty (Satisfactory Results): 0.007195

Mean Value (All Participants): 25.000168

Mean Uncertainty (All Participants): 0.005929

Test ID #	Reported Value	Reported Uncertainty	E_n	S/U	IWO	Z Score
A03361	25.000110	0.000065	0.01	S	I	0.01
A04464	25.000110	0.000012	0.01	S	I	0.01
A50780	25.000128	0.000089	0.14	S	I	0.20
A61769	25.000064	0.000000	-0.43	S	I	-0.49
A62072	25.000050	0.000140	-0.34	S	I	-0.64
A63419	25.000120	0.002724	0.00	S	I	0.12
B11960	25.000100	0.000100	-0.06	S	I	-0.10
B14090	25.000040	0.000210	-0.30	S	I	-0.75
B14835	25.000116	0.000065	0.05	S	I	0.07
B21566	25.000109	0.000105	0.00	S	I	0.00
*B22080	25.000370	0.000048	2.25	U	O	2.82
B24667	25.000140	0.097000	0.00	S	I	0.33
*B32031	24.999934	0.000010	-1.66	U	O	-1.90
*B33263	25.001000	0.000002	8.45	U	O	9.65
B52972	25.000220	0.000160	0.58	S	W	1.20
B53112	25.000140	0.000000	0.29	S	I	0.33
B64154	25.000099	0.000065	-0.08	S	I	-0.11



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FINAL REPORT: BLOCK COMPARISON

Gage Block Set/NAPT-GAGE-105
ABC Calibrations

OUTLIERS EXCLUDED

Report Date: 11/28/2007
Date of Participation in ILC/PT: 04/02/2007

Measurement Description: 10) 25.000 mm

BLOCK COMPARISON:

