Collaborative Testing Services, Inc.

Fasteners & Metals Interlaboratory Testing Program

Summary Report Cycle 139, 3rd Qtr 2022

About the Metals Program About CTS Key to Tables and Graphs

Analysis	Test Group
	Dimensional Tests
1001	Dimensional: Outside Diameter of Plain Plug Gage
	Tensile Tests
1101	Tensile Strength: Lab-Machined Flat Aluminum
1102	Yield Strength: Lab-Machined Flat Aluminum
1103	Elongation: Lab-Machined Flat Aluminum
1111	Tensile Strength: Pre-Machined Round Steel
1112	Yield Strength: Pre-Machined Round Steel
1113	Elongation: Pre-Machined Round Steel
1114	Reduction of Area: Pre-Machined Round Steel
1121	Tensile Strength: Lab-Machined Round Steel
1122	Yield Strength: Lab-Machined Round Steel
1123	Elongation: Lab-Machined Round Steel
1124	Reduction of Area: Lab-Machined Round Steel
	Hardness / Metallography Tests
1301	Rockwell Hardness: C & B Scales
1302	Rockwell Hardness: B Scale
1321	Microhardness: Knoop Indenters (500 gf)
1322	Microhardness: Knoop Indenters (200 gf)
1323	Microhardness: Vickers Indenters (500 gf)
	Chemical Analyses
1520 - 1527	Chemical Analysis: Titanium-based Alloy
1600 - 1613	Chemical Analysis: Carbon & Low Alloy Steel

ABOUT THE FASTENERS & METALS PROGRAM

Collaborative Testing Services operates and maintains the program for Fasteners and Metals as part of a series of Proficiency and Interlaboratory Testing Programs offered by CTS in cooperation with various associations for a wide range of industries. Personnel from the National Institute of Standards and Technology (formerly the National Bureau of Standards), Industrial Fasteners Institute (IFI), and the Naval Shipyard Laboratories provide technical guidance and advice to this program.

The purpose of the program is to give participating laboratories a means to compare periodically the level and uniformity of their testing with that of other laboratories in the industry. It also provides a realistic assessment of the state of fasteners and metals testing proficiency.

In each report, there is a summary of the statistics for the analysis and a graphical representation of the data for each test. Also shown are notes concerning specific laboratory results, as well as significant findings related to instrument types or other testing variations. Refer to the KEY TO TABLES AND GRAPHS for an explanation of terms and guidelines to interpreting the results.

ABOUT CTS

Founded in 1971, CTS is a privately-owned company that specializes in interlaboratory tests for a wide variety of industries, including rubber, plastics, fasteners and metals, containerboard, paper, color, and wine as well as proficiency tests for forensic laboratories. All of the tests are designed to assist organizations in achieving and maintaining quality control objectives. Labs from the U.S., as well as more than 50 countries, currently participate in the CTS programs.
For further information contact:

COLLABORATIVE TESTING SERVICES, INC.
21331 Gentry Drive
Sterling, VA 20166

Phone: (571) 434-1925
FAX: (571)434-1937
e-mail: metals@cts-interlab.com
www.collaborativetesting.com
Office Hours: 8:00 a.m. - 4:30 p.m. ET

Key for Fasteners & Metals Program Web Summary Report

WebCode - Assigned laboratory identification number(temporary)used to ensure lab confidentiality while permitting a lab to locate its data in the report published on the CTS website.

Lab Mean - The average of the test results obtained by the participant.

Grand Mean - The average of the LAB MEANS for all included participants. Laboratories flagged with an X or an M (see DATA FLAG column) are excluded from the GRAND MEAN.

Between-Lab Standard Deviation - An indication of the precision of measurement between the laboratories. The greater the spread of the LAB MEANS about the GRAND MEAN, the larger the BETWEEN-LAB STANDARD DEVIATION (and vice versa).

Comparative Performance Value (CPV) - An indication of how well a laboratory's results agree with the other participants. The CPV is a ratio indicating the number of standard deviations from the GRAND MEAN. CPV = (LAB MEAN - GRAND MEAN)/ BETWEEN-LAB STANDARD DEVIATION. The closer a laboratory's COMPARATIVE PERFORMANCE VALUE is to zero, the more consistent its results are with the other participants' data (and vice versa).

Instr. Code - A code indicating the manufacturer of the instrument used to perform the test (see separate INSTRUMENT CODE LIST for each test section).

Data Flag - DATA FLAGS are assigned based on the simultaneous analysis of both samples tested. Refer to the following chart for an explanation of each symbol:

Data Flags

Data Flag Type	Statistically Included/Excluded	ACTION REQUIRED
*	INCLUDED	CAUTION - review testing procedure and monitor future results. Results fall outside the drawn 95% ellipse but within a 99% ellipse that is calculated but not drawn. Labs flagged with an * do not typically receive a specific note regarding the flag. If this error is repeated in future rounds, however, a lab may need to stop and review its testing procedures. The initial data flag is not cause for alarm.
X	EXCLUDED	STOP - immediate review of data and/or testing procedure is required (all tests exept Chemical Analyses). Results fall outside the 99% ellipse. See the specific note following the data for more information on why the data are excluded. For Chemical Analyses see an additional Memo.
M	EXCLUDED	PROCEED - lab was unable to report data for at least one sample. However, a lab receiving two or more M flags for a test may need to stop and review its testing procedures.

Graph - For each laboratory, the Lab Mean for the second sample (y-axis) is plotted against the Lab Mean for the first sample (x-axis) with each point representing a laboratory. The horizontal and vertical cross-hairs are the Grand Means for each sample. When 20 or more laboratories are included in the statistics, an ellipse is also drawn so that 95% of the time a randomly selected laboratory will be included inside the ellipse. Plotted data flags are explained above. Labs not receiving a data flag appear as points on the plot.

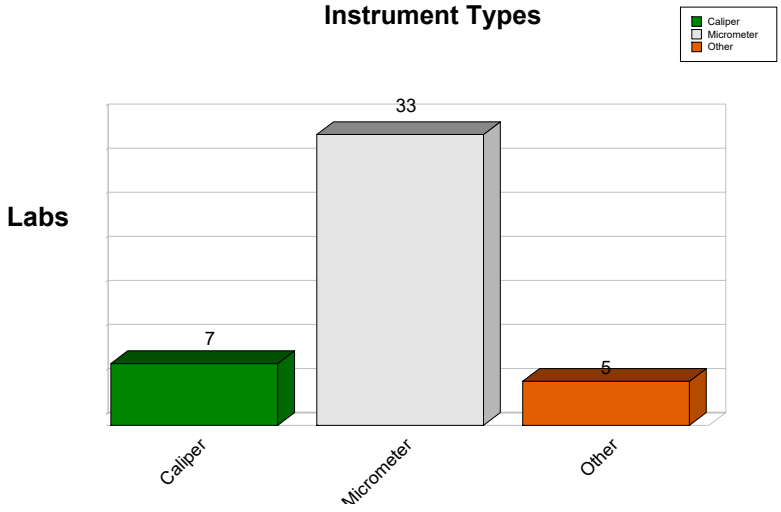
Fasteners and Metals Interlaboratory Testing Program

Analysis 1001

Dimensional: Outside Diameter of Plain Plug Gage
ISO GUM

Cycle 139
3rd Qtr 2022

During Cycle 139, CTS conducted the Analysis #101 - Round Dimensional. For this test all participants received two samples I85 and I86 with nominal diameters; 0.2496 in. and 0.2500 in. Each sample is an English Class X gage pin with 0.00002 in roundness limit made from 52100 bearing steel, hardened to 60-62 Rockwell C. Laboratories were asked to determine the outside diameter of the pins. 45 laboratories that subscribed for this test reported testing results. The graph below shows a breakdown of the types of instruments used.



Analysis of the Results

The most convenient and common method of judging the quality of measurement results is by calculating the performance statistic, En, calculated as:

$$E_n = \frac{\left(X_{lab} - X_{ref}\right)}{\sqrt{U_{lab}^2 + U_{ref}^2}}$$

Where the assigned value, Xref, is determined in a reference laboratory, Uref is the expanded uncertainty of Xref, and Ulab is the **Expanded Uncertainty** of a participant's result, Xlab. En is not calculated for Labs who did not report their Expanded Uncertainty.

Absolute values of En less than **1.00** should be obtained for the measurements to be acceptable.

The following graph and the table represent the results reported by participants. All tests were conducted at room temperature (20-23C or 68-77F).

Xref and Uref were determined by the gage pin manufacturer. The manufacturer is ISO 9001:2000 Certified and an ISO 17025 Accredited company. All master gages used in checking the plug gages are calibrated with standards traceable to NIST.

$$E_n = \frac{\left(X_{lab} - X_{ref}\right)}{\sqrt{U_{lab}^2 + U_{ref}^2}}$$

Xref1 = 0.2496 in.

Xref2 = 0.2500 in.

WebCode	Data Flag (if assigned)	Reference Uncertainty (Uref)	Expanded Uncertainty (Ulab)	Sample I85 Lab Mean (Xlab)	Sample I85 Performance Statistic (En1)	Sample I86 Lab Mean (Xlab)	Sample I86 Performance Statistic (En2)	Instrument
292JKB		0.00004	0.00030	0.24955	-0.17	0.24990	-0.33	Micrometer
2K7TUD		0.00004	0.00010	0.24963	0.29	0.25001	0.10	Micrometer
3BM2EL		0.00004	0.00118	0.24961	0.01	0.25000	0.00	Caliper
3BYDKY		0.00004	0.00258	0.24930	-0.12	0.24950	-0.19	Caliper
6A4WTT	X	0.00004	0.00010	0.24946	-1.30	0.24990	-0.93	Other
6ZB68F		0.00004	0.00020	0.24956	-0.20	0.24991	-0.42	Micrometer
73KTLQ		0.00004	0.00050	0.24950	-0.20	0.24980	-0.40	Micrometer
7YDA44		0.00004	0.00024	0.24965	0.22	0.24995	-0.19	Micrometer
7ZPXHA		0.00004	0.00210	0.24860	-0.48	0.24920	-0.38	Caliper
9LVQAR		0.00004	0.00043	0.24948	-0.29	0.24978	-0.51	Other
9ZUFZ4	X	0.00004	0.00002	0.24956	-0.98	0.24994	-1.30	Micrometer
ACL8JL		0.00004	0.00030	0.24950	-0.33	0.25000	0.00	Caliper
B7K864		0.00004	0.00059	0.24952	-0.14	0.24990	-0.17	Micrometer
BPYJV9	X	0.00004	0.00005	0.24945	-2.34	0.24980	-3.12	Micrometer
C27EKA		0.00004	Not Reported	0.24955		0.24995		Other
CLH293		0.00004	0.00201	0.24950	-0.05	0.24990	-0.05	Micrometer
DRBDHJ		0.00004	Not Reported	0.24950		0.24990		Micrometer
E7QZ32		0.00004	0.00040	0.24954	-0.15	0.24987	-0.32	Micrometer
EVB7R9		0.00004	0.00011	0.24956	-0.34	0.24996	-0.34	Micrometer
FJP23V		0.00004	0.00300	0.24960	0.00	0.25000	0.00	Caliper
GGBRCP		0.00004	0.00008	0.24951	-1.00	0.24991	-0.98	Micrometer
HECVYM		0.00004	0.00018	0.24951	-0.49	0.24989	-0.60	Micrometer
JTBMBW	X	0.00004	0.00030	0.24935	-0.83	0.24945	-1.82	Micrometer
K2FC77		0.00004	0.00019	0.24950	-0.52	0.24990	-0.52	Micrometer
KME47X	X	0.00004	0.00005	0.24950	-1.62	0.24996	-0.65	Micrometer
KYNUUR		0.00004	0.00006	0.24954	-0.90	0.24993	-0.99	Micrometer
MM62EG		0.00004	0.00017	0.24948	-0.67	0.24986	-0.78	Micrometer
NT3TQC		0.00004	0.00039	0.24946	-0.35	0.24990	-0.25	Other
PMNKGT		0.00004	0.00040	0.24959	-0.02	0.24997	-0.07	Micrometer
Q42LMF		0.00004	Not Reported	0.24938		0.24972		Micrometer
R36AM7		0.00004	0.00025	0.24961	0.04	0.25000	0.00	Micrometer
T6UXKR	X	0.00004	0.00009	0.24941	-1.98	0.24980	-2.09	Micrometer
T7M7AM		0.00004	0.00130	0.24950	-0.08	0.24980	-0.15	Caliper

$$E_n = \frac{\left(X_{lab} - X_{ref}\right)}{\sqrt{U_{lab}^2 + U_{ref}^2}}$$

Xref1 = 0.2496 in.

Xref2 = 0.2500 in.

WebCode	Data Flag (if assigned)	Reference Uncertainty (Uref)	Expanded Uncertainty (Ulab)	Sample I85 Lab Mean (Xlab)	Sample I85 Performance Statistic (En1)	Sample I86 Lab Mean (Xlab)	Sample I86 Performance Statistic (En2)	Instrument
U24C8V		0.00004	0.07874	0.24946	0.00	0.24987	0.00	Micrometer
UKJLAG	X	0.00004	0.00002	0.24955	-1.12	0.24994	-1.34	Micrometer
ULBJLU		0.00004	0.00110	0.24959	-0.01	0.24994	-0.05	Micrometer
UU76KL		0.00004	0.00009	0.24957	-0.32	0.24993	-0.69	Micrometer
UVRBNK		0.00004	0.00011	0.24957	-0.28	0.24996	-0.33	Micrometer
VFTH24		0.00004	0.02300	0.24953	0.00	0.24990	0.00	Micrometer
W6E7XC		0.00004	0.00015	0.24957	-0.19	0.24997	-0.19	Micrometer
WDNNZH	X	0.00004	0.00004	0.24951	-1.51	0.24987	-2.19	Micrometer
WW6ZGU		0.00004	0.00260	0.24900	-0.23	0.24920	-0.31	Caliper
WZL29E		0.00004	0.00015	0.24950	-0.66	0.25000	0.00	Other
Y7MX7J		0.00004	0.00004	0.24959	-0.18	0.24999	-0.18	Micrometer
ZLV7LD	X	0.00004	0.00015	0.24944	-1.03	0.24986	-0.90	Micrometer

Summary Statistics

	Sample I85		Sample I86	
Grand Means	0.2495	inch	0.2499	inch
Stnd Dev Btwn Labs	0.0001	inch	0.0001	inch

Samples I85, I86 : 52100 Steel, 52100 Steel

Statistics based on 41 of 45 reporting participants

Comments on Assigned Data Flags for Test #1001

6A4WTT (X) - En value for sample I85 was low.

9ZUFZ4 (X) - En value for sample I86 was low.

BPYJV9 (X) - En value for both samples was low.

JTBMBW (X) - En value for sample I86 was low.

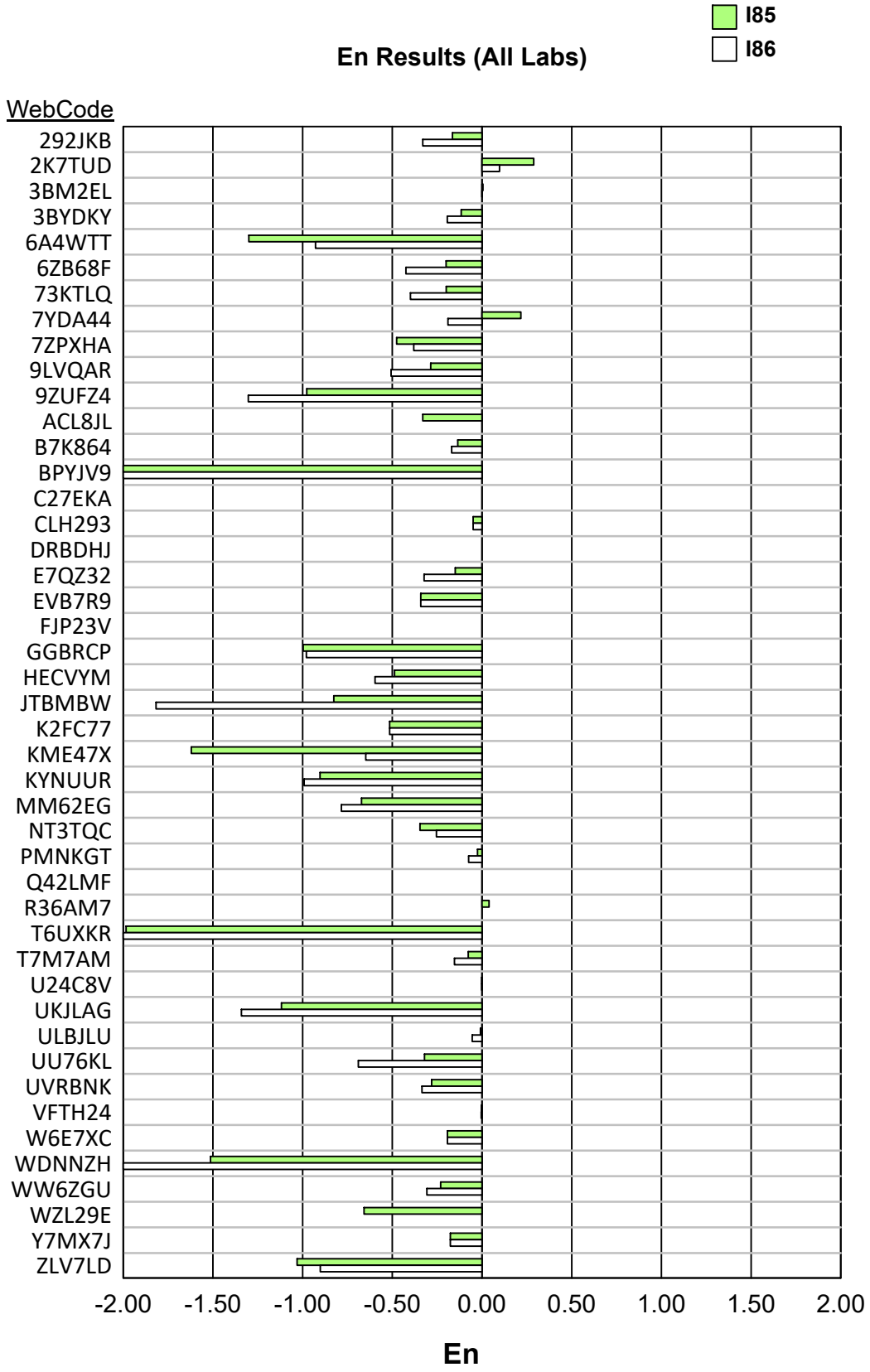
KME47X (X) - En value for sample I85 was low.

T6UXKR (X) - En value for both samples was low.

UKJLAG (X) - En value for both samples was low.

WDNNZH (X) - En value for both samples was low.

ZLV7LD (X) - En value for sample I85 was low.



		Sample R85			Sample R86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2ATBJA		47.40	-0.18	-0.33	48.70	-0.08	-0.20
2BJB67		46.92	-0.66	-1.23	48.41	-0.37	-0.87
38X88E		47.50	-0.08	-0.14	48.90	0.12	0.27
3ANLLG		47.60	0.02	0.04	49.00	0.22	0.51
3LGUGC	*	46.80	-0.78	-1.45	47.50	-1.28	-3.01
3MQ7U8		46.90	-0.68	-1.26	48.80	0.02	0.04
46R4W4		47.94	0.37	0.68	49.24	0.46	1.07
4D3ECA		47.99	0.41	0.77	49.02	0.24	0.56
6RY6J7		47.57	0.00	-0.01	49.30	0.51	1.21
6TR3QC		48.00	0.42	0.79	48.40	-0.38	-0.90
6XAW8B		47.28	-0.29	-0.55	48.73	-0.05	-0.12
7PMPP6		47.40	-0.18	-0.33	48.60	-0.18	-0.43
7VYZAQ		47.60	0.02	0.04	48.00	-0.78	-1.84
87GDT2		47.60	0.03	0.05	48.44	-0.34	-0.80
9K8T27		47.30	-0.28	-0.52	48.50	-0.28	-0.67
BM49G8		47.60	0.02	0.04	48.50	-0.28	-0.67
CKBU63		47.40	-0.18	-0.33	48.80	0.02	0.04
CYTHJ8		46.93	-0.65	-1.21	48.54	-0.25	-0.58
DDG4Y6		46.70	-0.88	-1.64	48.60	-0.18	-0.43
DEN7AX		47.20	-0.38	-0.70	48.80	0.02	0.04
DLXCNU		48.80	1.22	2.28	49.30	0.52	1.21
DMDWU4		47.90	0.32	0.60	48.90	0.12	0.27
EAQ7LD		47.90	0.32	0.60	48.60	-0.18	-0.43
F33PM9	X	47.10	-0.48	-0.89	61.50	12.72	29.82
FBEYWM		47.60	0.02	0.04	48.80	0.02	0.04
FPXK6V		48.05	0.47	0.88	49.38	0.60	1.40
FQPL6R		47.62	0.04	0.08	48.78	0.00	-0.01
GGU34N		46.88	-0.70	-1.31	48.17	-0.62	-1.45
HPEYXV	X	49.39	1.81	3.38	49.11	0.33	0.76
K6BK2V		46.80	-0.78	-1.45	47.90	-0.88	-2.07
KME47X	X	50.50	2.92	5.46	50.60	1.82	4.26
LCM29V		47.70	0.12	0.23	48.40	-0.38	-0.90
LDL4ZK	*	47.90	0.32	0.60	49.90	1.12	2.62
MMBWX9		47.30	-0.28	-0.52	48.90	0.12	0.27
NAB3QX		47.20	-0.38	-0.70	48.80	0.02	0.04
NKQZTG		47.04	-0.54	-1.00	49.10	0.32	0.74
NV63QA		48.80	1.22	2.28	49.70	0.92	2.15
P2CXD9		47.40	-0.18	-0.33	48.40	-0.38	-0.90
QANDU9		47.60	0.02	0.04	49.10	0.32	0.74
RFJCC3		47.20	-0.38	-0.70	48.50	-0.28	-0.67
T34Y69		47.70	0.12	0.23	48.90	0.12	0.27
T7CHRF		47.80	0.22	0.42	48.80	0.02	0.04
TGXJ9P		48.10	0.52	0.98	48.50	-0.28	-0.67
U8MHMN		48.80	1.22	2.28	49.50	0.72	1.68
UGALR3		47.30	-0.28	-0.52	48.70	-0.08	-0.20
URPPGD		48.60	1.02	1.91	49.10	0.32	0.74
V2L82M		48.50	0.92	1.72	49.20	0.42	0.98

WebCode	Data Flag	Sample R85 Lab Mean	Sample R85 Diff. from Grand Mean	Sample R85 CPV	Sample R86 Lab Mean	Sample R86 Diff. from Grand Mean	Sample R86 CPV
V3MV77		47.50	-0.08	-0.14	48.70	-0.08	-0.20
V9KR8N		47.20	-0.38	-0.70	48.80	0.02	0.04
VH3XYF		47.66	0.08	0.16	49.17	0.39	0.91
WJ77AJ		46.60	-0.98	-1.82	48.40	-0.38	-0.90
WLM3BJ		47.70	0.12	0.23	49.10	0.32	0.74
X6TUVX		47.29	-0.28	-0.53	48.61	-0.17	-0.40
YE8CPM		47.30	-0.28	-0.52	48.80	0.02	0.04
YVCXRA		48.06	0.48	0.91	49.14	0.36	0.84
ZKUGXH		48.50	0.92	1.72	49.00	0.22	0.51
ZTEYMH		47.20	-0.38	-0.70	48.50	-0.28	-0.67

Summary Statistics

	Sample R85		Sample R86	
Grand Means	47.58	ksi	48.78	ksi
Stnd Dev Btwn Labs	0.54	ksi	0.43	ksi

Samples R85, R86 : 16G 6061-T6 (A), 14G 6061-T6 (B)

Statistics based on 54 of 57 reporting participants

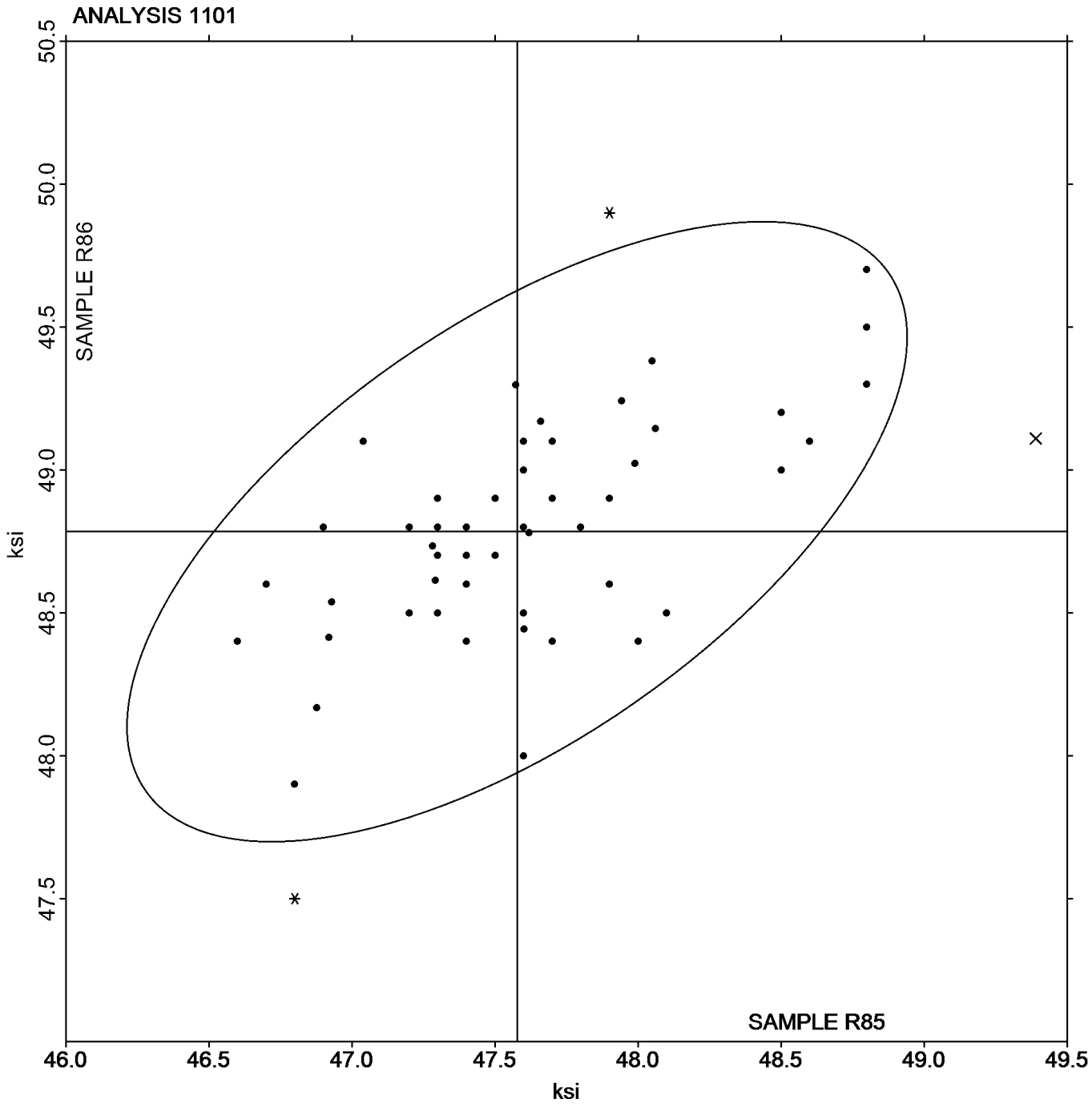
Comments on Assigned Data Flags for Test #1101

F33PM9 (X) - Data for sample R86 are high.

HPEYXV (X) - Data for sample R85 are high.

KME47X (X) - Data for both samples are high.

SAMPLE R85	SAMPLE R86
47.58 ksi	48.78 ksi



		Sample R85			Sample R86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2ATBJA		41.00	-0.05	-0.10	40.40	-0.15	-0.29
2BJB67		40.71	-0.34	-0.66	40.39	-0.16	-0.30
38X88E		40.90	-0.15	-0.30	40.60	0.05	0.10
3ANLLG		41.00	-0.05	-0.10	40.80	0.25	0.48
3LGUGC	*	40.40	-0.65	-1.28	39.20	-1.35	-2.59
3MQ7U8		40.40	-0.65	-1.28	40.50	-0.05	-0.09
46R4W4		40.72	-0.33	-0.65	40.46	-0.09	-0.17
4D3ECA		41.91	0.86	1.69	41.34	0.79	1.52
6RY6J7		40.89	-0.16	-0.31	40.89	0.34	0.65
6TR3QC		41.20	0.15	0.29	39.90	-0.65	-1.25
6XAW8B		40.76	-0.29	-0.58	40.61	0.06	0.12
7PMPP6		40.80	-0.25	-0.49	40.20	-0.35	-0.67
7VYZAQ		40.80	-0.25	-0.49	39.90	-0.65	-1.25
87GDT2		40.87	-0.18	-0.35	39.91	-0.63	-1.22
9K8T27		40.60	-0.45	-0.88	40.40	-0.15	-0.29
BM49G8		41.00	-0.05	-0.10	40.30	-0.25	-0.48
CKBU63		40.60	-0.45	-0.88	40.40	-0.15	-0.29
CYTHJ8		40.27	-0.78	-1.54	39.87	-0.68	-1.30
DDG4Y6		40.50	-0.55	-1.08	40.60	0.05	0.10
DEN7AX		40.60	-0.45	-0.88	40.50	-0.05	-0.09
DLXCNU		42.00	0.95	1.86	41.10	0.55	1.06
DMDWU4		41.10	0.05	0.10	40.40	-0.15	-0.29
EAQ7LD		41.30	0.25	0.49	40.10	-0.45	-0.86
F33PM9	X	40.50	-0.55	-1.08	50.70	10.15	19.46
FBEYWM		41.80	0.75	1.47	41.30	0.75	1.44
FPXK6V		41.35	0.30	0.59	40.91	0.36	0.69
FQPL6R		40.91	-0.14	-0.28	40.54	-0.01	-0.02
GGU34N		40.47	-0.58	-1.15	39.87	-0.68	-1.30
HPEYXV	X	44.03	2.98	5.85	42.19	1.64	3.15
K6BK2V		40.60	-0.45	-0.88	40.00	-0.55	-1.05
KME47X	*	41.80	0.75	1.47	41.90	1.35	2.59
LCM29V		41.10	0.05	0.10	40.00	-0.55	-1.05
LDL4ZK		41.40	0.35	0.69	41.10	0.55	1.06
MMBWX9		41.00	-0.05	-0.10	41.00	0.45	0.86
NAB3QX		41.20	0.15	0.29	40.80	0.25	0.48
NKQZTG		40.55	-0.50	-0.98	40.80	0.25	0.48
NV63QA	*	42.40	1.35	2.65	41.80	1.25	2.40
P2CXD9		40.80	-0.25	-0.49	39.80	-0.75	-1.44
QANDU9		41.50	0.45	0.88	41.40	0.85	1.63
RFJCC3		40.60	-0.45	-0.88	40.00	-0.55	-1.05
T34Y69		41.20	0.15	0.29	40.60	0.05	0.10
T7CHRF		41.20	0.15	0.29	40.40	-0.15	-0.29
TGXJ9P		41.50	0.45	0.88	40.00	-0.55	-1.05
U8MHMN		42.10	1.05	2.06	41.30	0.75	1.44
UGALR3		40.30	-0.75	-1.47	40.30	-0.25	-0.48
URPPGD		41.80	0.75	1.47	40.70	0.15	0.29
V2L82M		41.60	0.55	1.08	40.60	0.05	0.10

WebCode	Data Flag	Sample R85 Lab Mean	Sample R85 Diff. from Grand Mean	Sample R85 CPV	Sample R86 Lab Mean	Sample R86 Diff. from Grand Mean	Sample R86 CPV
V3MV77		41.00	-0.05	-0.10	40.50	-0.05	-0.09
V9KR8N		40.90	-0.15	-0.30	40.60	0.05	0.10
VH3XYF		41.20	0.15	0.29	41.10	0.55	1.06
WJ77AJ		40.00	-1.05	-2.06	40.00	-0.55	-1.05
WLM3BJ		41.10	0.05	0.10	40.80	0.25	0.48
X6TUVX		40.84	-0.21	-0.41	40.66	0.11	0.22
YE8CPM		40.90	-0.15	-0.30	40.70	0.15	0.29
YVCXRA		41.63	0.58	1.14	41.15	0.60	1.15
ZKUGXH		41.80	0.75	1.47	40.60	0.05	0.10
ZTEYMH		40.90	-0.15	-0.30	40.20	-0.35	-0.67

Summary Statistics

	Sample R85		Sample R86	
Grand Means	41.05	ksi	40.55	ksi
Stnd Dev Btwn Labs	0.51	ksi	0.52	ksi

Samples R85, R86 : 16G 6061-T6 (A), 14G 6061-T6 (B)

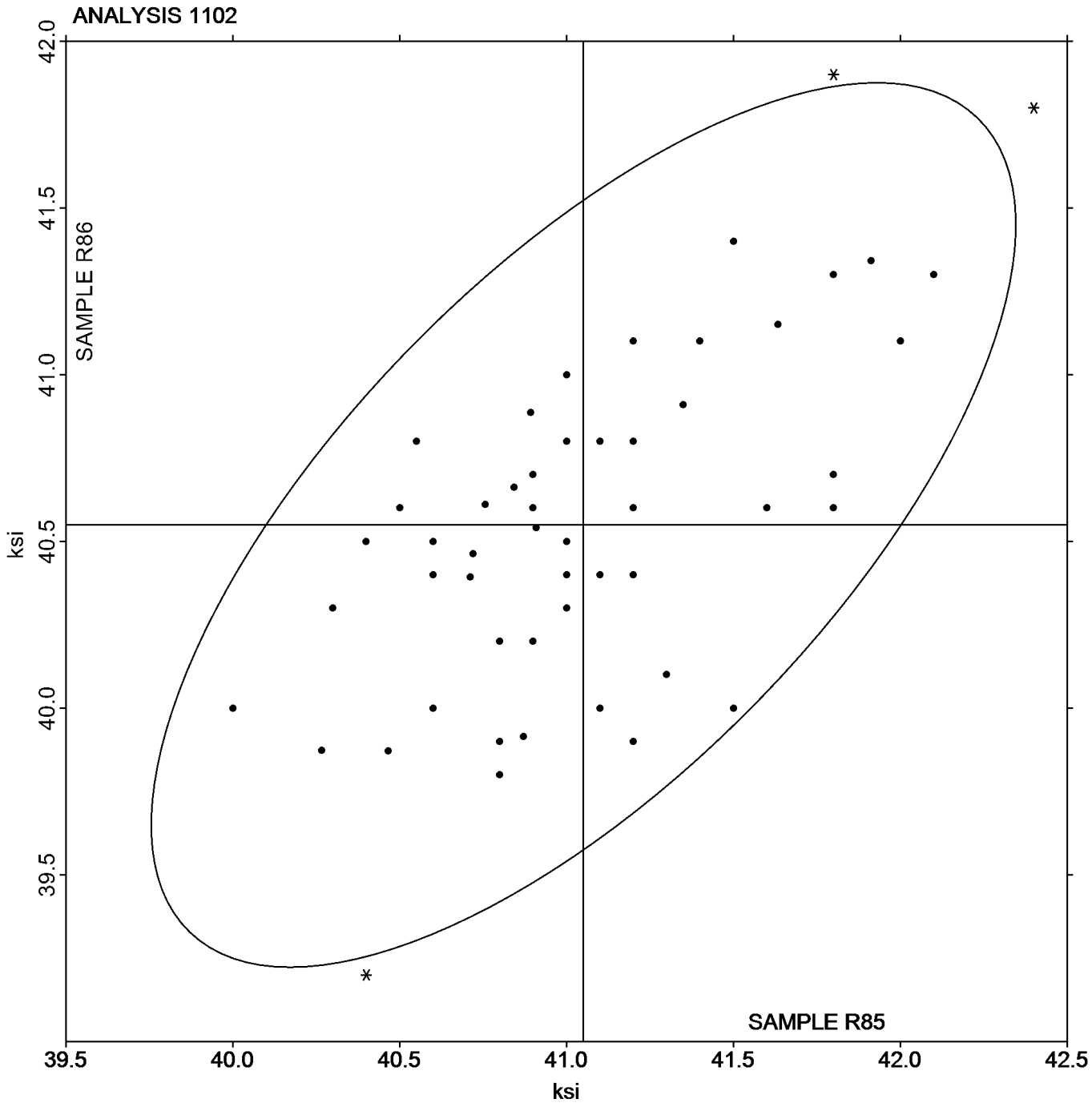
Statistics based on 55 of 57 reporting participants

Comments on Assigned Data Flags for Test #1102

F33PM9 (X) - Data for sample R86 are high.

HPEYXV (X) - Data for both samples are high.

SAMPLE R85	SAMPLE R86
41.05 ksi	40.55 ksi



		Sample R85			Sample R86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2ATBJA		12.00	-1.35	-1.47	14.50	-1.05	-1.17
2BJB67		12.30	-1.05	-1.15	14.80	-0.75	-0.83
38X88E		13.40	0.05	0.05	16.10	0.55	0.61
3ANLLG		12.87	-0.48	-0.52	15.34	-0.21	-0.23
3LGUGC		13.80	0.45	0.49	16.60	1.05	1.17
3MQ7U8		13.00	-0.35	-0.38	15.00	-0.55	-0.61
46R4W4		13.40	0.05	0.05	16.20	0.65	0.72
4D3ECA		14.20	0.85	0.92	16.00	0.45	0.50
6RY6J7		15.30	1.95	2.12	17.15	1.60	1.78
6TR3QC		13.00	-0.35	-0.38	15.00	-0.55	-0.61
6XAW8B		13.20	-0.15	-0.17	15.90	0.35	0.39
7PMPP6		13.00	-0.35	-0.38	15.60	0.05	0.06
7VYZAQ		13.00	-0.35	-0.38	15.00	-0.55	-0.61
87GDT2		14.70	1.35	1.47	17.20	1.65	1.83
9K8T27		14.60	1.25	1.36	17.00	1.45	1.61
BM49G8		13.00	-0.35	-0.38	15.00	-0.55	-0.61
CKBU63		13.50	0.15	0.16	15.00	-0.55	-0.61
CYTHJ8	*	16.00	2.65	2.88	17.00	1.45	1.61
DDG4Y6		12.00	-1.35	-1.47	14.00	-1.55	-1.72
DEN7AX		13.50	0.15	0.16	15.50	-0.05	-0.06
DLXCNU		13.50	0.15	0.16	14.50	-1.05	-1.17
DMDWU4		13.50	0.15	0.16	15.50	-0.05	-0.06
EAQ7LD		13.30	-0.05	-0.06	14.70	-0.85	-0.94
F33PM9	*	12.20	-1.15	-1.25	16.60	1.05	1.17
FBEYWM		13.50	0.15	0.16	15.50	-0.05	-0.06
FPXK6V		13.50	0.15	0.16	15.50	-0.05	-0.06
FQPL6R		13.95	0.60	0.65	14.50	-1.05	-1.17
GGU34N		12.20	-1.15	-1.25	14.50	-1.05	-1.17
HPEYXV		15.30	1.95	2.12	16.80	1.25	1.39
K6BK2V		12.50	-0.85	-0.93	14.50	-1.05	-1.17
KME47X	*	15.00	1.65	1.79	15.00	-0.55	-0.61
LCM29V		13.00	-0.35	-0.38	15.50	-0.05	-0.06
LDL4ZK		12.60	-0.75	-0.82	15.70	0.15	0.17
MMBWX9		14.30	0.95	1.03	16.80	1.25	1.39
NAB3QX		12.40	-0.95	-1.04	14.80	-0.75	-0.83
NKQZTG		12.65	-0.70	-0.76	16.35	0.80	0.89
NV63QA		14.40	1.05	1.14	16.90	1.35	1.50
P2CXD9		13.70	0.35	0.38	16.20	0.65	0.72
QANDU9		14.00	0.65	0.71	15.00	-0.55	-0.61
RFJCC3		14.50	1.15	1.25	17.50	1.95	2.16
T34Y69		14.00	0.65	0.71	16.00	0.45	0.50
T7CHRF		13.50	0.15	0.16	16.00	0.45	0.50
TGXJ9P		12.00	-1.35	-1.47	15.50	-0.05	-0.06
U8MHMN		12.50	-0.85	-0.93	14.50	-1.05	-1.17
UGALR3		12.80	-0.55	-0.60	14.90	-0.65	-0.72
URPPGD		13.00	-0.35	-0.38	15.50	-0.05	-0.06
V2L82M		13.50	0.15	0.16	15.50	-0.05	-0.06

WebCode	Data Flag	Sample R85 Lab Mean	Sample R85 Diff. from Grand Mean	Sample R85 CPV	Sample R86 Lab Mean	Sample R86 Diff. from Grand Mean	Sample R86 CPV
V3MV77		12.00	-1.35	-1.47	14.00	-1.55	-1.72
V9KR8N		13.20	-0.15	-0.17	15.60	0.05	0.06
VH3XYF		13.40	0.05	0.05	14.80	-0.75	-0.83
WJ77AJ		13.00	-0.35	-0.38	16.50	0.95	1.05
WLM3BJ		12.10	-1.25	-1.36	14.20	-1.35	-1.50
X6TUVX		12.10	-1.25	-1.36	14.80	-0.75	-0.83
YE8CPM		13.80	0.45	0.49	15.70	0.15	0.17
YVCXRA		13.90	0.55	0.60	15.30	-0.25	-0.28
ZKUGXH		12.50	-0.85	-0.93	14.50	-1.05	-1.17
ZTEYMH		14.00	0.65	0.71	16.80	1.25	1.39

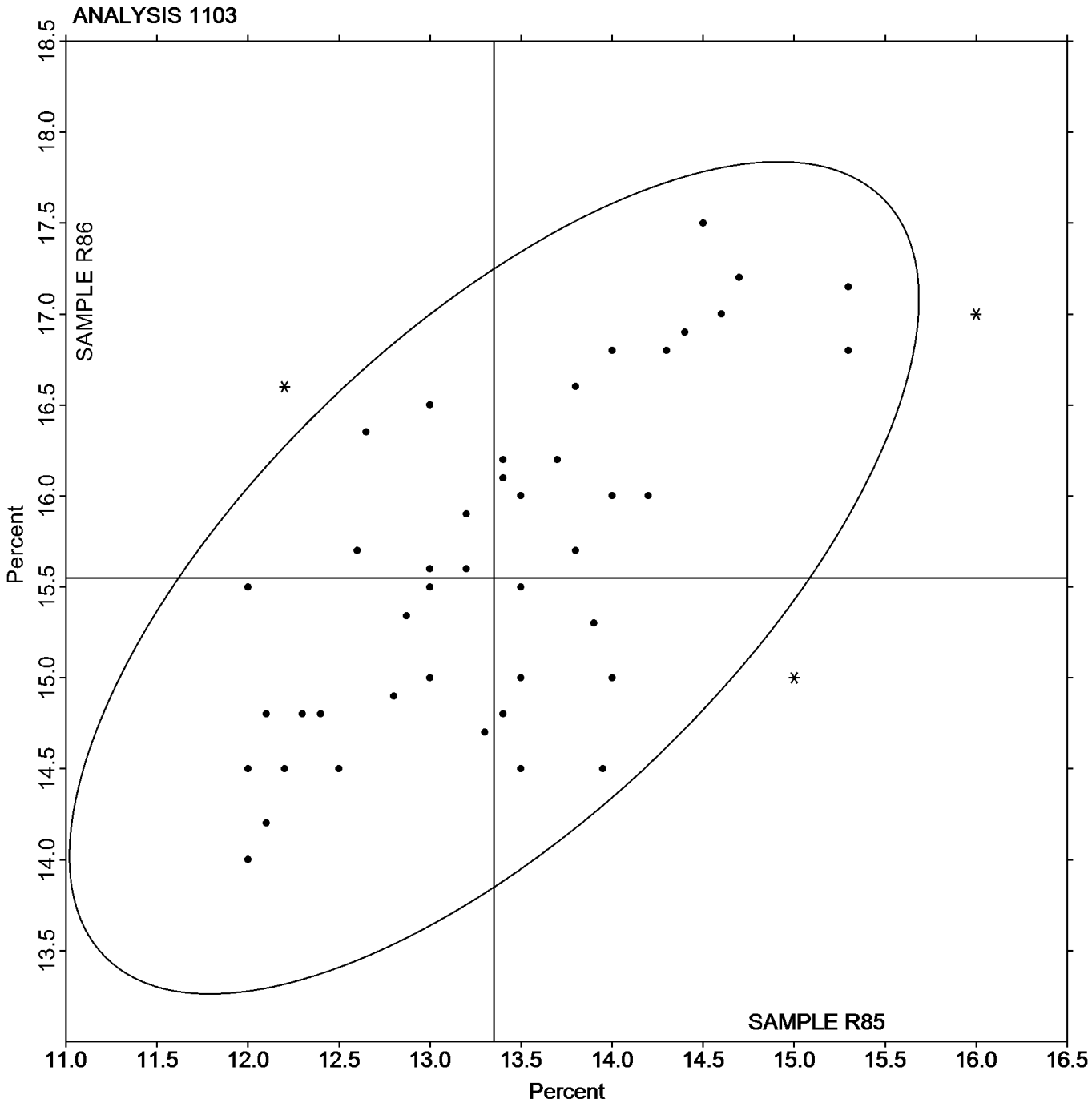
Summary Statistics

	Sample R85		Sample R86	
Grand Means	13.35	Percent	15.55	Percent
Stnd Dev Btwn Labs	0.92	Percent	0.90	Percent

Samples R85, R86 : 16G 6061-T6 (A), 14G 6061-T6 (B)

Statistics based on 57 of 57 reporting participants

SAMPLE R85	SAMPLE R86
13.35 Percent	15.55 Percent



		Sample A85			Sample A86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
3VRY33		170.08	1.22	0.51	147.07	-0.98	-0.83
4G68EK		169.01	0.16	0.07	148.51	0.45	0.38
4L2RKP		170.92	2.06	0.86	148.42	0.36	0.30
4UU3VK		170.00	1.14	0.48	148.90	0.84	0.71
6X7JE9		165.90	-2.96	-1.24	145.90	-2.16	-1.81
8P6ZZH		167.21	-1.65	-0.69	147.78	-0.27	-0.23
8QDCHK		167.60	-1.26	-0.53	147.49	-0.56	-0.47
9368K7		165.30	-3.56	-1.49	147.90	-0.16	-0.13
9N2C3Y		166.50	-2.36	-0.99	146.50	-1.56	-1.31
A7CM3N		164.47	-4.39	-1.84	145.65	-2.40	-2.02
ACQJ8H		166.78	-2.08	-0.87	147.81	-0.25	-0.21
ANFN9M		169.71	0.85	0.36	147.72	-0.33	-0.28
ANY47K		167.38	-1.48	-0.62	148.66	0.61	0.51
AXLNNG		164.40	-4.46	-1.87	147.80	-0.26	-0.21
BZVU2V		170.40	1.54	0.65	147.30	-0.76	-0.64
CGFRUA		165.49	-3.37	-1.41	146.34	-1.71	-1.44
CNG223		166.80	-2.06	-0.86	148.10	0.04	0.04
DURGHV	X	159.77	-9.09	-3.81	138.52	-9.54	-8.03
FBEYWM		170.00	1.14	0.48	148.00	-0.06	-0.05
FTJ8BP		173.18	4.32	1.81	149.39	1.34	1.12
HEMZVX		170.62	1.76	0.74	149.16	1.10	0.93
J4J3PA		166.00	-2.86	-1.20	149.00	0.94	0.80
JCQ9XH		166.00	-2.86	-1.20	147.00	-1.06	-0.89
JVAZ49	M	No Data Reported			150.20	2.14	1.81
KGAH4M	X	176.03	7.17	3.01	152.81	4.75	4.00
KLYZER		168.10	-0.76	-0.32	147.50	-0.56	-0.47
LNH89K	*	173.10	4.24	1.78	147.40	-0.66	-0.55
LVGY93		169.13	0.27	0.11	146.92	-1.14	-0.96
LWGTEM		168.83	-0.03	-0.01	148.70	0.65	0.55
MM39MB		171.00	2.14	0.90	150.41	2.35	1.98
N2LUHY		170.00	1.14	0.48	147.50	-0.56	-0.47
Q4BABE	X	171.13	2.28	0.96	163.99	15.94	13.42
Q4UW8C		170.33	1.48	0.62	147.91	-0.14	-0.12
Q82R7R		167.40	-1.46	-0.61	147.50	-0.56	-0.47
QAQ6NA		170.80	1.94	0.82	150.00	1.94	1.64
RKHAXU		168.67	-0.19	-0.08	147.91	-0.14	-0.12
T34Y69		171.00	2.14	0.90	148.00	-0.06	-0.05
T77H2L		171.70	2.84	1.19	148.70	0.64	0.54
TTCGNE		170.19	1.33	0.56	149.87	1.81	1.53
TUTQKL		170.50	1.64	0.69	148.20	0.14	0.12
U8T34Q		166.50	-2.35	-0.99	146.49	-1.57	-1.32
UGALR3		170.20	1.34	0.56	149.20	1.14	0.96
UJMT8N	*	171.94	3.08	1.29	151.56	3.50	2.95
VV7G2E		167.00	-1.86	-0.78	146.80	-1.26	-1.06
VVCK47		168.54	-0.32	-0.14	148.81	0.76	0.64
VWYPF6		169.26	0.40	0.17	147.21	-0.84	-0.71
W6E7XC		170.45	1.59	0.67	148.62	0.57	0.48

WebCode	Data Flag	Sample A85 Lab Mean	Sample A85 Diff. from Grand Mean	Sample A85 CPV	Sample A86 Lab Mean	Sample A86 Diff. from Grand Mean	Sample A86 CPV
X2LC4A	*	163.45	-5.41	-2.27	147.77	-0.28	-0.24
XHJ87R		170.40	1.54	0.65	148.70	0.64	0.54
Y3MUAQ	X	169.00	0.14	0.06	157.00	8.94	7.53
YK6BAJ		171.00	2.14	0.90	148.00	-0.06	-0.05
YKEZ3P		169.17	0.31	0.13	146.55	-1.51	-1.27
Z4DTZE		172.80	3.94	1.65	150.00	1.94	1.64

Summary Statistics

	Sample A85		Sample A86	
Grand Means	168.86	ksi	148.06	ksi
Stnd Dev Btwn Labs	2.38	ksi	1.19	ksi

Samples A85, A86 : AISI 4340 (L), AISI 4340 (S)

Statistics based on 48 of 53 reporting participants

Comments on Assigned Data Flags for Test #1111

DURGHV (X) - Data for both samples are low.

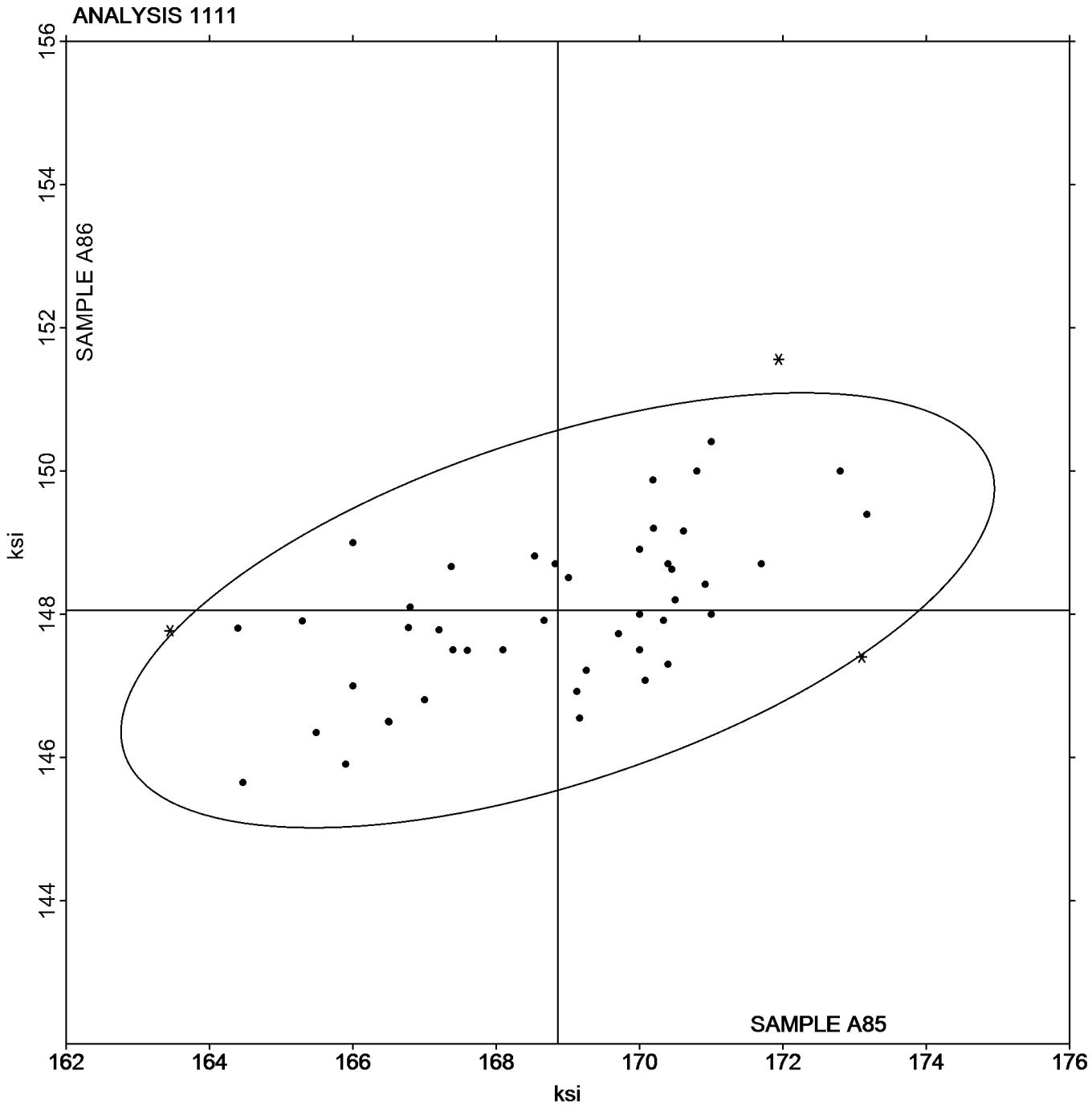
JVAZ49 (M) - Participant did not submit data for sample A85.

KGAH4M (X) - Data for both samples are high.

Q4BABE (X) - Data for sample A86 are high.

Y3MUAQ (X) - Data for sample A86 are high.

SAMPLE A85	SAMPLE A86
168.86 ksi	148.06 ksi



		Sample A85			Sample A86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
3VRY33		151.30	4.06	1.00	122.95	0.21	0.12
4G68EK		147.82	0.58	0.14	121.56	-1.18	-0.72
4L2RKP		150.53	3.29	0.81	122.21	-0.54	-0.32
4UU3VK		147.70	0.46	0.11	122.40	-0.34	-0.21
6X7JE9		144.90	-2.34	-0.58	121.30	-1.44	-0.87
8P6ZZH		143.18	-4.07	-1.00	121.82	-0.92	-0.56
8QDCHK		146.01	-1.24	-0.31	121.98	-0.77	-0.46
9368K7		140.80	-6.44	-1.59	122.00	-0.74	-0.45
9N2C3Y		143.80	-3.44	-0.85	121.30	-1.44	-0.87
A7CM3N		143.32	-3.92	-0.97	122.34	-0.40	-0.24
ACQJ8H		143.60	-3.64	-0.90	121.80	-0.94	-0.57
ANFN9M		150.03	2.79	0.69	125.81	3.07	1.86
ANY47K	*	136.19	-11.05	-2.73	120.38	-2.36	-1.43
AXLNNG		141.00	-6.24	-1.54	122.50	-0.24	-0.15
BZVU2V		150.50	3.26	0.81	122.90	0.16	0.10
CGFRUA		142.86	-4.38	-1.08	121.69	-1.05	-0.64
CNG223		142.90	-4.34	-1.07	121.80	-0.94	-0.57
DURGHV	X	138.97	-8.27	-2.04	114.60	-8.14	-4.93
FBEYWM		148.00	0.76	0.19	122.00	-0.74	-0.45
FTJ8BP		151.86	4.62	1.14	124.15	1.41	0.85
HEMZVX	*	143.93	-3.31	-0.82	118.11	-4.63	-2.80
J4J3PA		139.00	-8.24	-2.04	121.00	-1.74	-1.05
JCQ9XH		143.00	-4.24	-1.05	122.00	-0.74	-0.45
JVAZ49	M	No Data Reported			124.11	1.37	0.83
KGAH4M		153.21	5.97	1.48	126.30	3.56	2.15
KLYZER		146.40	-0.84	-0.21	121.90	-0.84	-0.51
LVGY93		147.21	-0.03	-0.01	121.65	-1.09	-0.66
LWGTEM		147.06	-0.18	-0.04	123.77	1.03	0.63
MM39MB		147.65	0.41	0.10	124.73	1.99	1.21
N2LUHY	M	136.30	-10.94	-2.70	No Data Reported		
Q4BABE		149.89	2.65	0.65	123.96	1.22	0.74
Q4UW8C		148.40	1.16	0.29	122.31	-0.43	-0.26
Q82R7R		146.30	-0.94	-0.23	122.30	-0.44	-0.27
QAQ6NA		150.60	3.36	0.83	124.40	1.66	1.00
RKHAXU		147.30	0.06	0.01	122.32	-0.43	-0.26
T34Y69		149.00	1.76	0.43	122.00	-0.74	-0.45
T77H2L		151.30	4.06	1.00	123.00	0.26	0.16
TTCGNE		149.13	1.89	0.47	124.54	1.80	1.09
TUTQKL		148.99	1.75	0.43	122.45	-0.29	-0.17
U8T34Q		143.44	-3.80	-0.94	121.83	-0.91	-0.55
UGALR3		147.60	0.36	0.09	123.90	1.16	0.70
UJMT8N		152.48	5.24	1.29	125.57	2.83	1.71
VV7G2E		154.70	7.46	1.84	123.50	0.76	0.46
VVCK47	X	146.05	-1.19	-0.29	127.78	5.04	3.05
VWYPF6		148.52	1.28	0.32	121.11	-1.63	-0.99
W6E7XC	*	151.71	4.47	1.10	127.00	4.26	2.57
X2LC4A	X	143.07	-4.17	-1.03	139.59	16.85	10.20

WebCode	Data Flag	Sample A85 Lab Mean	Sample A85 Diff. from Grand Mean	Sample A85 CPV	Sample A86 Lab Mean	Sample A86 Diff. from Grand Mean	Sample A86 CPV
XHJ87R		149.40	2.16	0.53	122.50	-0.24	-0.15
Y3MUAQ	X	147.00	-0.24	-0.06	156.00	33.26	20.13
YK6BAJ		150.00	2.76	0.68	123.00	0.26	0.16
YKEZ3P	X	147.12	-0.12	-0.03	134.25	11.51	6.96
Z4DTZE		153.30	6.06	1.50	125.30	2.56	1.55

Summary Statistics

	Sample A85		Sample A86	
Grand Means	147.24	ksi	122.74	ksi
Stnd Dev Btwn Labs	4.05	ksi	1.65	ksi

Samples A85, A86 : AISI 4340 (L), AISI 4340 (S)

Statistics based on 45 of 52 reporting participants

Comments on Assigned Data Flags for Test #1112

DURGHV (X) - Data for sample A86 are low.

JVAZ49 (M) - Participant did not submit data for sample A85.

N2LUHY (M) - Participant did not submit data for sample A86.

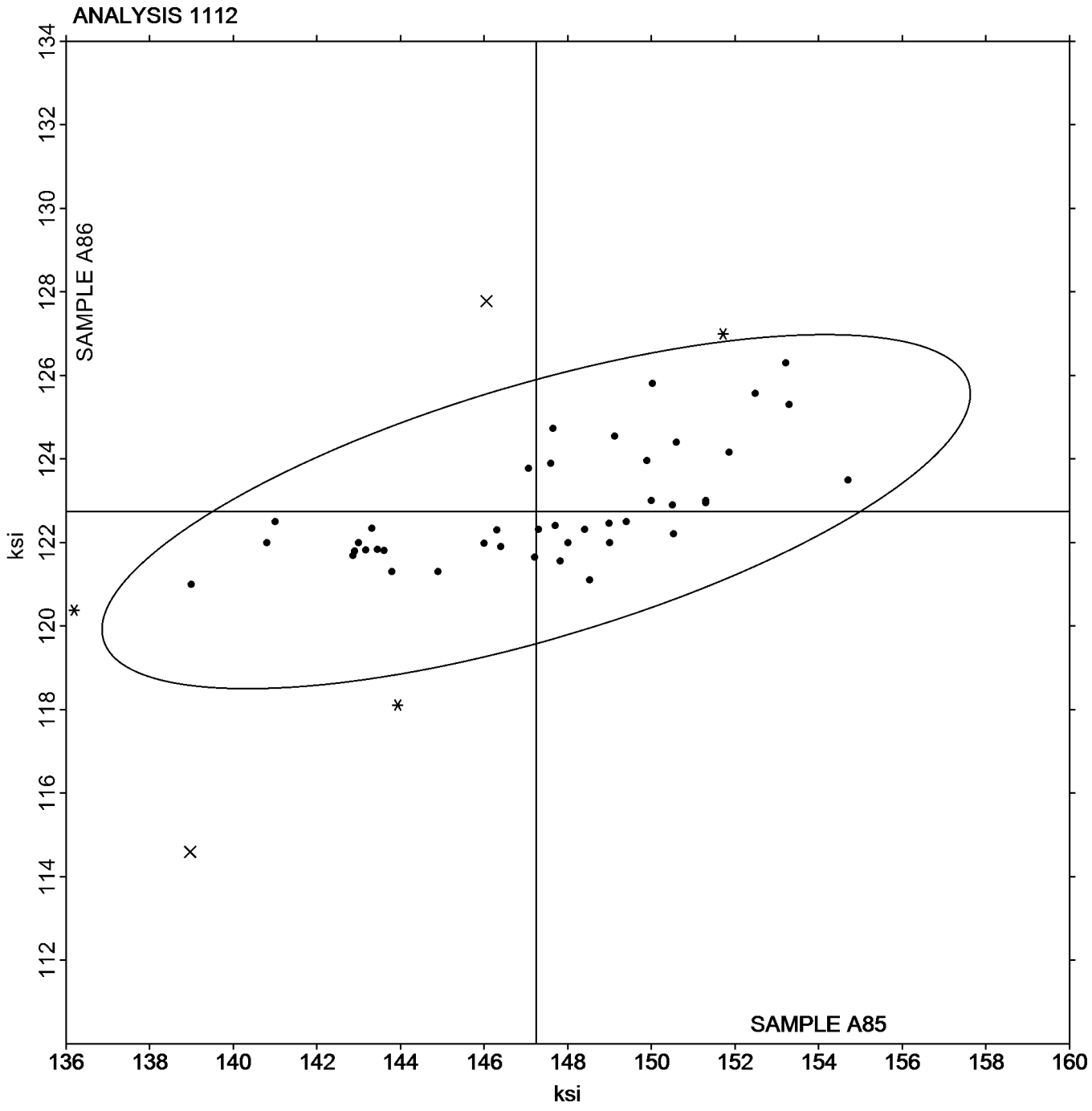
VVCK47 (X) - Data for sample A86 are high.

X2LC4A (X) - Data for sample A86 are high.

Y3MUAQ (X) - Data for sample A86 are high.

YKEZ3P (X) - Data for sample A86 are high.

SAMPLE A85	SAMPLE A86
147.24 ksi	122.74 ksi



		Sample A85			Sample A86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
3VRY33		18.30	0.01	0.01	17.92	0.47	0.69
4G68EK		18.60	0.31	0.50	17.70	0.25	0.36
4L2RKP		19.00	0.71	1.15	18.70	1.25	1.84
4UU3VK		18.60	0.31	0.50	17.80	0.35	0.51
6X7JE9		18.00	-0.29	-0.48	17.20	-0.25	-0.37
8P6ZZH		18.80	0.51	0.83	18.40	0.95	1.40
8QDCHK		18.00	-0.29	-0.48	17.00	-0.45	-0.67
9368K7		17.90	-0.39	-0.64	17.30	-0.15	-0.23
9N2C3Y		18.40	0.11	0.18	18.30	0.85	1.25
A7CM3N		19.34	1.05	1.71	18.37	0.92	1.35
ACQJ8H		17.70	-0.59	-0.96	17.20	-0.25	-0.37
ANFN9M		19.00	0.71	1.15	17.00	-0.45	-0.67
ANY47K	X	13.57	-4.72	-7.69	14.12	-3.33	-4.92
AXLNNG		18.50	0.21	0.34	18.50	1.05	1.55
BZVU2V		18.70	0.41	0.66	17.20	-0.25	-0.37
CGFRUA		18.10	-0.19	-0.31	17.50	0.05	0.07
CNG223		18.50	0.21	0.34	18.20	0.75	1.10
DURGHV		17.95	-0.34	-0.56	17.80	0.35	0.51
FBEYWM		17.00	-1.29	-2.10	16.00	-1.45	-2.15
FTJ8BP		18.10	-0.19	-0.31	17.50	0.05	0.07
HEMZVX		18.00	-0.29	-0.48	17.00	-0.45	-0.67
J4J3PA		18.00	-0.29	-0.48	17.00	-0.45	-0.67
JCQ9XH		18.00	-0.29	-0.48	16.00	-1.45	-2.15
JVAZ49	M	No Data Reported			18.15	0.70	1.03
KGAH4M	*	20.00	1.71	2.78	18.00	0.55	0.81
KLYZER	*	20.00	1.71	2.78	18.00	0.55	0.81
LVGY93		18.28	-0.01	-0.02	17.54	0.09	0.13
LWGTEM		17.70	-0.59	-0.96	17.10	-0.35	-0.52
MM39MB		17.06	-1.23	-2.01	16.67	-0.78	-1.16
N2LUHY	*	18.00	-0.29	-0.48	19.00	1.55	2.28
Q4BABE		18.66	0.37	0.60	17.92	0.47	0.69
Q4UW8C		18.10	-0.19	-0.31	17.30	-0.15	-0.23
Q82R7R		17.60	-0.69	-1.13	16.70	-0.75	-1.11
QAQ6NA	*	19.15	0.86	1.40	16.25	-1.20	-1.78
RKHAXU		18.21	-0.08	-0.13	17.53	0.08	0.11
T34Y69		17.00	-1.29	-2.10	17.00	-0.45	-0.67
T77H2L		18.15	-0.14	-0.23	17.40	-0.05	-0.08
TTCGNE		17.90	-0.39	-0.64	17.00	-0.45	-0.67
TUTQKL		18.50	0.21	0.34	18.05	0.60	0.88
U8T34Q		18.10	-0.19	-0.31	17.60	0.15	0.22
UGALR3		18.00	-0.29	-0.48	17.60	0.15	0.22
UJMT8N		18.00	-0.29	-0.48	17.58	0.13	0.19
VV7G2E		18.70	0.41	0.66	18.30	0.85	1.25
VVCK47		18.00	-0.29	-0.48	17.20	-0.25	-0.37
VWYPF6		19.00	0.71	1.15	17.00	-0.45	-0.67
W6E7XC		18.70	0.41	0.66	17.60	0.15	0.22
X2LC4A		18.00	-0.29	-0.48	16.00	-1.45	-2.15

		Sample A85			Sample A86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
XHJ87R		18.10	-0.19	-0.31	17.90	0.45	0.66
Y3MUAQ	X	18.00	-0.29	-0.48	12.00	-5.45	-8.05
YK6BAJ		18.00	-0.29	-0.48	17.00	-0.45	-0.67
YKEZ3P		18.31	0.02	0.03	17.39	-0.06	-0.09
Z4DTZE		18.60	0.31	0.50	17.00	-0.45	-0.67

Summary Statistics

	Sample A85		Sample A86	
Grand Means	18.29	Percent	17.45	Percent
Stnd Dev Btwn Labs	0.61	Percent	0.68	Percent

Samples A85, A86 : AISI 4340 (L), AISI 4340 (S)

Statistics based on 49 of 52 reporting participants

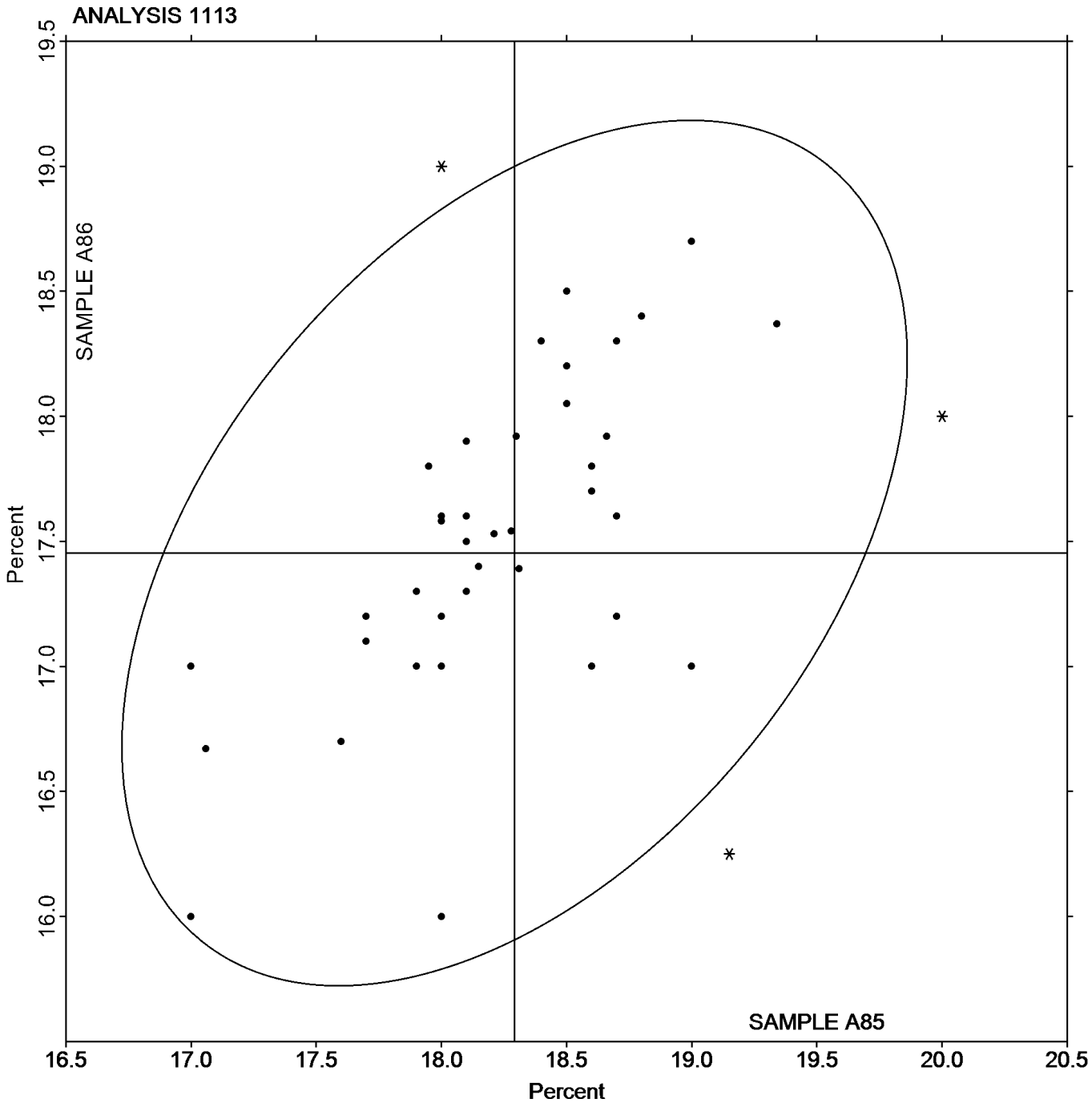
Comments on Assigned Data Flags for Test #1113

ANY47K (X) - Data for both samples are low.

JVAZ49 (M) - Participant did not submit data for sample A85.

Y3MUAQ (X) - Data for sample A86 are low.

SAMPLE A85	SAMPLE A86
18.29 Percent	17.45 Percent



		Sample A85			Sample A86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
3VRY33		59.91	1.68	1.32	56.28	1.40	1.29
4G68EK		59.50	1.27	1.00	54.90	0.02	0.02
4L2RKP		59.38	1.15	0.90	55.64	0.76	0.70
4UU3VK		58.40	0.17	0.13	54.10	-0.78	-0.72
6X7JE9		58.00	-0.23	-0.18	54.00	-0.88	-0.81
8P6ZZH		57.60	-0.63	-0.50	55.20	0.32	0.29
8QDCHK		57.00	-1.23	-0.97	54.00	-0.88	-0.81
9368K7		61.00	2.77	2.17	55.00	0.12	0.11
9N2C3Y	*	55.00	-3.23	-2.54	55.50	0.62	0.57
A7CM3N		58.93	0.70	0.55	55.17	0.29	0.27
ACQJ8H		57.90	-0.33	-0.26	55.00	0.12	0.11
ANFN9M		58.00	-0.23	-0.18	55.00	0.12	0.11
ANY47K		56.25	-1.98	-1.56	52.73	-2.15	-1.99
AXLNNG		57.70	-0.53	-0.42	55.90	1.02	0.94
BZVU2V		58.60	0.37	0.29	56.50	1.62	1.49
CGFRUA		58.00	-0.23	-0.18	54.00	-0.88	-0.81
CNG223		57.00	-1.23	-0.97	56.00	1.12	1.03
DURGHV		59.80	1.57	1.23	56.18	1.30	1.20
FBEYWM		59.00	0.77	0.60	55.00	0.12	0.11
FTJ8BP		59.20	0.97	0.76	56.80	1.92	1.77
HEMZVX	*	59.00	0.77	0.60	52.00	-2.88	-2.66
J4J3PA		56.17	-2.06	-1.62	54.32	-0.56	-0.52
JCQ9XH	X	39.00	-19.23	-15.12	37.00	-17.88	-16.51
JVAZ49	M	No Data Reported			56.26	1.38	1.27
KGAH4M		60.00	1.77	1.39	56.00	1.12	1.03
KLYZER		56.00	-2.23	-1.76	55.00	0.12	0.11
LVGY93		58.40	0.17	0.13	54.50	-0.38	-0.35
LWGTEM		58.50	0.27	0.21	53.70	-1.18	-1.09
MM39MB		56.98	-1.25	-0.99	54.27	-0.61	-0.56
N2LUHY		58.00	-0.23	-0.18	56.00	1.12	1.03
Q4BABE		57.16	-1.07	-0.84	55.54	0.66	0.61
Q4UW8C		58.20	-0.03	-0.03	54.20	-0.68	-0.63
Q82R7R		59.60	1.37	1.07	54.90	0.02	0.02
QAQ6NA		59.70	1.47	1.15	53.30	-1.58	-1.46
RKHAXU		57.32	-0.91	-0.72	54.72	-0.16	-0.15
T34Y69	X	60.00	1.77	1.39	60.00	5.12	4.73
T77H2L		58.78	0.55	0.43	57.17	2.29	2.11
TTCGNE		59.90	1.67	1.31	54.10	-0.78	-0.72
TUTQKL		57.21	-1.02	-0.80	55.22	0.34	0.31
U8T34Q		58.00	-0.23	-0.18	54.00	-0.88	-0.81
UJMT8N		59.67	1.44	1.13	54.67	-0.21	-0.19
VV7G2E		58.40	0.17	0.13	55.90	1.02	0.94
VVCK47		59.60	1.37	1.07	53.80	-1.08	-1.00
W6E7XC		58.10	-0.13	-0.10	54.30	-0.58	-0.54
X2LC4A		57.10	-1.13	-0.89	53.70	-1.18	-1.09
XHJ87R		58.80	0.57	0.45	55.10	0.22	0.20
Y3MUAQ		59.00	0.77	0.60	53.00	-1.88	-1.74

WebCode	Data Flag	Sample A85 Lab Mean	Sample A85 Diff. from Grand Mean	Sample A85 CPV	Sample A86 Lab Mean	Sample A86 Diff. from Grand Mean	Sample A86 CPV
YK6BAJ		58.00	-0.23	-0.18	56.00	1.12	1.03
YKEZ3P		55.70	-2.53	-1.99	55.40	0.52	0.48
Z4DTZE		57.50	-0.73	-0.58	55.70	0.82	0.76

Summary Statistics

	Sample A85		Sample A86	
Grand Means	58.23	Percent	54.88	Percent
Stnd Dev Btwn Labs	1.27	Percent	1.08	Percent

Samples A85, A86 : AISI 4340 (L), AISI 4340 (S)

Statistics based on 47 of 50 reporting participants

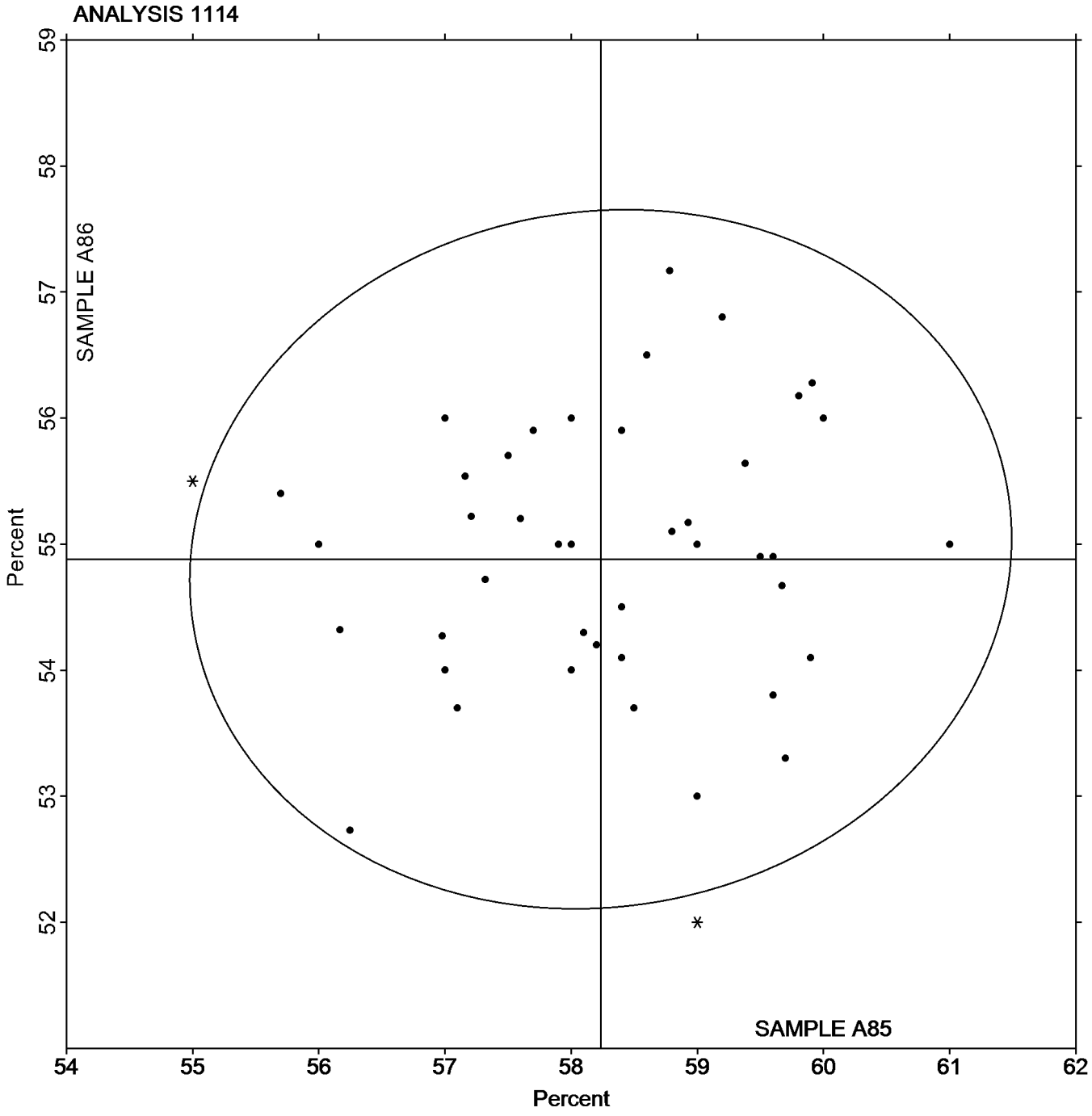
Comments on Assigned Data Flags for Test #1114

JCQ9XH (X) - Data for both samples are low.

JVAZ49 (M) - Participant did not submit data for sample A85.

T34Y69 (X) - Data for sample A86 are high.

SAMPLE A85	SAMPLE A86
58.23 Percent	54.88 Percent



		Sample P85			Sample P86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
29TD7T		148.70	0.48	0.34	172.50	2.17	1.18
2LZGD9		147.05	-1.17	-0.82	173.44	3.11	1.69
2T9K2N		148.66	0.44	0.31	170.57	0.24	0.13
39F37T		148.68	0.46	0.32	166.49	-3.84	-2.09
3BM2EL		149.39	1.17	0.82	171.44	1.11	0.60
3G8HVX		148.80	0.58	0.41	169.39	-0.94	-0.51
4JDH93		147.63	-0.59	-0.42	170.77	0.44	0.24
4PYFZB	*	151.80	3.58	2.52	171.40	1.07	0.58
4UU3VK		148.70	0.48	0.34	170.70	0.37	0.20
4XN736		149.21	0.98	0.69	167.92	-2.41	-1.31
6EPJ2X		147.40	-0.83	-0.58	169.96	-0.37	-0.20
6HUW2K		146.60	-1.62	-1.14	168.90	-1.43	-0.78
6QN3UL		146.00	-2.22	-1.57	168.40	-1.93	-1.05
6RY6J7	*	147.39	-0.83	-0.59	174.46	4.13	2.24
7DJNJL		146.40	-1.82	-1.28	168.53	-1.80	-0.98
7KHFNA		149.00	0.78	0.55	170.00	-0.33	-0.18
7ZPXHA	X	118.90	-29.32	-20.67	148.70	-21.63	-11.74
87GDT2		147.53	-0.69	-0.48	169.72	-0.61	-0.33
8EJQGV		147.94	-0.28	-0.20	168.25	-2.09	-1.13
8QDCHK		146.04	-2.18	-1.54	166.27	-4.06	-2.20
9FC74C		147.04	-1.18	-0.83	171.83	1.50	0.81
9GPK38		147.90	-0.32	-0.23	169.40	-0.93	-0.50
9K8T27		146.30	-1.92	-1.35	168.30	-2.03	-1.10
AJCGBX		148.50	0.28	0.20	173.10	2.77	1.50
BCRVJ6		149.00	0.78	0.55	171.40	1.07	0.58
BJV76J		147.71	-0.51	-0.36	169.67	-0.66	-0.36
DNCYXF		149.70	1.48	1.04	169.90	-0.43	-0.23
DRXYWV		146.80	-1.42	-1.00	170.60	0.27	0.15
EAQ7LD		148.40	0.18	0.13	171.40	1.07	0.58
EHGQRL		149.00	0.78	0.55	168.00	-2.33	-1.26
EMFZX8		148.18	-0.04	-0.03	169.17	-1.16	-0.63
EWBG7V		150.50	2.28	1.61	171.80	1.47	0.80
FJP23V		149.23	1.01	0.71	169.85	-0.48	-0.26
FL3B6Z		148.40	0.18	0.13	171.00	0.67	0.36
FTJ8BP		149.83	1.60	1.13	172.45	2.12	1.15
FWGWBA		148.95	0.73	0.52	168.83	-1.50	-0.82
G9MEDW	X	139.20	-9.02	-6.36	162.00	-8.33	-4.52
GAEE9L		148.08	-0.14	-0.10	166.36	-3.97	-2.15
H67BFR		149.20	0.98	0.69	171.30	0.97	0.53
H7VL6Y		146.90	-1.32	-0.93	168.10	-2.23	-1.21
HPEYXV		151.41	3.19	2.25	172.80	2.47	1.34
HZXD2X		148.60	0.38	0.27	171.40	1.07	0.58
J38MWU		147.42	-0.80	-0.57	171.39	1.06	0.57
J4XXNM	X	70.70	-77.52	-54.66	171.90	1.57	0.85
J66K2W		150.00	1.78	1.25	171.00	0.67	0.36
JHMQJP		148.00	-0.22	-0.16	174.00	3.67	1.99
JQE78T		151.08	2.86	2.02	169.81	-0.52	-0.28

		Sample P85			Sample P86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
JQV6GK		148.51	0.29	0.20	169.00	-1.33	-0.72
K73L2R	*	151.52	3.29	2.32	174.93	4.60	2.49
KJXRFA		146.00	-2.22	-1.57	169.00	-1.33	-0.72
KLUXHM	X	150.80	2.58	1.82	176.50	6.17	3.35
KME47X		148.00	-0.22	-0.16	171.00	0.67	0.36
KPMAUK		147.10	-1.12	-0.79	169.10	-1.23	-0.67
LFW3C8		147.00	-1.22	-0.86	168.00	-2.33	-1.26
LWGTEM		151.27	3.04	2.15	171.36	1.03	0.56
LXBGXH		148.25	0.03	0.02	171.40	1.07	0.58
M3JAAT		146.00	-2.22	-1.57	171.00	0.67	0.36
M48Y67		148.40	0.18	0.13	167.10	-3.23	-1.75
M7KD6L		148.30	0.08	0.06	170.40	0.07	0.04
M7YVTZ		146.85	-1.37	-0.97	169.07	-1.26	-0.68
MXKUQJ	X	143.39	-4.84	-3.41	165.26	-5.07	-2.75
N3JAQP	X	29.08	-119.14	-84.01	33.32	-137.01	-74.33
N9KVTF		146.95	-1.27	-0.90	171.35	1.01	0.55
NN98ZF		147.10	-1.12	-0.79	168.10	-2.23	-1.21
P846Y3		146.30	-1.92	-1.35	168.50	-1.83	-0.99
PA67YY	X	146.80	-1.42	-1.00	162.20	-8.13	-4.41
Q69YVG		148.90	0.68	0.48	167.80	-2.53	-1.37
QPVAKF	*	145.20	-3.02	-2.13	172.80	2.47	1.34
QTKQLU		148.50	0.28	0.20	171.05	0.72	0.39
QZXAG9	X	152.90	4.68	3.30	177.00	6.67	3.62
RBGJWK		148.08	-0.14	-0.10	168.83	-1.51	-0.82
RWJGB7		149.00	0.78	0.55	171.50	1.17	0.63
T8GVTH		149.26	1.04	0.73	169.49	-0.84	-0.45
TB88DT		149.16	0.94	0.66	169.66	-0.67	-0.37
TKNKQK		146.78	-1.44	-1.02	171.00	0.67	0.36
TV4F4X		149.05	0.83	0.58	172.53	2.20	1.19
U9J48T		148.52	0.29	0.21	171.24	0.90	0.49
UU4H2M		148.80	0.58	0.41	170.90	0.57	0.31
UUED2A		148.80	0.58	0.41	172.20	1.87	1.01
V2L82M		147.90	-0.32	-0.23	170.60	0.27	0.15
VNZ9JF		148.49	0.27	0.19	171.77	1.44	0.78
W4WWAY		149.62	1.40	0.99	173.08	2.75	1.49
W89F3R		145.30	-2.92	-2.06	169.20	-1.13	-0.61
X6TUVX		149.35	1.12	0.79	170.97	0.64	0.35
XTCPBA		147.10	-1.12	-0.79	173.00	2.67	1.45
XVMYRR		148.72	0.50	0.35	170.54	0.21	0.11
Y7HM67		146.50	-1.72	-1.21	167.50	-2.83	-1.54
YFAXGM		147.76	-0.46	-0.32	169.31	-1.02	-0.55
YPTKHB		149.00	0.78	0.55	169.20	-1.13	-0.61
YXLQ3C		149.54	1.31	0.93	172.31	1.98	1.07
Z3UL7C		145.38	-2.84	-2.01	169.53	-0.80	-0.43
ZTEYMH		149.30	1.08	0.76	170.50	0.17	0.09

Summary Statistics

	Sample P85		Sample P86	
Grand Means	148.22	ksi	170.33	ksi
Stnd Dev Btwn Labs	1.42	ksi	1.84	ksi

Samples P85, P86 : AISI 4340 (E), AISI 4340 (F)

Statistics based on 84 of 92 reporting participants

Comments on Assigned Data Flags for Test #1121

7ZPXHA (X) - Data for both samples are low.

G9MEDW (X) - Data for both samples are low.

J4XXNM (X) - Data for sample P85 are extreme.

KLUXHM (X) - Data for sample P86 are high.

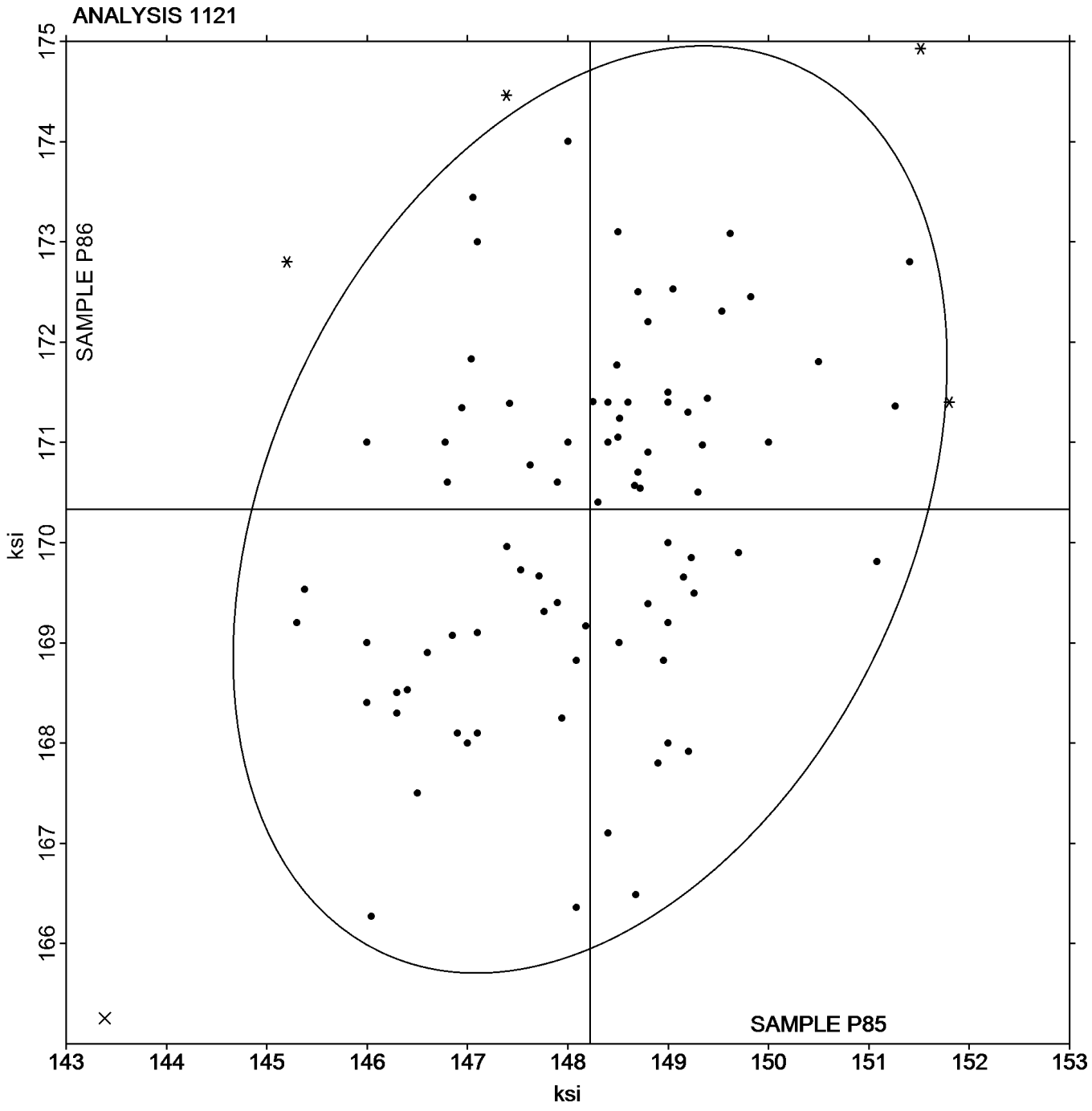
MXKUQJ (X) - Data for both samples are low.

N3JAQP (X) - Extreme Data. Appears to report data for load rather than stress.

PA67YY (X) - Data for sample P86 are low.

QZXAG9 (X) - Data for both samples are high.

SAMPLE P85	SAMPLE P86
148.22 ksi	170.33 ksi



		Sample P85			Sample P86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
29TD7T		122.10	0.08	0.05	150.70	1.92	0.74
2LZGD9		122.21	0.19	0.11	153.41	4.63	1.79
2T9K2N		122.27	0.25	0.14	149.39	0.61	0.24
39F37T	*	123.29	1.27	0.74	142.89	-5.89	-2.28
3BM2EL		122.70	0.68	0.40	150.12	1.33	0.52
3G8HVX		122.00	-0.02	-0.01	146.17	-2.61	-1.01
4JDH93		122.02	0.00	0.00	148.45	-0.33	-0.13
4PYFZB	X	118.40	-3.62	-2.12	127.60	-21.18	-8.20
4UU3VK		121.80	-0.22	-0.13	149.20	0.42	0.16
4XN736		122.32	0.30	0.18	144.18	-4.60	-1.78
6EPJ2X		121.65	-0.38	-0.22	149.54	0.75	0.29
6HUW2K		118.90	-3.12	-1.83	145.60	-3.18	-1.23
6QN3UL		118.30	-3.72	-2.18	144.20	-4.58	-1.77
6RY6J7		122.24	0.22	0.13	153.39	4.61	1.79
7DJNJL		118.16	-3.86	-2.26	144.36	-4.42	-1.71
7KHFNA		122.00	-0.02	-0.01	149.00	0.22	0.08
7ZPXHA	X	146.80	24.78	14.53	170.50	21.72	8.41
87GDT2		121.75	-0.27	-0.16	149.74	0.96	0.37
8EJQGV		123.57	1.55	0.91	146.49	-2.29	-0.89
8QDCHK		120.34	-1.68	-0.99	143.85	-4.93	-1.91
9FC74C		121.59	-0.43	-0.25	149.43	0.65	0.25
9GPK38		121.70	-0.32	-0.19	147.70	-1.08	-0.42
9K8T27		120.60	-1.42	-0.83	146.80	-1.98	-0.77
AJCGBX		119.70	-2.32	-1.36	150.70	1.92	0.74
BCRVJ6		124.70	2.68	1.57	148.70	-0.08	-0.03
BJV76J		122.60	0.58	0.34	149.74	0.96	0.37
DNCYXF		123.70	1.68	0.99	148.40	-0.38	-0.15
DRXYWV	X	129.60	7.58	4.45	157.80	9.02	3.49
EAQ7LD		123.90	1.88	1.10	152.60	3.82	1.48
EHGQRL	X	117.00	-5.02	-2.94	138.00	-10.78	-4.18
EMFZX8		123.26	1.24	0.73	148.75	-0.03	-0.01
EWBG7V		123.90	1.88	1.10	148.50	-0.28	-0.11
FJP23V	X	123.59	1.57	0.92	136.18	-12.60	-4.88
FL3B6Z		122.00	-0.02	-0.01	149.00	0.22	0.08
FTJ8BP		123.57	1.55	0.91	151.57	2.79	1.08
FWGWBA		123.45	1.43	0.84	146.99	-1.79	-0.70
G9MEDW	X	112.80	-9.22	-5.41	139.80	-8.98	-3.48
GAEE9L		121.54	-0.48	-0.28	143.30	-5.48	-2.12
H67BFR		124.10	2.08	1.22	151.70	2.92	1.13
H7VL6Y		121.80	-0.22	-0.13	147.10	-1.68	-0.65
HPEYXV		124.67	2.65	1.55	152.78	4.00	1.55
HZXD2X		120.90	-1.12	-0.66	148.20	-0.58	-0.22
J38MWU		120.18	-1.84	-1.08	149.78	1.00	0.39
J4XXNM	X	45.60	-76.42	-44.83	148.60	-0.18	-0.07
J66K2W		125.00	2.98	1.75	151.00	2.22	0.86
JHMQJP		122.00	-0.02	-0.01	153.00	4.22	1.63
JQE78T		124.37	2.35	1.38	153.62	4.84	1.87

		Sample P85			Sample P86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
JQV6GK	M	No Data Reported			147.57	-1.21	-0.47
K73L2R		124.54	2.51	1.47	152.16	3.38	1.31
KJXRFA		119.00	-3.02	-1.77	146.00	-2.78	-1.08
KLUXHM		123.10	1.08	0.63	153.30	4.52	1.75
KME47X		124.00	1.98	1.16	149.00	0.22	0.08
KPMAUK		118.70	-3.32	-1.95	147.30	-1.48	-0.57
LFW3C8		122.00	-0.02	-0.01	148.00	-0.78	-0.30
LWGTEM		125.60	3.58	2.10	149.71	0.93	0.36
LXBGXH		122.61	0.59	0.34	151.29	2.50	0.97
M3JAAT		119.00	-3.02	-1.77	150.00	1.22	0.47
M48Y67		121.50	-0.52	-0.31	142.80	-5.98	-2.32
M7KD6L		122.10	0.08	0.05	148.50	-0.28	-0.11
M7YVTZ		121.30	-0.72	-0.42	146.65	-2.13	-0.83
MXKUQJ		119.95	-2.07	-1.22	146.45	-2.33	-0.90
N3JAQP	X	24.07	-97.95	-57.45	29.37	-119.41	-46.25
N9KVTF		121.12	-0.90	-0.53	151.67	2.89	1.12
NN98ZF		121.50	-0.52	-0.31	146.70	-2.08	-0.81
P846Y3		118.20	-3.82	-2.24	144.70	-4.08	-1.58
PA67YY		122.10	0.08	0.05	146.20	-2.58	-1.00
Q69YVG		122.00	-0.02	-0.01	145.40	-3.38	-1.31
QPVAKF		120.50	-1.52	-0.89	150.70	1.92	0.74
QTKQLU		121.78	-0.24	-0.14	150.25	1.47	0.57
QZXAG9	X	127.60	5.58	3.27	155.90	7.12	2.76
RBGJWK		123.20	1.18	0.69	148.71	-0.07	-0.03
RWJGB7		123.20	1.18	0.69	149.80	1.02	0.39
T8GVTH		123.01	0.99	0.58	147.88	-0.90	-0.35
TB88DT		122.60	0.58	0.34	147.01	-1.77	-0.69
TKNKQK		120.53	-1.49	-0.88	150.70	1.91	0.74
TV4F4X		122.93	0.91	0.53	151.53	2.75	1.06
U9J48T		122.88	0.86	0.50	150.60	1.82	0.70
UU4H2M		122.80	0.78	0.46	150.40	1.62	0.63
UUED2A		122.70	0.68	0.40	150.80	2.02	0.78
V2L82M		122.50	0.48	0.28	150.70	1.92	0.74
VNZ9JF		122.83	0.81	0.48	150.84	2.06	0.80
W4WWAY		121.80	-0.22	-0.13	149.04	0.26	0.10
W89F3R		119.50	-2.52	-1.48	148.70	-0.08	-0.03
X6TUVX		123.49	1.47	0.86	148.78	0.00	0.00
XTCPBA		120.30	-1.72	-1.01	150.10	1.32	0.51
XVMYRR		123.08	1.06	0.62	149.79	1.01	0.39
Y7HM67		121.80	-0.22	-0.13	146.60	-2.18	-0.84
YFAXGM		122.83	0.81	0.48	148.91	0.13	0.05
YPTKHB		124.30	2.28	1.34	146.30	-2.48	-0.96
YXLQ3C		120.53	-1.49	-0.88	149.25	0.46	0.18
Z3UL7C		117.86	-4.16	-2.44	146.50	-2.28	-0.88
ZTEYMH		123.60	1.58	0.93	150.30	1.52	0.59

Summary Statistics

	Sample P85		Sample P86	
Grand Means	122.02	ksi	148.78	ksi
Stnd Dev Btwn Labs	1.70	ksi	2.58	ksi

Samples P85, P86 : AISI 4340 (E), AISI 4340 (F)

Statistics based on 82 of 92 reporting participants

Comments on Assigned Data Flags for Test #1122

4PYFZB (X) - Data for sample P86 are low.

7ZPXHA (X) - Data for both samples are high.

DRXYWV (X) - Data for both samples are high.

EHGQRL (X) - Data for both samples are low.

FJP23V (X) - Data for sample P86 are low.

G9MEDW (X) - Data for both samples are low.

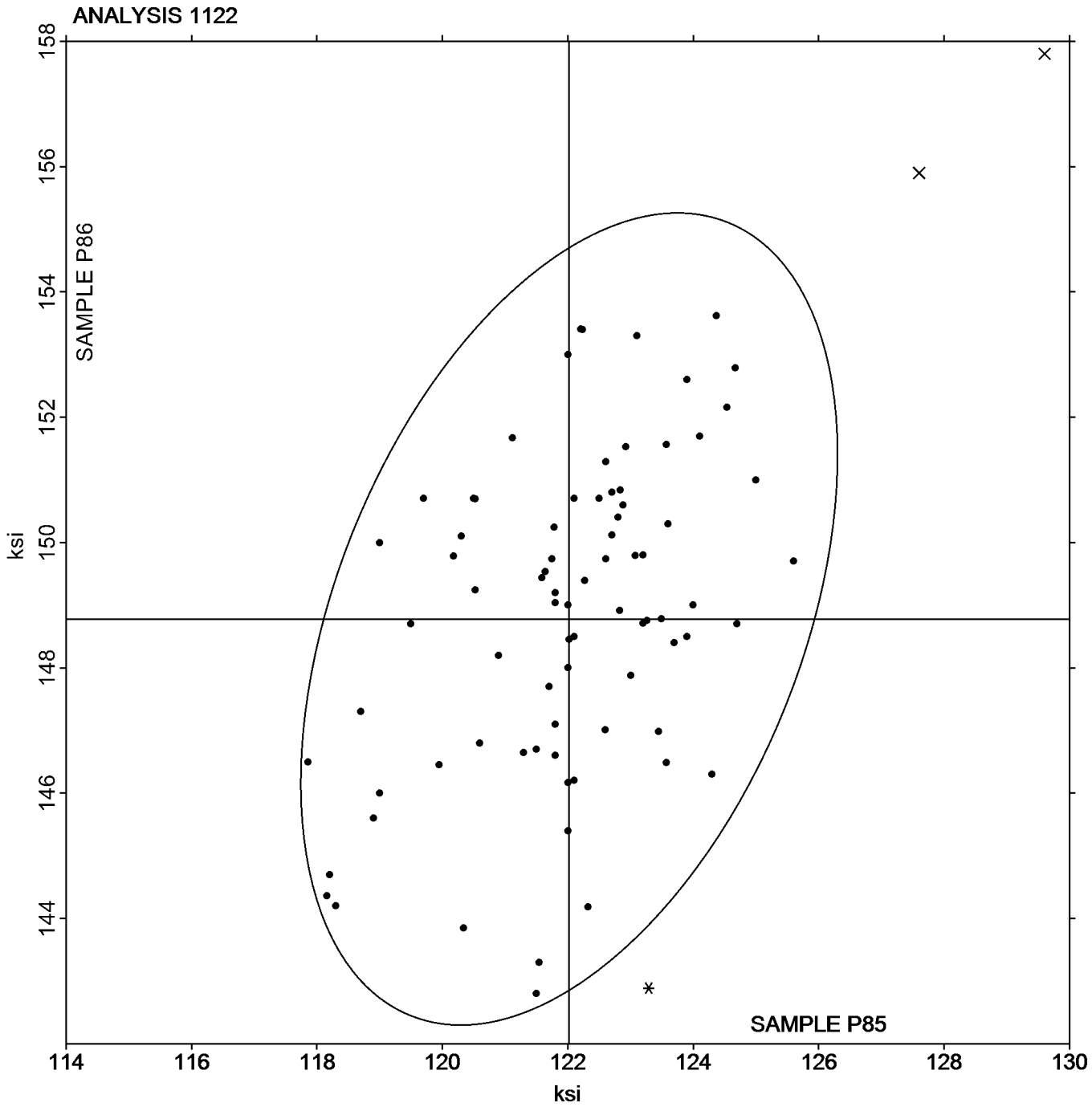
J4XXNM (X) - Data for sample P85 are extreme.

JQV6GK (M) - Participant did not submit data for sample P85.

N3JAQP (X) - Extreme Data. Appears to report data for load rather than stress.

QZXAG9 (X) - Data for both samples are high.

SAMPLE P85	SAMPLE P86
122.02 ksi	148.78 ksi



		Sample P85			Sample P86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
29TD7T	X	17.20	-0.53	-0.62	20.90	2.27	2.29
2LZGD9		17.00	-0.73	-0.86	19.00	0.37	0.37
2T9K2N		18.00	0.27	0.33	18.80	0.17	0.17
39F37T		17.12	-0.61	-0.72	16.47	-2.16	-2.18
3BM2EL		18.08	0.35	0.42	19.94	1.31	1.32
3G8HVX		19.00	1.27	1.52	19.00	0.37	0.37
4JDH93	X	15.45	-2.28	-2.70	15.20	-3.43	-3.46
4PYFZB		18.50	0.77	0.92	20.20	1.57	1.58
4UU3VK		17.10	-0.63	-0.74	19.20	0.57	0.57
4XN736		17.97	0.24	0.29	18.81	0.18	0.18
6EPJ2X		17.50	-0.23	-0.27	18.00	-0.63	-0.64
6HUW2K		18.60	0.87	1.04	18.60	-0.03	-0.03
6QN3UL		18.60	0.87	1.04	18.60	-0.03	-0.03
6RY6J7		19.00	1.27	1.52	19.14	0.51	0.51
7DJNJL		16.45	-1.28	-1.52	17.60	-1.03	-1.04
7KHFNA		18.00	0.27	0.33	19.00	0.37	0.37
7ZPXHA		17.00	-0.73	-0.86	17.50	-1.13	-1.14
87GDT2		19.00	1.27	1.52	20.00	1.37	1.38
8EJQGV		17.00	-0.73	-0.86	19.00	0.37	0.37
8QDCHK		18.00	0.27	0.33	19.00	0.37	0.37
9FC74C	X	20.48	2.75	3.27	22.88	4.25	4.28
9GPK38	*	20.10	2.37	2.82	21.10	2.47	2.49
9K8T27		17.40	-0.33	-0.39	18.00	-0.63	-0.64
AJCGBX		18.00	0.27	0.33	18.50	-0.13	-0.13
BCRVJ6		17.60	-0.13	-0.15	18.40	-0.23	-0.23
BJV76J		16.50	-1.23	-1.46	17.50	-1.13	-1.14
DNCYXF		18.30	0.57	0.68	19.70	1.07	1.08
DRXYWV		17.60	-0.13	-0.15	17.90	-0.73	-0.74
EAQ7LD		17.10	-0.63	-0.74	16.70	-1.93	-1.94
EHGQRL		18.00	0.27	0.33	20.00	1.37	1.38
EMFZX8		17.75	0.03	0.03	18.42	-0.21	-0.21
EWBG7V		18.50	0.77	0.92	19.70	1.07	1.08
FJP23V		17.80	0.07	0.09	18.10	-0.53	-0.53
FL3B6Z		17.00	-0.73	-0.86	18.00	-0.63	-0.64
FTJ8BP		16.70	-1.03	-1.22	18.20	-0.43	-0.43
FWGWBA		17.00	-0.73	-0.86	17.50	-1.13	-1.14
G9MEDW		16.70	-1.03	-1.22	17.50	-1.13	-1.14
GAEE9L		16.70	-1.03	-1.22	17.50	-1.13	-1.14
H67BFR		17.90	0.17	0.21	19.70	1.07	1.08
H7VL6Y		18.75	1.02	1.22	19.82	1.19	1.20
HPEYXV		15.90	-1.83	-2.17	16.50	-2.13	-2.15
HZXD2X		18.10	0.37	0.45	17.80	-0.83	-0.84
J38MWU		18.40	0.67	0.80	19.86	1.23	1.24
J4XXNM	X	34.00	16.27	19.34	17.40	-1.23	-1.24
J66K2W		18.50	0.77	0.92	19.00	0.37	0.37
JHMQJP		16.80	-0.93	-1.10	18.50	-0.13	-0.13
JQE78T		16.64	-1.09	-1.29	17.50	-1.13	-1.14

		Sample P85			Sample P86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
JQV6GK	M	No Data Reported			19.96	1.33	1.34
K73L2R		18.00	0.27	0.33	20.00	1.37	1.38
KJXRFA		17.10	-0.63	-0.74	18.50	-0.13	-0.13
KLUXHM	X	22.50	4.77	5.68	24.40	5.77	5.81
KME47X		16.00	-1.73	-2.05	18.00	-0.63	-0.64
KPMAUK		17.80	0.07	0.09	19.90	1.27	1.28
LFW3C8		18.40	0.67	0.80	19.40	0.77	0.78
LWGTEM		18.20	0.47	0.56	18.95	0.32	0.32
LXBGXH		17.00	-0.73	-0.86	17.50	-1.13	-1.14
M3JAAT		17.80	0.07	0.09	18.00	-0.63	-0.64
M48Y67		16.50	-1.23	-1.46	17.10	-1.53	-1.54
M7KD6L		19.00	1.27	1.52	19.00	0.37	0.37
M7YVTZ		17.15	-0.58	-0.68	17.99	-0.64	-0.65
MXKUQJ	X	30.76	13.03	15.49	20.08	1.45	1.46
N3JAQP		17.00	-0.73	-0.86	18.00	-0.63	-0.64
N9KVTF		17.50	-0.23	-0.27	18.50	-0.13	-0.13
NN98ZF		17.40	-0.33	-0.39	19.70	1.07	1.08
P846Y3		18.60	0.87	1.04	18.60	-0.03	-0.03
PA67YY		16.40	-1.33	-1.58	18.30	-0.33	-0.33
Q69YVG		18.01	0.28	0.34	18.66	0.03	0.03
QPVAKF		17.50	-0.23	-0.27	20.00	1.37	1.38
QTKQLU		17.20	-0.53	-0.62	17.10	-1.53	-1.54
QZXAG9		17.60	-0.13	-0.15	18.75	0.12	0.12
RBGJWK	*	19.90	2.17	2.58	20.80	2.17	2.19
RWJGB7		17.80	0.07	0.09	17.50	-1.13	-1.14
T8GVTH		18.00	0.27	0.33	18.30	-0.33	-0.33
TB88DT		18.17	0.44	0.53	19.13	0.50	0.50
TKNKQK		19.00	1.27	1.52	20.00	1.37	1.38
TV4F4X		18.00	0.27	0.33	17.50	-1.13	-1.14
U9J48T		17.00	-0.73	-0.86	18.00	-0.63	-0.64
UU4H2M		18.00	0.27	0.33	19.00	0.37	0.37
UUED2A		18.00	0.27	0.33	19.00	0.37	0.37
V2L82M		17.30	-0.43	-0.51	19.80	1.17	1.18
VNZ9JF	*	19.90	2.17	2.58	19.70	1.07	1.08
W4WWAY		17.00	-0.73	-0.86	18.10	-0.53	-0.53
W89F3R		18.80	1.07	1.28	19.20	0.57	0.57
X6TUVX		17.63	-0.10	-0.11	18.07	-0.56	-0.56
XTCPBA		17.50	-0.23	-0.27	17.90	-0.73	-0.74
XVMYRR		17.00	-0.73	-0.86	17.50	-1.13	-1.14
Y7HM67		17.80	0.07	0.09	17.80	-0.83	-0.84
YFAXGM		17.63	-0.10	-0.12	18.38	-0.25	-0.25
YPTKHB		17.00	-0.73	-0.86	18.00	-0.63	-0.64
YXLQ3C		18.40	0.67	0.80	19.50	0.87	0.88
Z3UL7C	*	17.60	-0.13	-0.15	20.60	1.97	1.98
ZTEYMH		17.40	-0.33	-0.39	18.60	-0.03	-0.03

Summary Statistics

	Sample P85		Sample P86	
Grand Means	17.73	Percent	18.63	Percent
Stnd Dev Btwn Labs	0.84	Percent	0.99	Percent

Samples P85, P86 : AISI 4340 (E), AISI 4340 (F)

Statistics based on 85 of 92 reporting participants

Comments on Assigned Data Flags for Test #1123

29TD7T (X) - Inconsistent in testing between samples.

4JDH93 (X) - Data for sample P86 are low.

9FC74C (X) - Data for both samples are high.

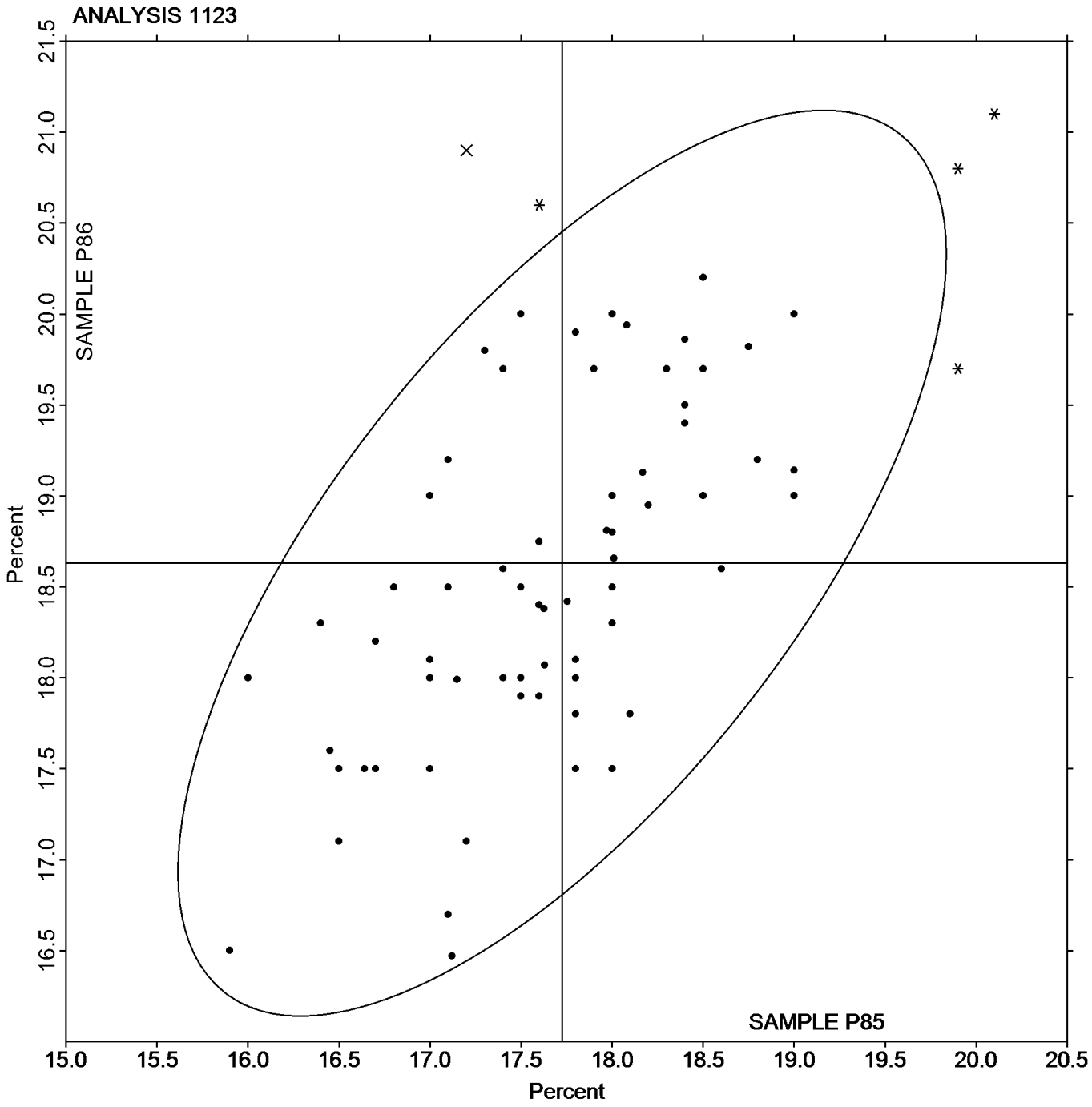
J4XXNM (X) - Data for sample P85 are high.

JQV6GK (M) - Participant did not submit data for sample P85.

KLUXHM (X) - Data for both samples are high.

MXKUQJ (X) - Data for sample P85 are high.

SAMPLE P85	SAMPLE P86
17.73 Percent	18.63 Percent



		Sample P85			Sample P86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
29TD7T		53.20	-2.06	-1.59	58.50	-0.80	-0.62
2LZGD9		54.00	-1.26	-0.97	61.00	1.70	1.32
2T9K2N		57.00	1.74	1.35	59.00	-0.30	-0.24
39F37T		54.67	-0.59	-0.45	58.51	-0.79	-0.62
3BM2EL		55.27	0.01	0.01	59.54	0.24	0.18
3G8HVX		56.00	0.74	0.57	59.00	-0.30	-0.24
4JDH93	X	50.23	-5.03	-3.88	42.24	-17.06	-13.27
4PYFZB	*	52.60	-2.66	-2.05	60.50	1.20	0.93
4UU3VK		55.10	-0.16	-0.12	57.90	-1.40	-1.09
4XN736		53.94	-1.32	-1.01	60.62	1.32	1.02
6EPJ2X		55.40	0.14	0.11	58.80	-0.50	-0.39
6RY6J7		55.17	-0.09	-0.07	60.71	1.41	1.09
7DJNJL		55.82	0.56	0.44	59.69	0.39	0.30
7KHFNA		55.00	-0.26	-0.20	60.00	0.70	0.54
7ZPXHA		56.30	1.04	0.81	60.30	1.00	0.78
87GDT2		56.40	1.14	0.88	59.00	-0.30	-0.24
8EJQGV		55.00	-0.26	-0.20	58.00	-1.30	-1.01
8QDCHK		54.00	-1.26	-0.97	57.00	-2.30	-1.79
9FC74C		58.04	2.78	2.15	59.25	-0.05	-0.04
9GPK38		56.50	1.24	0.96	58.60	-0.70	-0.55
9K8T27		54.50	-0.76	-0.58	57.40	-1.90	-1.48
AJCGBX	X	55.50	0.24	0.19	52.70	-6.60	-5.13
BCRVJ6	*	54.80	-0.46	-0.35	55.40	-3.90	-3.04
BJV76J		54.67	-0.59	-0.45	57.48	-1.82	-1.42
DNCYXF		55.10	-0.16	-0.12	60.80	1.50	1.16
DRXYWV		55.10	-0.16	-0.12	56.20	-3.10	-2.41
EAQ7LD		56.70	1.44	1.11	60.50	1.20	0.93
EHGQRL		55.00	-0.26	-0.20	59.00	-0.30	-0.24
EMFZX8		55.56	0.30	0.23	60.02	0.72	0.56
FJP23V		54.87	-0.39	-0.30	58.29	-1.01	-0.79
FL3B6Z		54.80	-0.46	-0.35	60.30	1.00	0.78
FTJ8BP		55.20	-0.06	-0.04	59.60	0.30	0.23
FWGWBA		54.80	-0.46	-0.35	58.50	-0.80	-0.62
G9MEDW		55.90	0.64	0.50	60.00	0.70	0.54
GAEE9L		52.80	-2.46	-1.89	59.20	-0.10	-0.08
H67BFR		53.90	-1.36	-1.05	60.10	0.80	0.62
H7VL6Y		56.40	1.14	0.88	59.40	0.10	0.08
HPEYXV		54.00	-1.26	-0.97	58.00	-1.30	-1.01
HZXD2X		55.20	-0.06	-0.04	60.70	1.40	1.09
J38MWU		54.26	-1.00	-0.77	58.75	-0.55	-0.43
J4XXNM	X	70.00	14.74	11.37	59.70	0.40	0.31
J66K2W		56.40	1.14	0.88	58.50	-0.80	-0.62
JHMQJP		54.60	-0.66	-0.51	60.30	1.00	0.78
JQE78T		53.00	-2.26	-1.74	58.39	-0.91	-0.71
JQV6GK	M	No Data Reported			56.88	-2.42	-1.88
K73L2R		55.00	-0.26	-0.20	62.00	2.70	2.10
KJXRFA	*	59.10	3.84	2.97	59.80	0.50	0.39

		Sample P85			Sample P86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
KLUXHM		56.00	0.74	0.57	61.40	2.10	1.63
KME47X		55.00	-0.26	-0.20	58.00	-1.30	-1.01
KPMAUK		54.60	-0.66	-0.51	61.10	1.80	1.40
LFW3C8		54.60	-0.66	-0.51	62.10	2.80	2.17
LWGTEM		58.46	3.20	2.47	60.27	0.97	0.75
LXBGXH		55.40	0.14	0.11	58.50	-0.80	-0.62
M3JAAT		57.00	1.74	1.35	60.80	1.50	1.16
M48Y67		55.10	-0.16	-0.12	59.20	-0.10	-0.08
M7KD6L		56.00	0.74	0.57	60.00	0.70	0.54
M7YVTZ		55.32	0.06	0.05	59.19	-0.11	-0.09
MXKUQJ	X	50.05	-5.21	-4.01	61.25	1.95	1.51
N3JAQP		53.30	-1.96	-1.51	56.90	-2.40	-1.87
N9KVTF		54.80	-0.46	-0.35	58.40	-0.90	-0.70
NN98ZF		54.60	-0.66	-0.51	58.00	-1.30	-1.01
PA67YY	*	51.40	-3.86	-2.97	57.20	-2.10	-1.64
Q69YVG		55.56	0.30	0.23	59.37	0.06	0.05
QPVAKF		58.00	2.74	2.12	60.00	0.70	0.54
QZXAG9		54.80	-0.46	-0.35	59.20	-0.10	-0.08
RBGJWK		56.40	1.14	0.88	60.50	1.20	0.93
RWJGB7		55.50	0.24	0.19	59.30	0.00	0.00
T8GVTH		56.90	1.64	1.27	62.40	3.10	2.41
TB88DT		56.12	0.86	0.67	58.35	-0.95	-0.74
TKNKQK	X	43.00	-12.26	-9.45	58.00	-1.30	-1.01
TV4F4X		55.56	0.30	0.24	58.95	-0.35	-0.27
U9J48T		55.40	0.14	0.11	59.80	0.50	0.39
UU4H2M		54.10	-1.16	-0.89	60.20	0.90	0.70
UUED2A		56.10	0.84	0.65	59.40	0.10	0.08
V2L82M		54.50	-0.76	-0.58	60.00	0.70	0.54
VNZ9JF		57.20	1.94	1.50	60.40	1.10	0.85
W4WWAY		54.00	-1.26	-0.97	59.10	-0.20	-0.16
W89F3R	X	50.50	-4.76	-3.67	56.80	-2.50	-1.95
X6TUVX		55.20	-0.06	-0.04	58.76	-0.54	-0.42
XTCPBA		56.20	0.94	0.73	58.00	-1.30	-1.01
XVMYRR		55.40	0.14	0.11	59.30	0.00	0.00
Y7HM67		55.20	-0.06	-0.04	57.70	-1.60	-1.25
YFAXGM		54.10	-1.16	-0.89	58.94	-0.36	-0.28
YPTKHB		54.00	-1.26	-0.97	59.00	-0.30	-0.24
YXLQ3C		57.00	1.74	1.35	60.00	0.70	0.54
Z3UL7C		54.84	-0.42	-0.32	60.06	0.76	0.59
ZTEYMH		55.70	0.44	0.34	59.90	0.60	0.46

Summary Statistics

	Sample P85		Sample P86	
Grand Means	55.26	Percent	59.30	Percent
Stnd Dev Btwn Labs	1.30	Percent	1.29	Percent

Samples P85, P86 : AISI 4340 (E), AISI 4340 (F)

Statistics based on 80 of 87 reporting participants

Comments on Assigned Data Flags for Test #1124

4JDH93 (X) - Data for both samples are low.

AJCGBX (X) - Data for sample P86 are low.

J4XXNM (X) - Data for sample P85 are high.

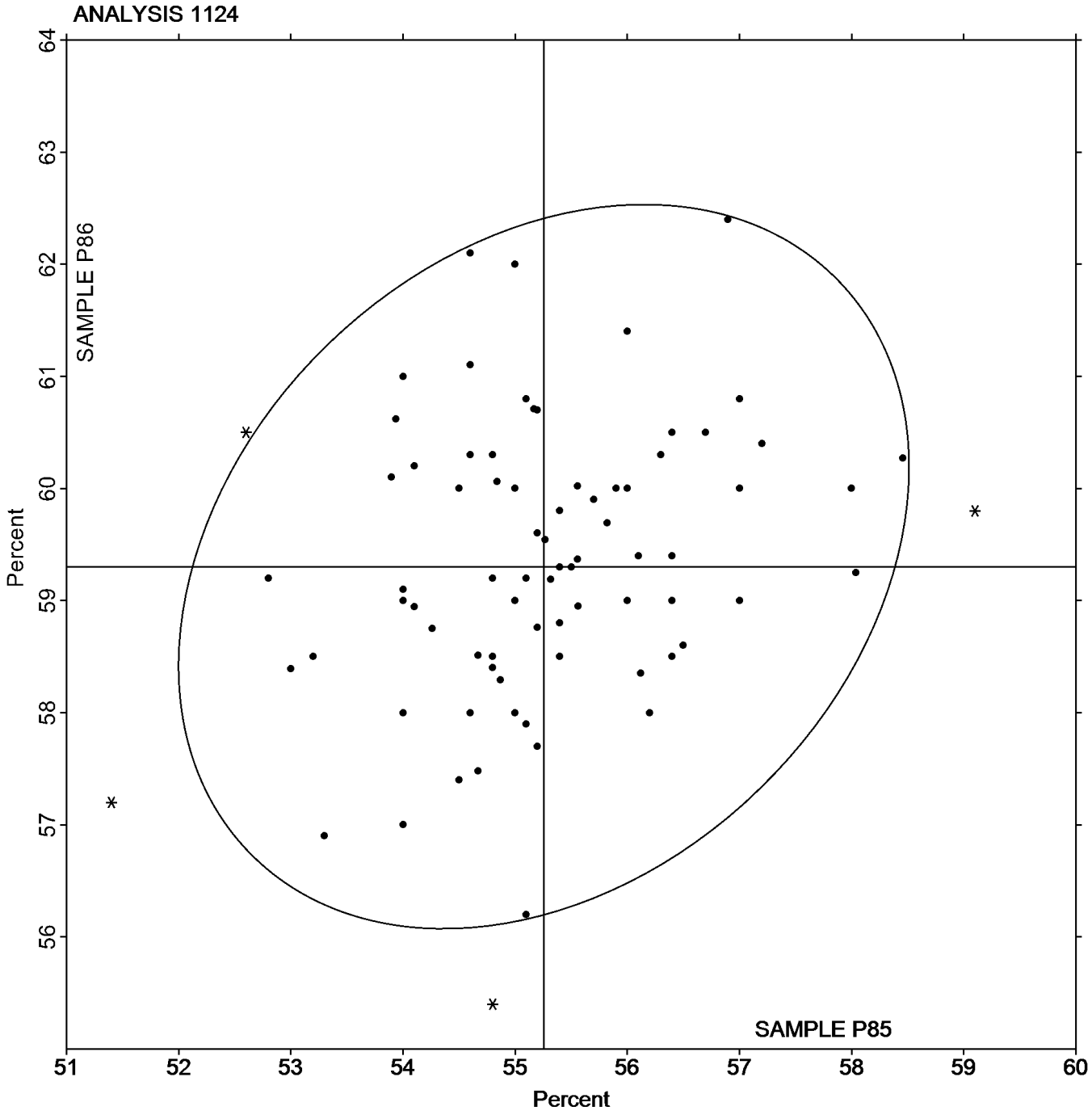
JQV6GK (M) - Participant did not submit data for sample P85.

MXKUQJ (X) - Data for sample P85 are low.

TKNKQK (X) - Data for sample P85 are low.

W89F3R (X) - Data for sample P85 are low.

SAMPLE P85	SAMPLE P86
55.26 Percent	59.30 Percent



		Sample N85			Sample N86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
292JKB		93.48	-0.44	-0.77	93.66	-0.94	-1.73
38A46D		94.70	0.78	1.39	95.40	0.80	1.48
3CQCZH	X	94.24	0.32	0.57	93.98	-0.62	-1.14
3G8HVX	*	92.68	-1.24	-2.18	93.90	-0.70	-1.28
3LGUGC		94.36	0.45	0.79	95.22	0.62	1.14
3V7PM8		93.60	-0.32	-0.56	94.42	-0.18	-0.33
3VRY33		93.56	-0.35	-0.62	94.47	-0.12	-0.23
3WXJBB		93.60	-0.32	-0.56	94.50	-0.10	-0.18
44WJA4		93.52	-0.40	-0.70	94.54	-0.06	-0.11
46R4W4	X	92.44	-1.48	-2.61	92.52	-2.08	-3.83
4K6Q97		94.00	0.08	0.15	94.92	0.32	0.60
4LX9HU		93.83	-0.08	-0.15	94.75	0.15	0.29
4UU3VK		94.46	0.54	0.96	94.90	0.30	0.56
4XN736		94.74	0.82	1.46	95.26	0.66	1.22
62CVLB		93.93	0.01	0.03	94.55	-0.05	-0.09
634VGZ		92.78	-1.14	-2.01	93.42	-1.18	-2.17
693P98		93.40	-0.52	-0.91	94.00	-0.60	-1.10
6GC7RZ		93.50	-0.42	-0.73	93.96	-0.64	-1.17
6HXHPD		93.66	-0.26	-0.45	94.92	0.32	0.60
6TDD27		92.80	-1.12	-1.97	93.32	-1.28	-2.35
78VM6N		93.74	-0.18	-0.31	94.42	-0.18	-0.33
7DJNJL		94.14	0.22	0.40	95.08	0.48	0.89
7J4A9E		94.16	0.24	0.43	94.88	0.28	0.52
7KHFNA	*	95.40	1.48	2.63	96.00	1.40	2.59
7KK389		93.12	-0.80	-1.41	93.94	-0.66	-1.21
7PMPP6		94.52	0.60	1.07	95.14	0.54	1.00
7ZPXHA		93.98	0.06	0.11	94.42	-0.18	-0.33
84AGJC		94.14	0.22	0.40	94.78	0.18	0.34
87GDT2		93.70	-0.22	-0.38	94.20	-0.40	-0.73
8P6ZZH		93.22	-0.70	-1.23	94.48	-0.12	-0.22
8QDCHK		94.34	0.42	0.75	94.64	0.04	0.08
9363WW		93.76	-0.16	-0.27	94.50	-0.10	-0.18
9AFLT2		93.44	-0.48	-0.84	94.30	-0.30	-0.55
9GPK38		93.80	-0.12	-0.20	94.26	-0.34	-0.62
9VRBLQ		93.96	0.04	0.08	94.94	0.34	0.63
9ZHFP3		93.70	-0.22	-0.38	94.52	-0.08	-0.14
ACQJ8H		93.40	-0.52	-0.91	94.14	-0.46	-0.84
AFUJCA		94.50	0.58	1.03	95.00	0.40	0.74
AWAT2N		93.10	-0.82	-1.44	93.82	-0.78	-1.43
B7JGQ9		94.08	0.16	0.29	94.32	-0.28	-0.51
B7K864		94.84	0.92	1.64	95.38	0.78	1.44
BPV4H9		93.86	-0.06	-0.10	94.50	-0.10	-0.18
BPYJV9	*	95.46	1.54	2.73	96.10	1.50	2.77
BQ7ZVZ		93.00	-0.92	-1.62	94.00	-0.60	-1.10
BYNET4		93.40	-0.52	-0.91	94.02	-0.58	-1.06
CNCZLU	X	95.08	1.16	2.06	97.14	2.54	4.69
DK8P86		93.58	-0.34	-0.59	94.38	-0.22	-0.40

		Sample N85			Sample N86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
DRBDHJ		93.94	0.02	0.04	95.10	0.50	0.93
EFDRHE		94.42	0.50	0.89	95.14	0.54	1.00
FBEYWM		93.94	0.02	0.04	94.92	0.32	0.60
FJP23V		94.26	0.34	0.61	95.24	0.64	1.19
FK4QGU		93.60	-0.32	-0.56	93.94	-0.66	-1.21
FL3B6Z	X	73.04	-20.88	-36.92	74.54	-20.06	-36.97
FTJ8BP	X	94.86	0.94	1.67	94.32	-0.28	-0.51
G9MEDW		93.92	0.00	0.01	94.60	0.00	0.01
GGM2UG		93.46	-0.46	-0.81	94.20	-0.40	-0.73
H7VL6Y		94.50	0.58	1.03	94.74	0.14	0.26
HEMZVX	X	92.80	-1.12	-1.97	94.40	-0.20	-0.36
HPEYXV		93.22	-0.70	-1.23	93.96	-0.64	-1.17
J4J3PA		93.92	0.00	0.01	94.21	-0.39	-0.71
J66K2W		93.94	0.02	0.04	94.96	0.36	0.67
JCQ9XH		93.62	-0.30	-0.52	94.22	-0.38	-0.69
JHMQJP		95.16	1.24	2.20	95.70	1.10	2.03
JML8NB		93.58	-0.34	-0.59	94.32	-0.28	-0.51
JQE78T		93.02	-0.90	-1.58	93.80	-0.80	-1.47
JVAZ49		94.42	0.50	0.89	95.00	0.40	0.74
KGAH4M		93.98	0.06	0.11	94.86	0.26	0.48
KLUXHM	X	94.53	0.62	1.09	94.03	-0.56	-1.04
LCM4WE		94.88	0.96	1.71	95.08	0.48	0.89
LVGY93		93.00	-0.92	-1.62	93.80	-0.80	-1.47
M7TLV8		93.76	-0.15	-0.27	94.52	-0.08	-0.14
M8V9TY		94.04	0.12	0.22	95.00	0.40	0.74
MGHCV8		94.26	0.34	0.61	95.22	0.62	1.15
MHDFJT		93.83	-0.08	-0.14	94.26	-0.34	-0.62
MM62EG		94.24	0.32	0.57	95.04	0.44	0.82
MQTEHT		93.12	-0.80	-1.41	93.84	-0.76	-1.40
N2LUHY		94.18	0.26	0.47	94.58	-0.02	-0.03
NAT6JR		93.80	-0.12	-0.20	94.34	-0.26	-0.47
PK8LLH		94.26	0.34	0.61	94.64	0.04	0.08
PMNKGT		94.18	0.26	0.47	95.04	0.44	0.82
PP49KD		93.00	-0.92	-1.62	93.70	-0.90	-1.65
Q42LMF	X	92.96	-0.96	-1.69	94.80	0.20	0.37
Q69YVG	X	93.74	-0.18	-0.31	93.30	-1.30	-2.39
RDGCC7	X	93.48	-0.44	-0.77	93.24	-1.36	-2.50
RWJGB7		94.40	0.48	0.86	94.94	0.34	0.63
T6KKF3		93.76	-0.16	-0.27	94.64	0.04	0.08
T6UXKR		94.30	0.38	0.68	94.80	0.20	0.37
T8TH6D		93.20	-0.72	-1.26	94.04	-0.56	-1.03
TUTQKL		94.08	0.16	0.29	94.70	0.10	0.19
TV4F4X		94.74	0.82	1.46	95.14	0.54	1.00
U24C8V	X	95.26	1.34	2.38	95.20	0.60	1.11
UUED2A		94.20	0.28	0.50	95.06	0.46	0.85
UZQQBE		93.60	-0.32	-0.56	94.14	-0.46	-0.84
V4LVAC		93.40	-0.52	-0.92	94.18	-0.42	-0.77

WebCode	Data Flag	Sample N85 Lab Mean	Sample N85 Diff. from Grand Mean	Sample N85 CPV	Sample N86 Lab Mean	Sample N86 Diff. from Grand Mean	Sample N86 CPV
VJFM7Y		94.84	0.92	1.64	95.76	1.16	2.14
VVCK47		94.60	0.68	1.21	95.02	0.42	0.78
WJ79W3		94.66	0.74	1.32	95.00	0.40	0.74
WW6ZGU		93.36	-0.56	-0.98	94.22	-0.38	-0.69
WZ82HQ		94.26	0.34	0.61	94.40	-0.20	-0.36
WZL29E		94.54	0.62	1.10	95.24	0.64	1.19
XANQCB		94.02	0.10	0.19	94.36	-0.24	-0.44
XG4FQB		93.44	-0.48	-0.84	94.28	-0.32	-0.58
XHJ87R		94.16	0.24	0.43	94.60	0.00	0.01
XZYX77		93.60	-0.32	-0.56	94.50	-0.10	-0.18
Y3MUAQ		94.28	0.36	0.64	95.43	0.83	1.53
YFAXGM		93.80	-0.12	-0.20	94.32	-0.28	-0.51
YXLQ3C	X	92.92	-1.00	-1.76	92.58	-2.02	-3.72
Z3UL7C		93.80	-0.12	-0.20	94.72	0.12	0.23
Z4DTZE		93.98	0.06	0.11	94.36	-0.24	-0.44
ZJ2JPB		94.66	0.74	1.32	95.16	0.56	1.03
ZTEYMH		93.54	-0.38	-0.66	93.85	-0.75	-1.37

Summary Statistics

	Sample N85		Sample N86	
Grand Means	93.92	HRB	94.60	HRB
Stnd Dev Btwn Labs	0.57	HRB	0.54	HRB

Samples N85, N86 : Steel, Steel

Statistics based on 99 of 111 reporting participants

Comments on Assigned Data Flags for Test #1301

3CQCZH (X) - Inconsistent in testing between samples.

46R4W4 (X) - Data for sample N86 are low. Inconsistent within the determinations of sample N86.

CNCZLU (X) - Data for sample N86 are high.

FL3B6Z (X) - Data for both samples are extremely low. Possible Systematic Error.

FTJ8BP (X) - Inconsistent in testing between samples.

HEMZVX (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample N86.

KLUXHM (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

Q42LMF (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample N85.

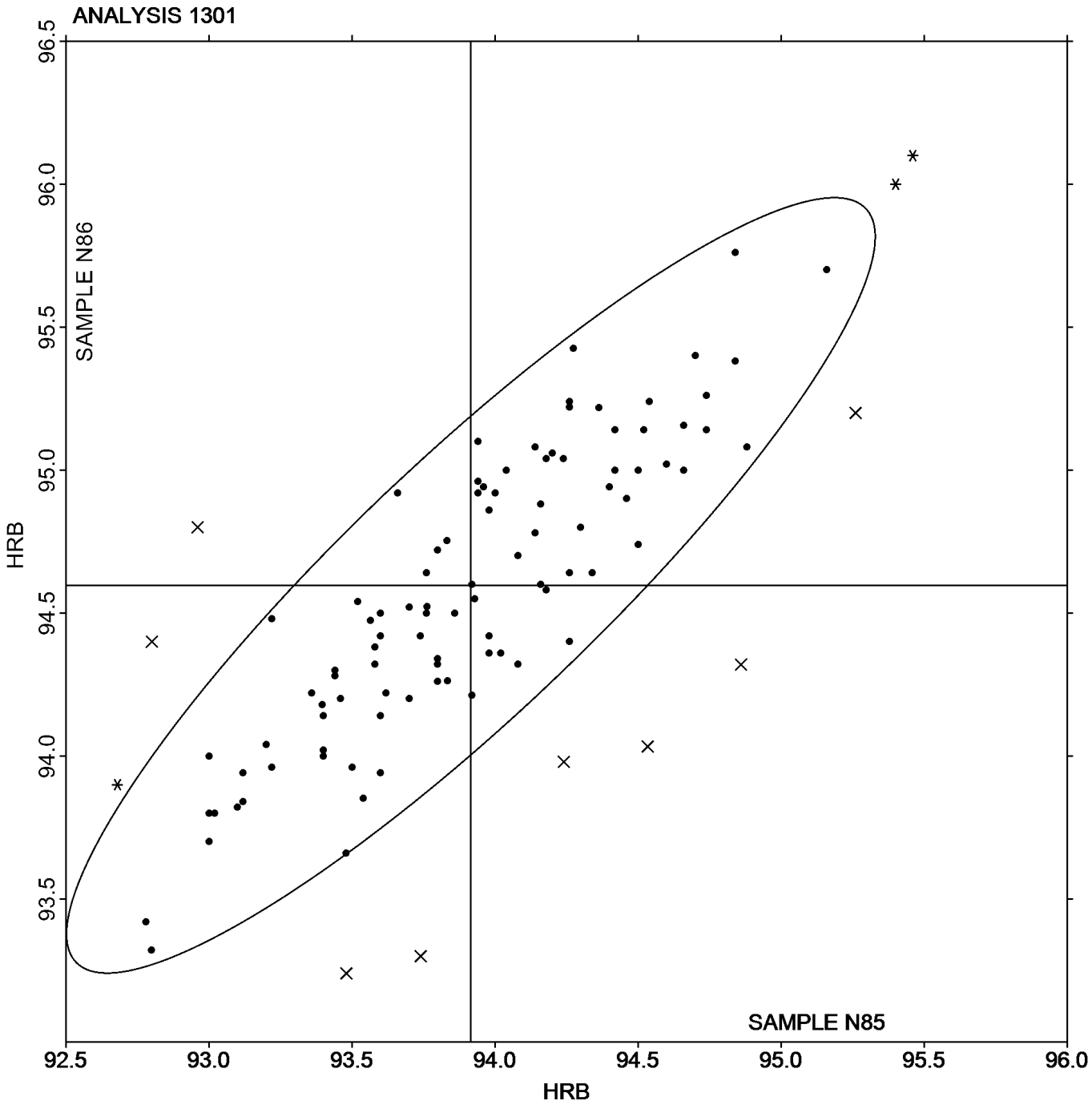
Q69YVG (X) - Inconsistent in testing between samples.

RDGCC7 (X) - Inconsistent in testing between samples.

U24C8V (X) - Inconsistent in testing between samples.

YXLQ3C (X) - Data for sample N86 are low. Inconsistent within the determinations of sample N85.

SAMPLE N85	SAMPLE N86
93.92 HRB	94.60 HRB



		Sample N85			Sample N86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
29TD7T		94.46	0.20	0.43	95.42	0.49	1.05
2PCJUK		93.74	-0.52	-1.15	94.28	-0.65	-1.41
38JRVX		94.32	0.06	0.12	94.76	-0.17	-0.37
3BM2EL	*	93.10	-1.16	-2.55	93.86	-1.07	-2.31
3CUXNC		93.62	-0.64	-1.41	94.40	-0.53	-1.15
3L7FHN		93.80	-0.46	-1.02	94.70	-0.23	-0.50
3MMGPA		94.60	0.34	0.73	94.96	0.03	0.06
3RVEWX		95.28	1.02	2.22	95.86	0.93	2.00
4JDH93		94.66	0.40	0.86	95.42	0.49	1.05
4MA378		94.17	-0.09	-0.20	94.88	-0.06	-0.12
4RRRWG		94.32	0.06	0.12	95.28	0.35	0.75
4WHQ3E		95.38	1.12	2.44	95.80	0.87	1.87
4YM8NP		94.66	0.40	0.87	95.48	0.55	1.18
4ZGU3D		94.08	-0.18	-0.40	95.00	0.07	0.15
62CVLB		94.13	-0.13	-0.30	94.66	-0.27	-0.59
62XGHZ		94.14	-0.12	-0.27	94.76	-0.17	-0.37
6WG9NF		94.62	0.36	0.78	95.44	0.51	1.09
7ARQL4		93.86	-0.40	-0.89	94.34	-0.59	-1.28
7U4X83		94.18	-0.08	-0.19	94.32	-0.61	-1.32
7XTNTL		93.48	-0.78	-1.72	94.66	-0.27	-0.59
92J9GA		95.30	1.04	2.26	95.72	0.79	1.70
96AQFT		94.44	0.18	0.38	94.68	-0.25	-0.54
9LVQAR		94.18	-0.08	-0.19	94.95	0.02	0.04
A7CM3N		94.40	0.14	0.30	95.00	0.07	0.15
ACL8JL		94.30	0.04	0.08	94.76	-0.17	-0.37
BDLJ22		94.32	0.06	0.12	95.22	0.29	0.62
BK3HMK		94.24	-0.02	-0.05	95.08	0.15	0.32
BQPUHV		94.70	0.44	0.95	95.36	0.43	0.92
C7YZB7	*	93.46	-0.80	-1.76	94.88	-0.05	-0.11
C92AR2		94.88	0.62	1.34	95.58	0.65	1.40
CN7NZJ		93.86	-0.40	-0.89	94.60	-0.33	-0.72
D23C9B		94.22	-0.04	-0.10	94.90	-0.03	-0.07
DEPGF8		93.68	-0.58	-1.28	94.04	-0.89	-1.93
DRBDHJ		94.18	-0.08	-0.19	95.14	0.21	0.45
DTBWJ7		94.12	-0.14	-0.32	94.74	-0.19	-0.42
E7QZ32		94.42	0.16	0.34	94.78	-0.15	-0.33
EVJVHT		94.20	-0.06	-0.14	94.38	-0.55	-1.19
EXPUYY		94.34	0.08	0.16	95.38	0.45	0.97
GV2V42		94.74	0.48	1.04	95.36	0.43	0.92
H67BFR	X	91.60	-2.66	-5.83	94.40	-0.53	-1.15
HAVWZY		94.14	-0.12	-0.27	94.96	0.03	0.06
HZXD2X		93.88	-0.38	-0.84	94.84	-0.09	-0.20
JAPHYD		94.80	0.54	1.17	95.52	0.59	1.27
KJXRFA		94.66	0.40	0.86	95.24	0.31	0.66
KVUVLN		94.32	0.06	0.12	94.98	0.05	0.10
KZJH9G		94.88	0.62	1.34	95.42	0.49	1.05
LFW3C8		94.40	0.14	0.30	95.32	0.39	0.84

		Sample N85			Sample N86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
LVGY93	X	93.60	-0.66	-1.45	93.20	-1.73	-3.74
M3JAAT	X	92.16	-2.11	-4.61	93.09	-1.85	-3.98
MMVDDB		94.14	-0.12	-0.27	95.00	0.07	0.15
MR2JMG		93.56	-0.70	-1.54	94.22	-0.71	-1.54
N6WKDM		95.04	0.78	1.69	95.80	0.87	1.87
N98TBT		93.90	-0.36	-0.80	95.20	0.27	0.58
NN98ZF		94.32	0.06	0.12	94.82	-0.11	-0.24
Q4BABE	X	95.92	1.66	3.62	96.44	1.51	3.25
Q77E48		94.12	-0.14	-0.32	94.52	-0.41	-0.89
Q9WG6E		94.70	0.44	0.95	95.00	0.07	0.15
QANDU9	X	96.00	1.74	3.79	96.60	1.67	3.60
QG6XVZ		93.74	-0.52	-1.15	94.70	-0.23	-0.50
QN3H6H		93.44	-0.82	-1.80	93.90	-1.03	-2.23
R4PJW7		94.62	0.36	0.78	95.46	0.53	1.14
RMQ9KN		94.62	0.36	0.78	95.40	0.47	1.01
T77H2L		94.28	0.02	0.03	94.76	-0.17	-0.37
TKNKQK		93.56	-0.70	-1.54	94.12	-0.81	-1.75
UGGR7K		94.04	-0.22	-0.49	94.94	0.01	0.02
UJMT8N		94.08	-0.18	-0.40	94.42	-0.51	-1.11
W89F3R		94.46	0.20	0.43	95.14	0.21	0.45
WECC9C		94.58	0.32	0.69	94.78	-0.15	-0.32
WMGN7V		94.21	-0.05	-0.12	94.63	-0.31	-0.66
WW6ZGU		94.14	-0.12	-0.27	94.62	-0.31	-0.67
YK6BAJ		94.00	-0.26	-0.58	95.00	0.07	0.15
YNL6AJ		94.82	0.56	1.21	95.42	0.49	1.05
YTVDKM	X	95.98	1.72	3.75	95.40	0.47	1.01
ZLV7LD		93.98	-0.28	-0.62	94.46	-0.47	-1.02

Summary Statistics

	Sample N85		Sample N86	
Grand Means	94.26	HRB	94.93	HRB
Stnd Dev Btwn Labs	0.46	HRB	0.46	HRB

Samples N85, N86 : Steel, Steel

Statistics based on 68 of 74 reporting participants

Comments on Assigned Data Flags for Test #1302

H67BFR (X) - Data for sample N85 are low. Inconsistent within the determinations of both samples.

LVGY93 (X) - Data for sample N86 are low. Inconsistent within the determinations of both samples.

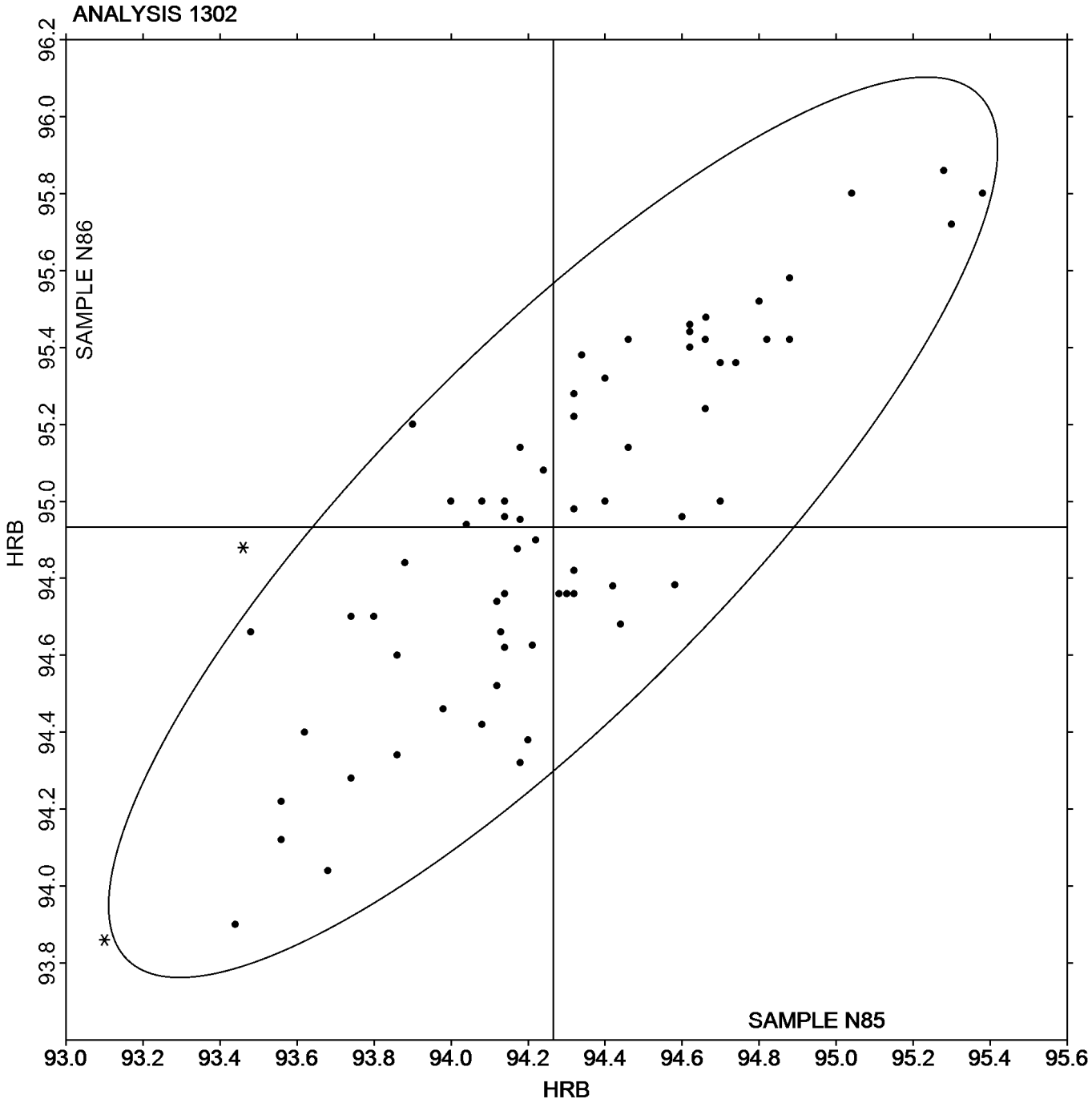
M3JAAT (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.

Q4BABE (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.

QANDU9 (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample N86.

YTVDKM (X) - Data for sample N85 are high.

SAMPLE N85	SAMPLE N86
94.26 HRB	94.93 HRB



		Sample S85			Sample S86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2LZGD9	X	469.80	42.14	3.39	521.20	48.42	3.61
3ATPN8		430.80	3.14	0.25	476.00	3.22	0.24
3BM2EL		401.40	-26.26	-2.11	455.00	-17.78	-1.33
3CQCZH		418.60	-9.06	-0.73	462.80	-9.98	-0.74
3K3F3B		424.00	-3.66	-0.29	463.60	-9.18	-0.68
3LGUGC	X	491.40	63.74	5.13	478.60	5.82	0.43
3V7PM8		428.40	0.74	0.06	466.80	-5.98	-0.45
4VKAX4		433.00	5.34	0.43	471.40	-1.38	-0.10
693P98	X	372.40	-55.26	-4.44	387.80	-84.98	-6.34
78VM6N		416.00	-11.66	-0.94	459.20	-13.58	-1.01
7KHFNA		432.80	5.14	0.41	462.60	-10.18	-0.76
7PMPP6		440.20	12.54	1.01	499.00	26.22	1.96
7R4MGU		420.76	-6.90	-0.55	476.24	3.46	0.26
7VYZAQ		422.40	-5.26	-0.42	460.40	-12.38	-0.92
7ZPXHA		446.60	18.94	1.52	496.20	23.42	1.75
87GDT2		439.60	11.94	0.96	478.80	6.02	0.45
8DAL38	X	410.60	-17.06	-1.37	388.20	-84.58	-6.31
8P6ZZH		408.28	-19.38	-1.56	453.58	-19.20	-1.43
96ANTA		422.40	-5.26	-0.42	461.60	-11.18	-0.83
9F879X		443.00	15.34	1.23	487.80	15.02	1.12
9GPK38		404.00	-23.66	-1.90	461.80	-10.98	-0.82
9JYK8E		414.80	-12.86	-1.03	456.78	-16.00	-1.19
9VRBLQ		437.00	9.34	0.75	485.00	12.22	0.91
A34RR7	X	409.00	-18.66	-1.50	486.20	13.42	1.00
ACQJ8H		435.60	7.94	0.64	468.80	-3.98	-0.30
AWAT2N		439.14	11.48	0.92	474.82	2.04	0.15
B7JGQ9	*	405.40	-22.26	-1.79	439.20	-33.58	-2.51
BPV4H9		417.32	-10.34	-0.83	478.12	5.34	0.40
BYNET4		399.46	-28.20	-2.27	448.75	-24.03	-1.79
CKBUAA		436.40	8.74	0.70	482.80	10.02	0.75
CNWB3F		423.80	-3.86	-0.31	470.60	-2.18	-0.16
DARKEN		431.00	3.34	0.27	468.40	-4.38	-0.33
DK8P86	X	451.94	24.28	1.95	473.98	1.20	0.09
DRBDHJ		430.60	2.94	0.24	469.60	-3.18	-0.24
EAQ7LD		425.20	-2.46	-0.20	469.00	-3.78	-0.28
EFDRHE		413.80	-13.86	-1.11	451.20	-21.58	-1.61
FBEYWM		433.00	5.34	0.43	476.44	3.66	0.27
FJP23V		424.54	-3.12	-0.25	459.68	-13.10	-0.98
GGM2UG		427.40	-0.26	-0.02	479.40	6.62	0.49
H67BFR	*	456.60	28.94	2.33	507.80	35.02	2.61
HAVWZY		432.60	4.94	0.40	472.00	-0.78	-0.06
HBPKEN		426.38	-1.28	-0.10	463.38	-9.40	-0.70
HEMZVX	*	464.38	36.72	2.95	500.19	27.41	2.05
HL9ZLW		420.60	-7.06	-0.57	468.00	-4.78	-0.36
HPEYXV		444.20	16.54	1.33	485.20	12.42	0.93
HRRJ9J		417.60	-10.06	-0.81	464.60	-8.18	-0.61
HV4VR8		434.30	6.64	0.53	493.52	20.74	1.55

		Sample S85			Sample S86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
HZVQHY		408.80	-18.86	-1.52	464.80	-7.98	-0.60
HZXD2X		438.20	10.54	0.85	489.20	16.42	1.23
JBKJYF		435.20	7.54	0.61	474.60	1.82	0.14
JDE69Y		420.60	-7.06	-0.57	465.80	-6.98	-0.52
JFG3G7	X	427.14	-0.52	-0.04	434.84	-37.94	-2.83
JGD2NX		441.42	13.76	1.11	484.16	11.38	0.85
JVAZ49		431.58	3.92	0.32	476.62	3.84	0.29
K2FC77		437.06	9.40	0.76	485.50	12.72	0.95
KT26C4		421.90	-5.76	-0.46	464.02	-8.76	-0.65
KZ9UAW		419.40	-8.26	-0.66	470.60	-2.18	-0.16
LVGY93		419.80	-7.86	-0.63	466.40	-6.38	-0.48
M7KD6L		422.78	-4.88	-0.39	468.50	-4.28	-0.32
M98YU3		415.80	-11.86	-0.95	458.00	-14.78	-1.10
MPXQ44		420.80	-6.86	-0.55	475.60	2.82	0.21
NKQZTG		420.80	-6.86	-0.55	465.60	-7.18	-0.54
PFNNN2		413.40	-14.26	-1.15	463.60	-9.18	-0.68
Q77E48		432.40	4.74	0.38	470.80	-1.98	-0.15
QAQ6NA		438.80	11.14	0.90	487.20	14.42	1.08
QEWEHE		446.00	18.34	1.48	499.80	27.02	2.02
QLEBGE		411.40	-16.26	-1.31	452.20	-20.58	-1.54
QTLQBM		438.00	10.34	0.83	476.60	3.82	0.29
RKAWUY		433.20	5.54	0.45	477.20	4.42	0.33
RKHAXU		439.00	11.34	0.91	484.80	12.02	0.90
RKQXUF	*	413.80	-13.86	-1.11	478.20	5.42	0.40
T6UXKR		430.00	2.34	0.19	475.80	3.02	0.23
T77H2L		441.20	13.54	1.09	479.00	6.22	0.46
TA2TVF		433.40	5.74	0.46	480.40	7.62	0.57
THVYPF	X	129.76	-297.90	-23.96	123.25	-349.53	-26.09
TUTQKL		429.60	1.94	0.16	462.60	-10.18	-0.76
U8MKDE	*	423.80	-3.86	-0.31	488.82	16.04	1.20
UQ3UCU		423.71	-3.95	-0.32	475.04	2.26	0.17
UUED2A		399.40	-28.26	-2.27	445.00	-27.78	-2.07
V4ZHNK		421.40	-6.26	-0.50	470.00	-2.78	-0.21
VJFM7Y		438.60	10.94	0.88	477.80	5.02	0.37
WDNNZH		419.54	-8.12	-0.65	452.84	-19.94	-1.49
WMGN7V		418.80	-8.86	-0.71	465.20	-7.58	-0.57
WZL29E		447.24	19.58	1.57	489.30	16.52	1.23
XANQCB		448.02	20.36	1.64	492.88	20.10	1.50
XF4PCF		440.00	12.34	0.99	475.20	2.42	0.18
XG4FQB		414.80	-12.86	-1.03	452.94	-19.84	-1.48
XZYX77		431.00	3.34	0.27	472.20	-0.58	-0.04
Y7HM67		439.00	11.34	0.91	499.40	26.62	1.99
YK6BAJ		418.00	-9.66	-0.78	464.00	-8.78	-0.66
Z3UL7C		437.40	9.74	0.78	484.00	11.22	0.84
Z4DTZE		424.20	-3.46	-0.28	469.80	-2.98	-0.22
ZCJCQJ		427.60	-0.06	0.00	473.00	0.22	0.02
ZFJNMJ		418.00	-9.66	-0.78	467.20	-5.58	-0.42

		Sample S85			Sample S86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
ZJ2JPB		432.80	5.14	0.41	479.60	6.82	0.51
ZTEYMH		433.00	5.34	0.43	486.40	13.62	1.02

Summary Statistics

	Sample S85		Sample S86	
Grand Means	427.66	HK 500 gf	472.78	HK 500 gf
Stnd Dev Btwn Labs	12.43	HK 500 gf	13.40	HK 500 gf

Samples S85, S86 : Steel, Steel

Statistics based on 88 of 96 reporting participants

Comments on Assigned Data Flags for Test #1321

2LZGD9 (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample S85.

3LGUGC (X) - Data for sample S85 are high. Inconsistent within the determinations of sample S85.

693P98 (X) - Data for both samples are low. Possible Systematic Error.

8DAL38 (X) - Data for sample S86 are low.

A34RR7 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample S86.

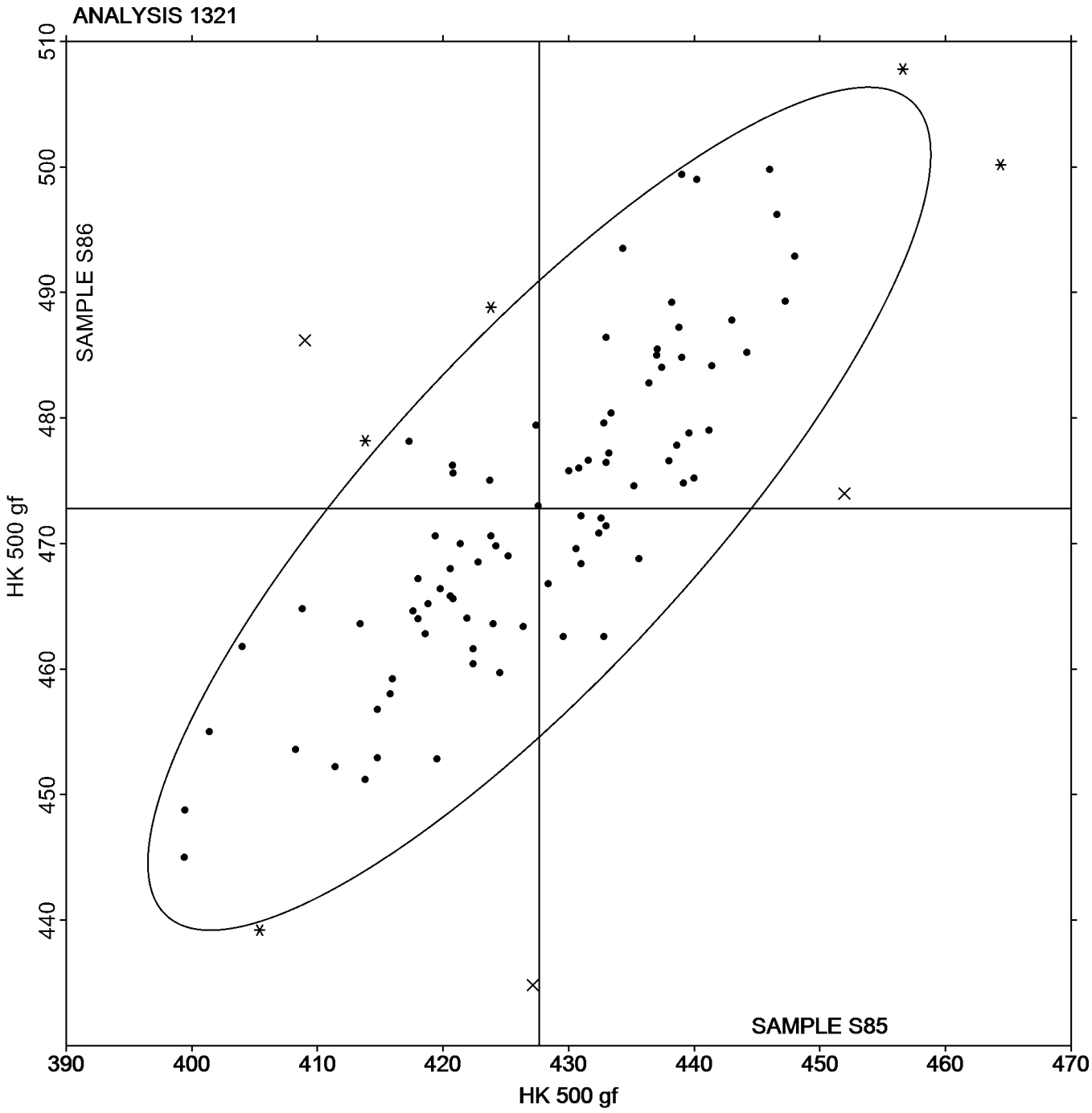
DK8P86 (X) - Inconsistent in testing between samples.

JFG3G7 (X) - Data for sample S86 are low.

THVYPF (X) - Data for both samples are extremely low. Possible Systematic Error.

SAMPLE S85
427.66 HK 500 gf

SAMPLE S86
472.78 HK 500 gf



		Sample S85			Sample S86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2LZGD9		432.80	-4.97	-0.36	477.00	-8.71	-0.61
3BM2EL		415.20	-22.57	-1.65	465.20	-20.51	-1.43
3K3F3B		441.00	3.23	0.24	487.20	1.49	0.10
3LGUGC		420.20	-17.57	-1.29	471.60	-14.11	-0.98
3V7PM8		437.60	-0.17	-0.01	478.20	-7.51	-0.52
78VM6N		424.40	-13.37	-0.98	483.40	-2.31	-0.16
7KHFNA		427.00	-10.77	-0.79	480.20	-5.51	-0.38
7PMPP6		452.00	14.23	1.04	503.60	17.89	1.24
7VYZAQ		428.80	-8.97	-0.66	474.20	-11.51	-0.80
7ZPXHA	*	470.80	33.03	2.42	496.80	11.09	0.77
87GDT2		459.60	21.83	1.60	486.80	1.09	0.08
8DAL38		407.20	-30.57	-2.24	472.20	-13.51	-0.94
8P6ZZH		421.30	-16.47	-1.21	468.04	-17.67	-1.23
96ANTA		448.80	11.03	0.81	474.00	-11.71	-0.81
9F879X	X	478.00	40.23	2.95	497.20	11.49	0.80
9GPK38		412.40	-25.37	-1.86	461.40	-24.31	-1.69
9JYK8E	X	395.66	-42.11	-3.09	486.18	0.47	0.03
9VRBLQ		453.20	15.43	1.13	512.80	27.09	1.88
A34RR7		437.60	-0.17	-0.01	498.60	12.89	0.90
ACQJ8H		452.40	14.63	1.07	518.40	32.69	2.27
AWAT2N		436.66	-1.11	-0.08	493.24	7.53	0.52
CKBUAA		439.80	2.03	0.15	489.00	3.29	0.23
CNWB3F		436.00	-1.77	-0.13	481.20	-4.51	-0.31
DK8P86		464.78	27.01	1.98	507.66	21.95	1.52
DRBDHJ		440.80	3.03	0.22	491.00	5.29	0.37
EAQ7LD		429.40	-8.37	-0.61	473.80	-11.91	-0.83
EFDRHE		431.60	-6.17	-0.45	468.20	-17.51	-1.22
FBEYWM		445.30	7.53	0.55	477.12	-8.59	-0.60
FJP23V		425.66	-12.11	-0.89	462.74	-22.97	-1.60
GGM2UG		430.80	-6.97	-0.51	471.20	-14.51	-1.01
HAVWZY		448.40	10.63	0.78	489.40	3.69	0.26
HBPKEN		430.88	-6.89	-0.51	478.24	-7.47	-0.52
HEMZVX		460.39	22.62	1.66	519.56	33.84	2.35
HL9ZLW		420.80	-16.97	-1.24	469.40	-16.31	-1.13
HPEYXV		445.40	7.63	0.56	493.60	7.89	0.55
HRRJ9J		427.40	-10.37	-0.76	473.40	-12.31	-0.86
HV4VR8	*	432.78	-4.99	-0.37	507.56	21.85	1.52
HZVQHY		426.00	-11.77	-0.86	478.60	-7.11	-0.49
HZXD2X		435.40	-2.37	-0.17	480.80	-4.91	-0.34
JFG3G7	X	427.88	-9.89	-0.73	432.04	-53.67	-3.73
JGD2NX		432.78	-4.99	-0.37	479.32	-6.39	-0.44
JVAZ49		435.40	-2.37	-0.17	483.32	-2.39	-0.17
K2FC77		447.64	9.87	0.72	502.28	16.57	1.15
KT26C4		422.84	-14.93	-1.09	478.34	-7.37	-0.51
KZ9UAW		422.00	-15.77	-1.16	477.60	-8.11	-0.56
LVGY93		435.80	-1.97	-0.14	484.40	-1.31	-0.09
NKQZTG		439.80	2.03	0.15	506.20	20.49	1.42

Fasteners and Metals Interlaboratory Testing Program

Analysis 1322

Microhardness: Knoop Indenters (200 gf)
ASTM E384

		Sample S85			Sample S86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
PFNNN2		416.80	-20.97	-1.54	483.20	-2.51	-0.17
QAQ6NA		442.80	5.03	0.37	487.80	2.09	0.14
QEWEHE	*	453.40	15.63	1.15	521.40	35.69	2.48
QLEBGE		418.40	-19.37	-1.42	460.80	-24.91	-1.73
RKHAXU		448.40	10.63	0.78	495.80	10.09	0.70
T6UXKR		449.20	11.43	0.84	495.60	9.89	0.69
T77H2L		445.40	7.63	0.56	490.80	5.09	0.35
TA2TVF		461.40	23.63	1.73	494.40	8.69	0.60
UQ3UCU		432.27	-5.50	-0.40	491.67	5.96	0.41
WMGN7V		432.20	-5.57	-0.41	483.00	-2.71	-0.19
WZL29E		466.18	28.41	2.08	515.48	29.77	2.07
XF4PCF		445.60	7.83	0.57	490.40	4.69	0.33
XG4FQB		435.10	-2.67	-0.20	483.18	-2.53	-0.18
XZYX77		443.80	6.03	0.44	478.20	-7.51	-0.52
Y7HM67		455.60	17.83	1.31	483.60	-2.11	-0.15
YK6BAJ		434.00	-3.77	-0.28	480.00	-5.71	-0.40
Z4DTZE		432.20	-5.57	-0.41	470.00	-15.71	-1.09
ZCJCQJ		440.00	2.23	0.16	481.00	-4.71	-0.33
ZFJNMJ		437.80	0.03	0.00	487.20	1.49	0.10
ZJ2JPB		440.00	2.23	0.16	485.40	-0.31	-0.02

Summary Statistics

	Sample S85		Sample S86	
Grand Means	437.77	HK 200 gf	485.71	HK 200 gf
Stnd Dev Btwn Labs	13.64	HK 200 gf	14.39	HK 200 gf

Samples S85, S86 : Steel, Steel

Statistics based on 64 of 67 reporting participants

Comments on Assigned Data Flags for Test #1322

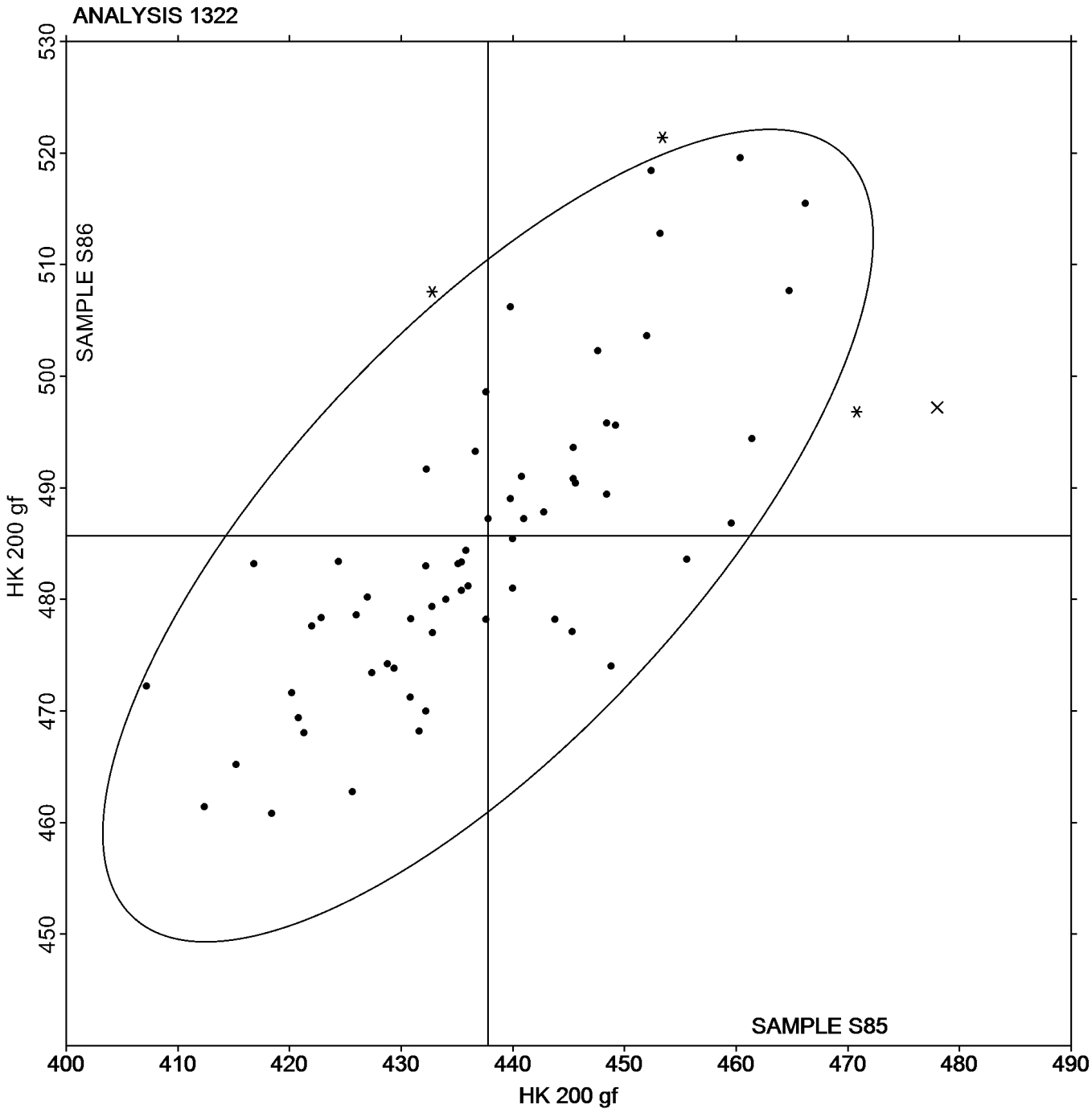
9F879X (X) - Data for sample S85 are high.

9JYK8E (X) - Data for sample S85 are low.

JFG3G7 (X) - Data for sample S86 are low.

SAMPLE S85
437.77 HK 200 gf

SAMPLE S86
485.71 HK 200 gf



		Sample S85			Sample S86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
292JKB	X	437.18	30.95	3.05	399.06	-53.97	-5.08
2LZGD9		397.20	-9.03	-0.89	451.00	-2.03	-0.19
2NAEWH		390.72	-15.51	-1.53	435.42	-17.61	-1.66
2TMBLR		399.24	-6.99	-0.69	449.14	-3.89	-0.37
38A46D		404.26	-1.97	-0.19	452.50	-0.53	-0.05
3BM2EL		388.00	-18.23	-1.79	439.20	-13.83	-1.30
3K3F3B		403.80	-2.43	-0.24	446.80	-6.23	-0.59
3LGUGC	*	394.60	-11.63	-1.14	428.80	-24.23	-2.28
3V7PM8		407.40	1.17	0.12	449.40	-3.63	-0.34
3VRY33		427.00	20.77	2.04	474.00	20.97	1.97
4MTTKL	X	455.18	48.95	4.82	493.70	40.67	3.83
693P98	X	315.20	-91.03	-8.96	351.00	-102.03	-9.60
6RY6J7		414.44	8.21	0.81	449.04	-3.99	-0.38
6ZB68F		400.80	-5.43	-0.53	453.80	0.77	0.07
78VM6N		396.60	-9.63	-0.95	454.00	0.97	0.09
7KHFNA		431.00	24.77	2.44	472.40	19.37	1.82
7PMPP6		405.80	-0.43	-0.04	450.60	-2.43	-0.23
7R4MGU		396.68	-9.55	-0.94	453.14	0.11	0.01
7VYZAQ		404.20	-2.03	-0.20	448.00	-5.03	-0.47
7ZPXHA		420.00	13.77	1.36	473.20	20.17	1.90
87GDT2		394.60	-11.63	-1.14	432.80	-20.23	-1.90
8DAL38	*	386.80	-19.43	-1.91	446.80	-6.23	-0.59
8DP437		411.00	4.77	0.47	453.40	0.37	0.03
8P6ZZH		401.00	-5.23	-0.51	440.48	-12.55	-1.18
92AFKT		395.46	-10.77	-1.06	443.76	-9.27	-0.87
96ANTA		397.60	-8.63	-0.85	450.80	-2.23	-0.21
9BY4HG		416.00	9.77	0.96	455.80	2.77	0.26
9F879X		412.80	6.57	0.65	450.80	-2.23	-0.21
9GPK38		397.00	-9.23	-0.91	441.40	-11.63	-1.09
9KRL34		427.20	20.97	2.06	479.00	25.97	2.44
9N2C3Y		397.80	-8.43	-0.83	442.80	-10.23	-0.96
9VRBLQ		404.40	-1.83	-0.18	454.20	1.17	0.11
A34RR7		392.00	-14.23	-1.40	442.40	-10.63	-1.00
ACL8JL		398.76	-7.47	-0.74	450.86	-2.17	-0.20
ACQJ8H		413.00	6.77	0.67	455.60	2.57	0.24
ANFN9M		408.56	2.33	0.23	458.98	5.95	0.56
AWAT2N		404.16	-2.07	-0.20	453.28	0.25	0.02
B7JGQ9	*	386.40	-19.83	-1.95	447.40	-5.63	-0.53
BYNET4		383.88	-22.35	-2.20	428.92	-24.11	-2.27
C3VHJ4		409.24	3.01	0.30	450.14	-2.89	-0.27
C69DUG		398.40	-7.83	-0.77	445.80	-7.23	-0.68
CKBUAA		411.20	4.97	0.49	460.00	6.97	0.66
CNWB3F		407.80	1.57	0.15	454.40	1.37	0.13
DK8P86		429.16	22.93	2.26	468.42	15.39	1.45
DRBDHJ		421.40	15.17	1.49	461.20	8.17	0.77
DTLBHU		391.60	-14.63	-1.44	437.60	-15.43	-1.45
E332GL		407.44	1.21	0.12	459.20	6.17	0.58

		Sample S85			Sample S86		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
EAQ7LD		410.20	3.97	0.39	451.60	-1.43	-0.13
EFDRHE		388.40	-17.83	-1.75	431.80	-21.23	-2.00
EZ3QUA		423.20	16.97	1.67	473.40	20.37	1.92
FBEYWM		408.40	2.17	0.21	454.20	1.17	0.11
FJP23V		394.98	-11.25	-1.11	438.56	-14.47	-1.36
FK8B94		401.20	-5.03	-0.50	456.80	3.77	0.35
FL3B6Z		403.00	-3.23	-0.32	456.40	3.37	0.32
FTJ8BP		408.38	2.15	0.21	459.50	6.47	0.61
GGBRCP		418.60	12.37	1.22	459.20	6.17	0.58
GGM2UG		398.40	-7.83	-0.77	443.40	-9.63	-0.91
HAVWZY		405.60	-0.63	-0.06	452.60	-0.43	-0.04
HBPKEN		417.62	11.39	1.12	455.90	2.87	0.27
HEMZVX		417.60	11.37	1.12	466.22	13.20	1.24
HJ7U9C		413.60	7.37	0.73	460.00	6.97	0.66
HL9ZLW		405.60	-0.63	-0.06	448.80	-4.23	-0.40
HPEYXV		410.95	4.72	0.46	466.53	13.50	1.27
HRRJ9J		404.20	-2.03	-0.20	451.00	-2.03	-0.19
HV4VR8		414.02	7.79	0.77	471.38	18.35	1.73
HWN628		403.00	-3.23	-0.32	454.80	1.77	0.17
HZVQHY		400.00	-6.23	-0.61	452.20	-0.83	-0.08
HZXD2X		407.00	0.77	0.08	445.60	-7.43	-0.70
JAPHYD		414.24	8.01	0.79	454.08	1.05	0.10
JDE69Y		404.40	-1.83	-0.18	444.00	-9.03	-0.85
JFG3G7		401.46	-4.77	-0.47	450.22	-2.81	-0.26
JGD2NX		396.04	-10.19	-1.00	443.28	-9.75	-0.92
KGAH4M		399.40	-6.83	-0.67	454.20	1.17	0.11
KPMAUK	*	434.66	28.43	2.80	481.70	28.67	2.70
KYNUUR		418.60	12.37	1.22	459.80	6.77	0.64
KZ9UAW		407.40	1.17	0.12	450.00	-3.03	-0.28
LVGY93		398.40	-7.83	-0.77	438.20	-14.83	-1.39
LZEDBJ		412.20	5.97	0.59	460.20	7.17	0.67
M98YU3		399.00	-7.23	-0.71	439.80	-13.23	-1.24
NKQZTG		404.40	-1.83	-0.18	456.80	3.77	0.35
NNKK2Y		409.40	3.17	0.31	452.40	-0.63	-0.06
NW4EFF		421.46	15.23	1.50	469.14	16.11	1.52
PFNNN2		403.00	-3.23	-0.32	444.00	-9.03	-0.85
PW6CNP		421.40	15.17	1.49	467.60	14.57	1.37
Q4BABE		413.80	7.57	0.74	460.40	7.37	0.69
Q82R7R		396.40	-9.83	-0.97	444.20	-8.83	-0.83
Q8ANY6		410.24	4.01	0.39	451.24	-1.79	-0.17
QAQ6NA		422.00	15.77	1.55	470.60	17.57	1.65
QEWEHE		415.80	9.57	0.94	468.60	15.57	1.46
QLEBGE		389.80	-16.43	-1.62	439.40	-13.63	-1.28
RKHAXU		413.00	6.77	0.67	462.20	9.17	0.86
RKQXUF	*	402.60	-3.63	-0.36	465.60	12.57	1.18
RL4KCU		397.00	-9.23	-0.91	440.60	-12.43	-1.17
RWJGB7		411.00	4.77	0.47	465.20	12.17	1.14

WebCode	Data Flag	Sample S85 Lab Mean	Sample S85 Diff. from Grand Mean	Sample S85 CPV	Sample S86 Lab Mean	Sample S86 Diff. from Grand Mean	Sample S86 CPV
T6UXKR		403.80	-2.43	-0.24	456.00	2.97	0.28
T77H2L		400.60	-5.63	-0.55	458.20	5.17	0.49
TBAXJB		408.50	2.27	0.22	455.10	2.07	0.19
TKNKQK		412.00	5.77	0.57	461.80	8.77	0.82
TUTQKL		400.60	-5.63	-0.55	435.60	-17.43	-1.64
UJMT8N		389.80	-16.43	-1.62	439.00	-14.03	-1.32
ULBJLU		401.00	-5.23	-0.51	445.60	-7.43	-0.70
UU76KL		414.00	7.77	0.76	459.60	6.57	0.62
UUED2A		399.40	-6.83	-0.67	445.00	-8.03	-0.76
VDNF7D		420.00	13.77	1.36	458.40	5.37	0.51
VFTH24		407.74	1.51	0.15	455.12	2.09	0.20
VVCK47		410.42	4.19	0.41	450.10	-2.93	-0.28
W6E7XC		405.54	-0.69	-0.07	456.62	3.59	0.34
WEGMBA		421.60	15.37	1.51	477.72	24.69	2.32
WLM3BJ		409.80	3.57	0.35	452.02	-1.01	-0.09
WMGN7V		406.80	0.57	0.06	452.60	-0.43	-0.04
WZ82HQ		414.40	8.17	0.80	464.60	11.57	1.09
XANQCB		413.90	7.67	0.75	451.20	-1.83	-0.17
XF4PCF		403.60	-2.63	-0.26	436.20	-16.83	-1.58
XG4FQB		388.72	-17.51	-1.72	437.60	-15.43	-1.45
XZYX77		393.40	-12.83	-1.26	441.60	-11.43	-1.07
Y7HM67		405.60	-0.63	-0.06	448.80	-4.23	-0.40
Y9P3EX		405.66	-0.57	-0.06	448.60	-4.43	-0.42
YCQ2RC		401.28	-4.95	-0.49	448.20	-4.83	-0.45
YK6BAJ		408.00	1.77	0.17	447.00	-6.03	-0.57
YN8LFE		416.20	9.97	0.98	453.00	-0.03	0.00
Z3UL7C		415.80	9.57	0.94	455.60	2.57	0.24
Z4DTZE		413.60	7.37	0.73	459.40	6.37	0.60
ZCJCQJ		404.80	-1.43	-0.14	461.60	8.57	0.81
ZER9RF		411.80	5.57	0.55	462.60	9.57	0.90
ZFJNMJ	*	388.80	-17.43	-1.72	453.80	0.77	0.07
ZJ2JPB		411.80	5.57	0.55	464.20	11.17	1.05

Summary Statistics

	Sample S85		Sample S86	
Grand Means	406.23	HV 500 gf	453.03	HV 500 gf
Stnd Dev Btwn Labs	10.16	HV 500 gf	10.63	HV 500 gf

Samples S85, S86 : Steel, Steel

Statistics based on 123 of 126 reporting participants

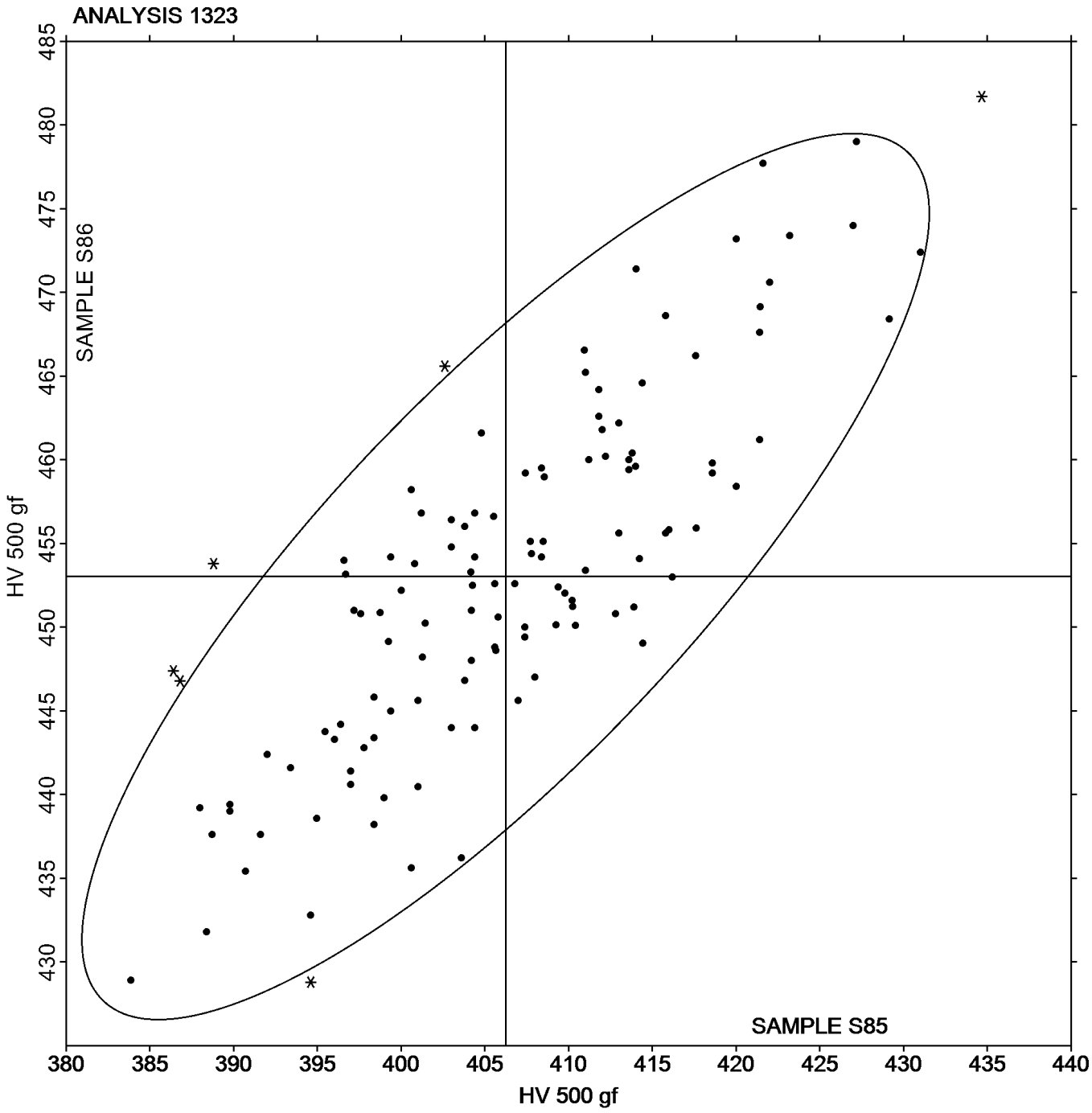
Comments on Assigned Data Flags for Test #1323

292JKB (X) - Data for sample S85 are high and data for sample S86 are low. Inconsistent in testing between samples.

4MTTKL (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample S86.

693P98 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample S85.

SAMPLE S85	SAMPLE S86
406.23 HV 500 gf	453.03 HV 500 gf



WebCode	Data Flag	Sample T85 Lab Mean	Sample T85 Diff. from Grand Mean	Sample T85 CPV	Sample T86 Lab Mean	Sample T86 Diff. from Grand Mean	Sample T86 CPV	Method
9K33RW		89.01	1.10	0.61	89.71	1.18	0.64	WD
NW4EFF		88.90	0.99	0.55	89.47	0.93	0.51	OE
UGALR3		85.81	-2.10	-1.15	86.43	-2.11	-1.15	OE

Summary Statistics

	Sample T85		Sample T86	
Grand Means	87.91	Percent	88.54	Percent
Stnd Dev Btwn Labs	1.82	Percent	1.83	Percent

Samples T85, T86 : Ti 6-4 (Gr. 5), Ti 6-4 (Gr. 5)

Statistics based on 3 of 3 reporting participants

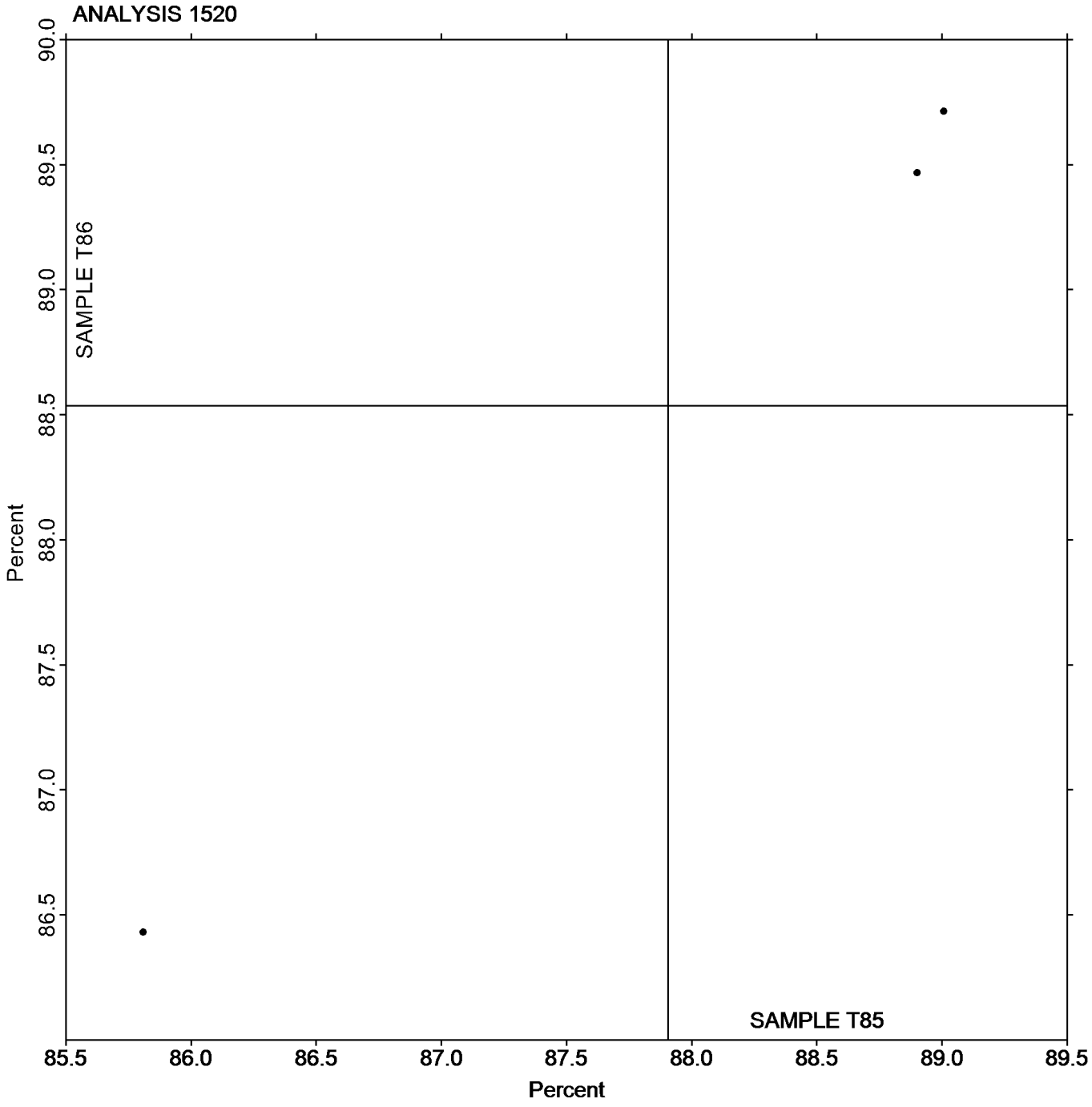
Key to Method Codes Reported by Participants

OE Spectrometry - Optical Emission (OES)

WD X-Ray Fluorescence - Wavelength Dispersive (WDX)

SAMPLE T85
87.91 Percent

SAMPLE T86
88.54 Percent



Analysis 1521

Titanium-based Alloy, HYDROGEN (H)
HYDROGEN (H)

		Sample T85			Sample T86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
3ATPN8		0.00127	0.000319	0.99	0.00143	0.00026	0.52	XX
9K33RW		0.000702	-0.000246	-0.76	0.000908	-0.00027	-0.53	IR
NW4EFF		0.000359	-0.000589	-1.83	0.000141	-0.00103	-2.06	IR
RKAWUY		0.000933	-0.000014	-0.04	0.00147	0.00029	0.58	CI
UU4H2M		0.00110	0.000152	0.47	0.00137	0.00019	0.38	XX
WMGN7V		0.00104	0.000093	0.29	0.00157	0.00040	0.79	CI
YPTKHB		0.00123	0.000286	0.89	0.00133	0.00016	0.32	OE

Summary Statistics

	Sample T85		Sample T86	
Grand Means	0.000948	Percent	0.00117	Percent
Stnd Dev Btwn Labs	0.000322	Percent	0.00050	Percent

Samples T85, T86 : Ti 6-4 (Gr. 5), Ti 6-4 (Gr. 5)

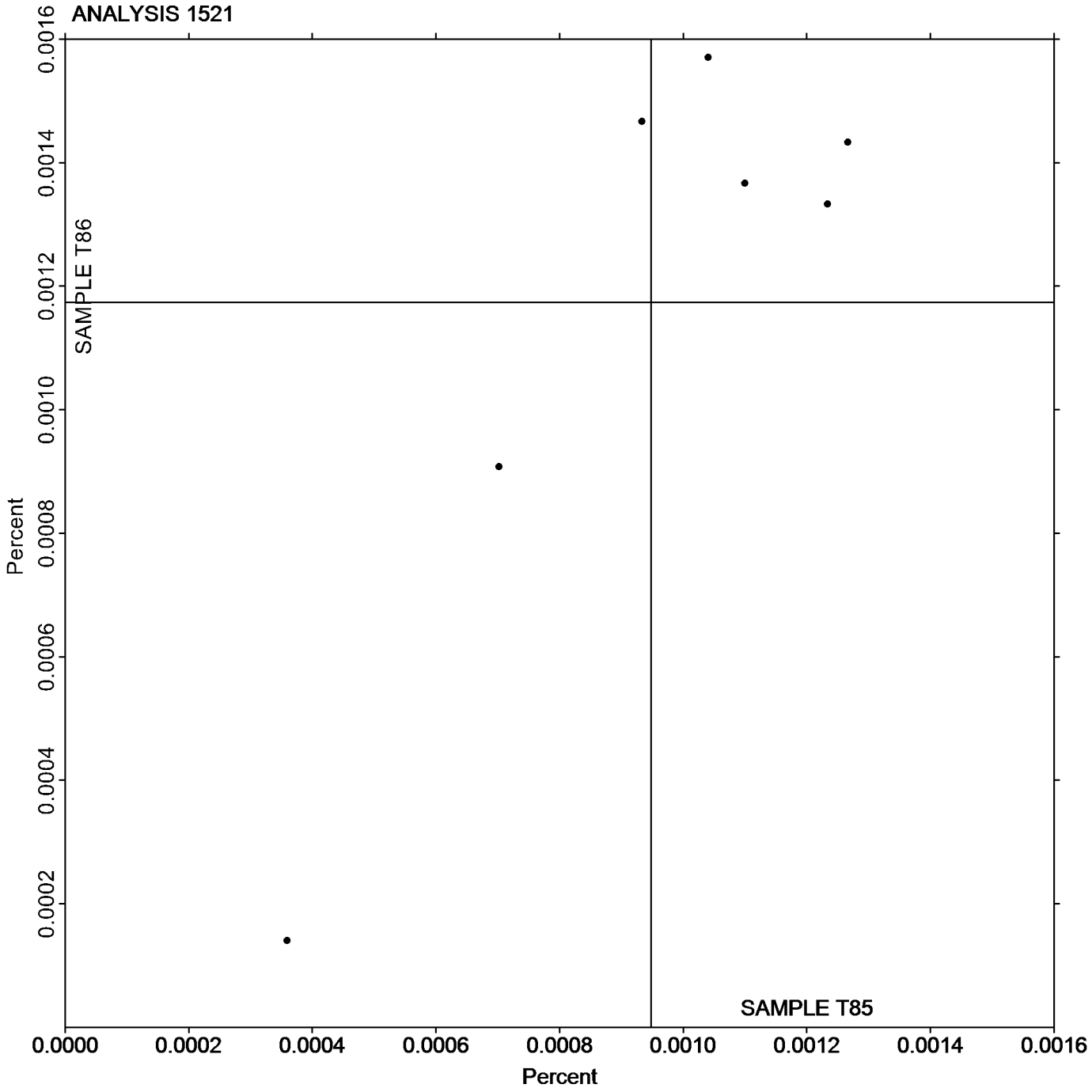
Statistics based on 7 of 7 reporting participants

Key to Method Codes Reported by Participants

CI	Combustion / IR	IR	IR (Absorption / Detection)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

SAMPLE T85
0.00095 Percent

SAMPLE T86
0.00117 Percent



Fasteners and Metals Interlaboratory Testing Program

Analysis 1522

Titanium-based Alloy, OXYGEN (O)

OXYGEN (O)

WebCode	Data Flag	Sample T85 Lab Mean	Sample T85 Diff. from Grand Mean	Sample T85 CPV	Sample T86 Lab Mean	Sample T86 Diff. from Grand Mean	Sample T86 CPV	Method
9K33RW		0.1767	-0.0061	-0.99	0.1927	0.0135	0.65	XX
NW4EFF		0.1905	0.0077	1.26	0.1444	-0.0348	-1.67	IR
RKAWUY		0.1897	0.0069	1.13	0.2050	0.0258	1.23	CI
UU4H2M		0.1768	-0.0060	-0.98	0.1849	0.0057	0.27	XX
WMGN7V		0.1800	-0.0028	-0.45	0.1787	-0.0006	-0.03	CI
YPTKHB		0.1830	0.0002	0.04	0.1697	-0.0096	-0.46	OE

Summary Statistics

	Sample T85		Sample T86	
Grand Means	0.1828	Percent	0.1792	Percent
Stnd Dev Btwn Labs	0.0061	Percent	0.0209	Percent

Samples T85, T86 : Ti 6-4 (Gr. 5), Ti 6-4 (Gr. 5)

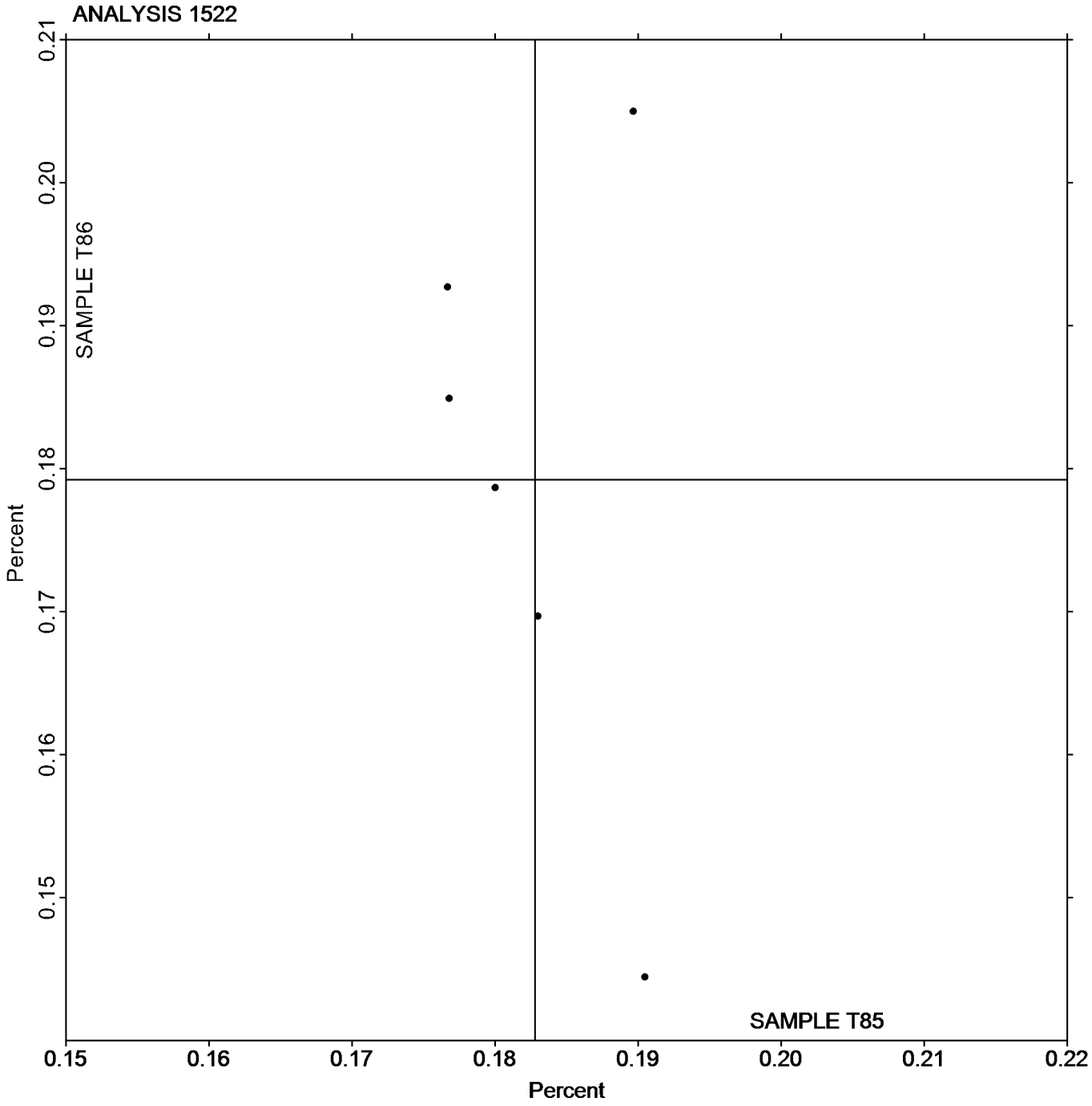
Statistics based on 6 of 6 reporting participants

Key to Method Codes Reported by Participants

CI	Combustion / IR	IR	IR (Absorption / Detection)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

SAMPLE T85
0.1828 Percent

SAMPLE T86
0.1792 Percent



Analysis 1523

Titanium-based Alloy, NITROGEN (N)
NITROGEN (N)

		Sample T85			Sample T86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9K33RW		0.0218	-0.0046	-0.79	0.0113	0.0010	0.35	XX
NW4EFF		0.0361	0.0096	1.66	0.00768	-0.0026	-0.89	IR
UU4H2M		0.0274	0.0010	0.17	0.0145	0.0042	1.44	XX
WMGN7V		0.0224	-0.0040	-0.69	0.0106	0.0003	0.10	CO
YPTKHB		0.0244	-0.0021	-0.35	0.00733	-0.0029	-1.01	OE

Summary Statistics

	Sample T85		Sample T86	
Grand Means	0.0264	Percent	0.0103	Percent
Stnd Dev Btwn Labs	0.0058	Percent	0.0029	Percent

Samples T85, T86 : Ti 6-4 (Gr. 5), Ti 6-4 (Gr. 5)

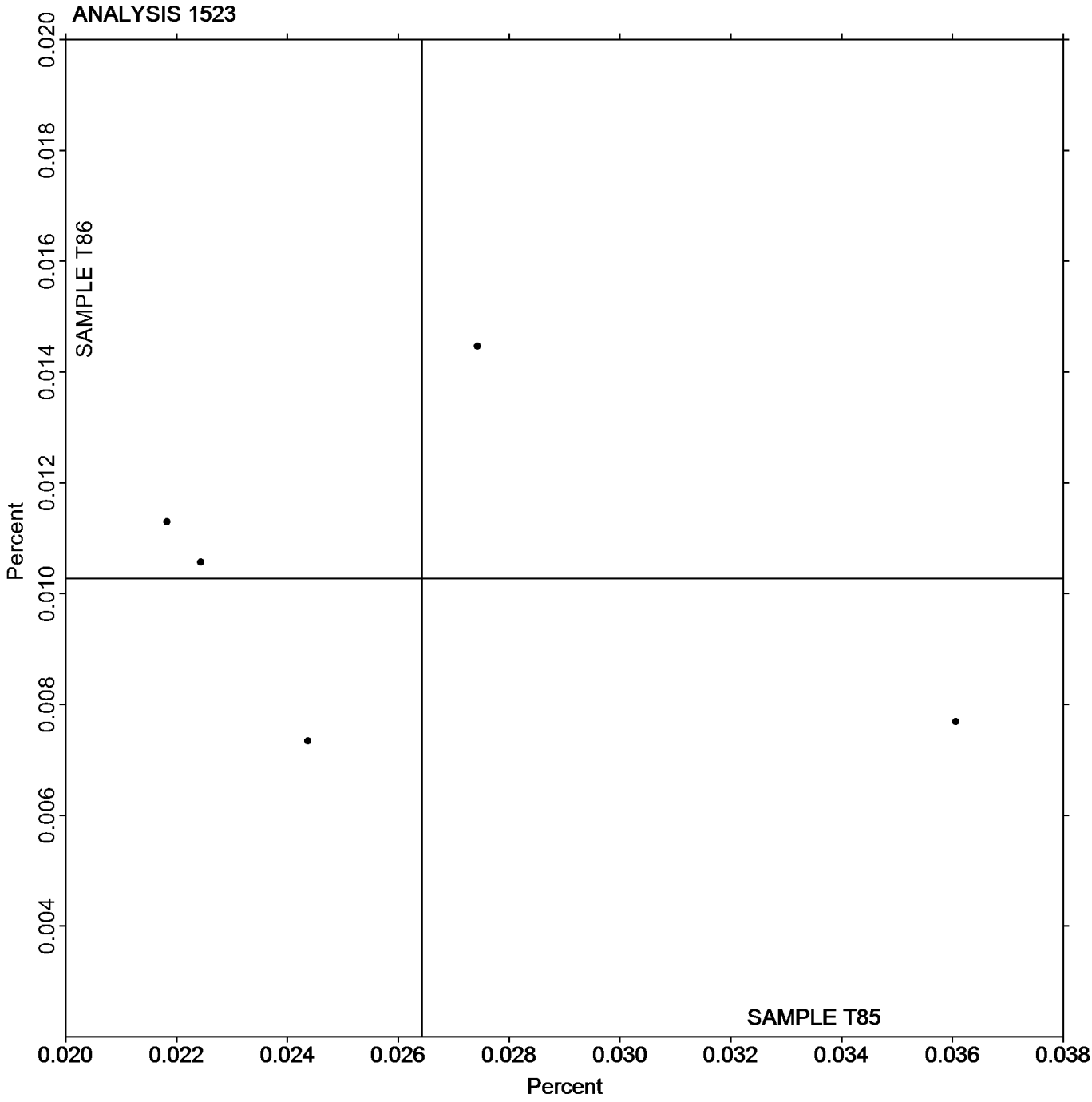
Statistics based on 5 of 5 reporting participants

Key to Method Codes Reported by Participants

CO	Combustion	IR	IR (Absorption / Detection)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

SAMPLE T85
0.0264 Percent

SAMPLE T86
0.0103 Percent



Analysis 1524

Titanium-based Alloy, ALUMINUM (Al)
ALUMINUM (Al)

WebCode	Data Flag	Sample T85 Lab Mean	Sample T85 Diff. from Grand Mean	Sample T85 CPV	Sample T86 Lab Mean	Sample T86 Diff. from Grand Mean	Sample T86 CPV	Method
9K33RW		6.512	0.123	0.46	6.119	0.053	0.20	IC
MMAGRH		5.923	-0.466	-1.76	5.623	-0.443	-1.69	IC
NW4EFF		6.433	0.044	0.17	6.190	0.124	0.47	OE
UGALR3		6.500	0.111	0.42	6.311	0.245	0.94	OE
YPTKHB		6.577	0.188	0.71	6.087	0.021	0.08	OE

Summary Statistics

	Sample T85		Sample T86	
Grand Means	6.389	Percent	6.066	Percent
Stnd Dev Btwn Labs	0.265	Percent	0.262	Percent

Samples T85, T86 : Ti 6-4 (Gr. 5), Ti 6-4 (Gr. 5)

Statistics based on 5 of 5 reporting participants

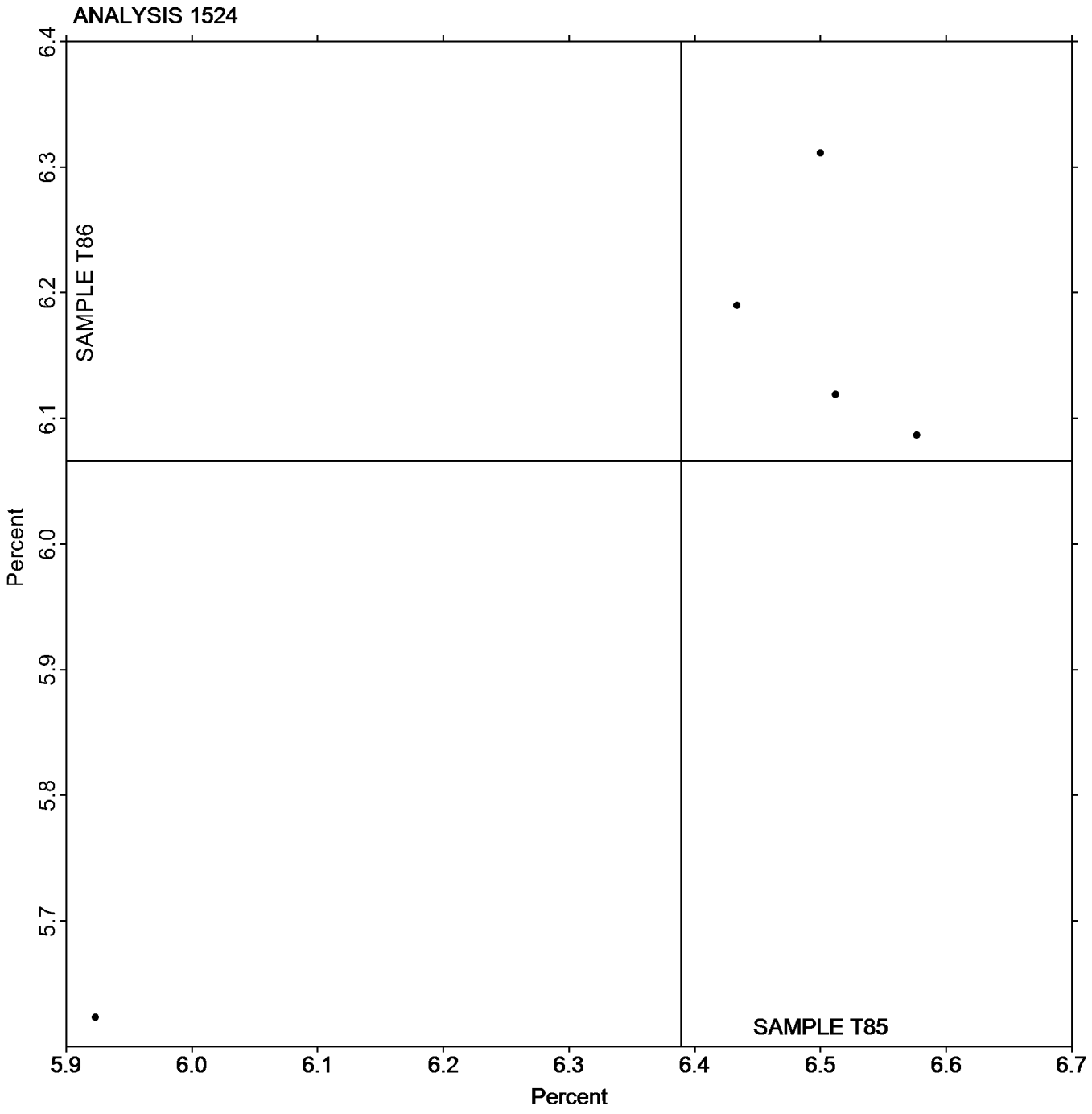
Key to Method Codes Reported by Participants

IC Spectrometry - Inductively Coupled Plasma (ICP)

OE Spectrometry - Optical Emission (OES)

SAMPLE T85
6.389 Percent

SAMPLE T86
6.066 Percent



Fasteners and Metals Interlaboratory Testing Program

Analysis 1525

Titanium-based Alloy, VANADIUM (V)
VANADIUM (V)

WebCode	Data Flag	Sample T85 Lab Mean	Sample T85 Diff. from Grand Mean	Sample T85 CPV	Sample T86 Lab Mean	Sample T86 Diff. from Grand Mean	Sample T86 CPV	Method
9K33RW		4.214	0.033	0.21	3.873	0.017	0.10	IC
MMAGRH		4.370	0.189	1.20	4.077	0.221	1.27	IC
NW4EFF		4.143	-0.037	-0.24	3.807	-0.049	-0.28	OE
UGALR3		3.940	-0.241	-1.53	3.600	-0.256	-1.47	OE
YPTKHB		4.235	0.055	0.35	3.922	0.066	0.38	XX

Summary Statistics

	Sample T85		Sample T86	
Grand Means	4.181	Percent	3.856	Percent
Stnd Dev Btwn Labs	0.158	Percent	0.174	Percent

Samples T85, T86 : Ti 6-4 (Gr. 5), Ti 6-4 (Gr. 5)

Statistics based on 5 of 5 reporting participants

Key to Method Codes Reported by Participants

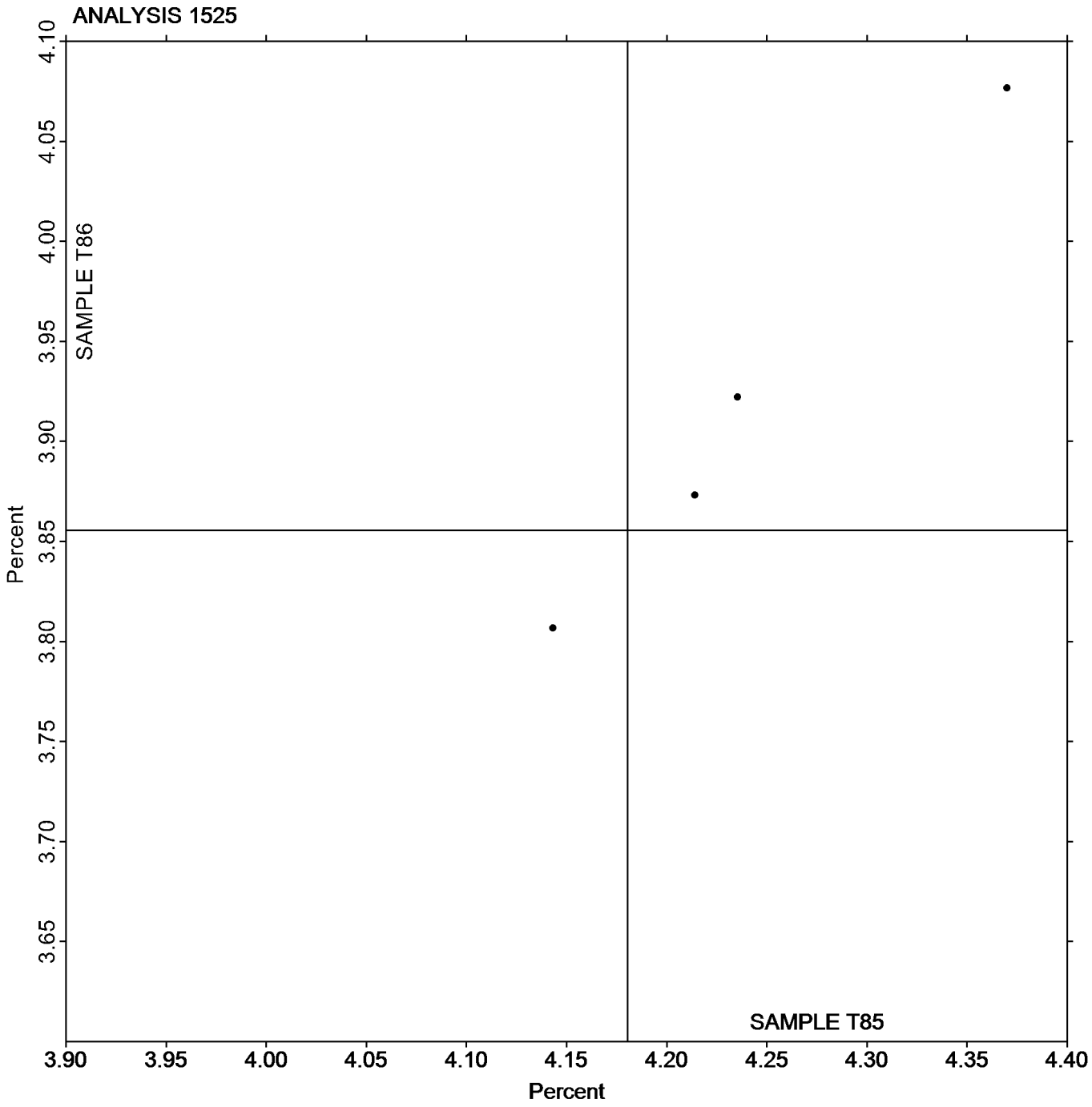
IC Spectrometry - Inductively Coupled Plasma (ICP)

OE Spectrometry - Optical Emission (OES)

XX Please Indicate Method Used for Current Element

SAMPLE T85
4.181 Percent

SAMPLE T86
3.856 Percent



		Sample T85			Sample T86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9K33RW		0.1967	0.0042	0.72	0.1358	-0.0004	-0.03	WD
MMAGRH		0.1853	-0.0071	-1.22	0.1170	-0.0192	-1.60	IC
NW4EFF		0.1977	0.0052	0.89	0.1443	0.0082	0.68	OE
UGALR3		0.1870	-0.0055	-0.94	0.1357	-0.0005	-0.04	OE
YPTKHB		0.1957	0.0032	0.55	0.1480	0.0118	0.99	OE

Summary Statistics

	Sample T85		Sample T86	
Grand Means	0.1925	Percent	0.1362	Percent
Stnd Dev Btwn Labs	0.0058	Percent	0.0120	Percent

Samples T85, T86 : Ti 6-4 (Gr. 5), Ti 6-4 (Gr. 5)

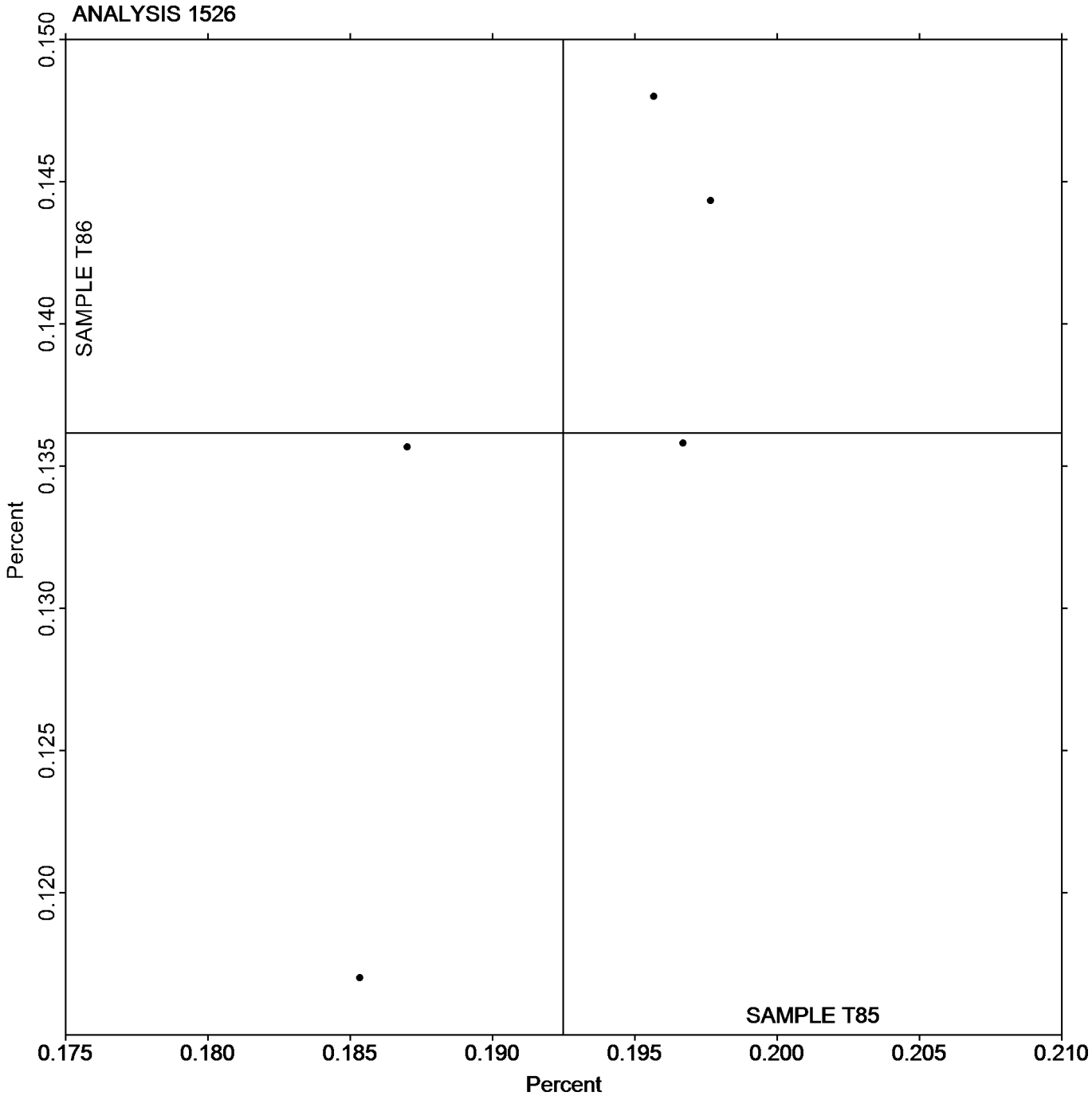
Statistics based on 5 of 5 reporting participants

Key to Method Codes Reported by Participants

IC Spectrometry - Inductively Coupled Plasma (ICP)
OE Spectrometry - Optical Emission (OES)
WD X-Ray Fluorescence - Wavelength Dispersive (WDX)

SAMPLE T85
0.1925 Percent

SAMPLE T86
0.1362 Percent



Analysis 1527

Titanium-based Alloy, CARBON (C)
CARBON (C)

WebCode	Data Flag	Sample T85 Lab Mean	Sample T85 Diff. from Grand Mean	Sample T85 CPV	Sample T86 Lab Mean	Sample T86 Diff. from Grand Mean	Sample T86 CPV	Method
NW4EFF		0.0425	0.0051	0.29	0.0121	-0.0047	-0.36	CO
UU4H2M		0.0113	-0.0261	-1.47	0.0363	0.0195	1.49	CO
WMGN7V		0.0455	0.0081	0.46	0.00885	-0.0080	-0.61	CO
YPTKHB		0.0503	0.0129	0.73	0.0101	-0.0068	-0.52	CI

Summary Statistics

	Sample T85		Sample T86	
Grand Means	0.0374	Percent	0.0168	Percent
Stnd Dev Btwn Labs	0.0177	Percent	0.0130	Percent

Samples T85, T86 : Ti 6-4 (Gr. 5), Ti 6-4 (Gr. 5)

Statistics based on 4 of 4 reporting participants

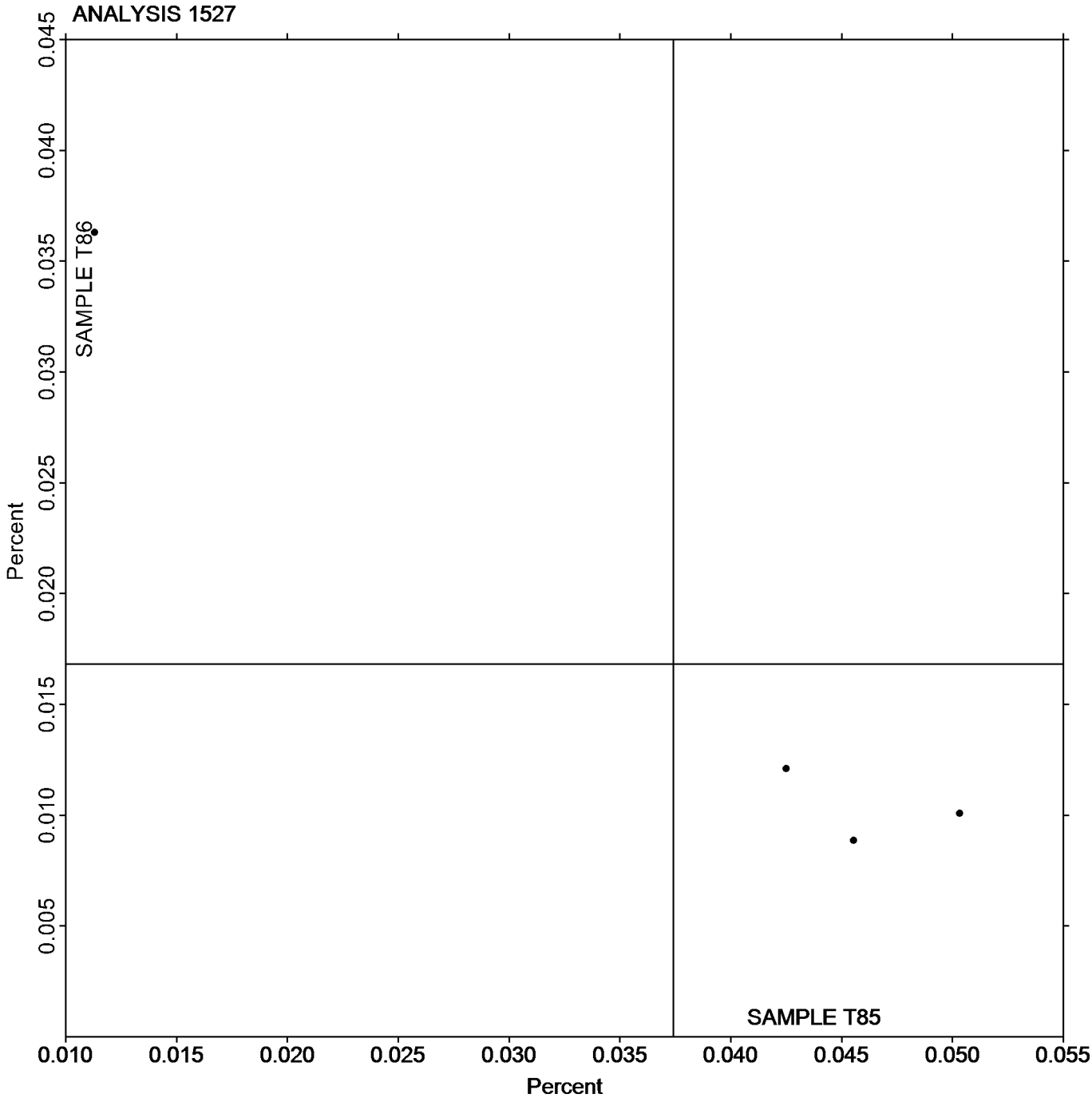
Key to Method Codes Reported by Participants

CI Combustion / IR

CO Combustion

SAMPLE T85
0.0374 Percent

SAMPLE T86
0.0168 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.4240	0.0048	0.44	0.4283	0.0077	0.82	XX
29TD7T		0.4243	0.0051	0.47	0.4197	-0.0010	-0.11	OE
2LZGD9		0.3930	-0.0263	-2.44	0.4050	-0.0156	-1.67	CO
2T9K2N		0.4187	-0.0006	-0.05	0.4223	0.0017	0.18	CI
38A46D		0.4133	-0.0059	-0.55	0.4033	-0.0173	-1.85	OE
38JRVX		0.4317	0.0124	1.16	0.4190	-0.0017	-0.18	OE
3BM2EL		0.4210	0.0018	0.16	0.4290	0.0083	0.89	IR
3CQCZH	*	0.4038	-0.0155	-1.44	0.4331	0.0124	1.32	CI
3VRY33		0.4337	0.0145	1.35	0.4265	0.0059	0.63	OE
4CC7D7		0.4360	0.0168	1.56	0.4303	0.0097	1.03	OE
4D3ECA		0.4393	0.0201	1.87	0.4430	0.0223	2.38	OE
4JDH93		0.4163	-0.0029	-0.27	0.4287	0.0080	0.85	OE
4L2RKP		0.4207	0.0014	0.13	0.4163	-0.0043	-0.46	OE
4LX9HU		0.4236	0.0044	0.41	0.4184	-0.0023	-0.25	OE
4XN736		0.4214	0.0021	0.20	0.4219	0.0012	0.13	OE
4YGXDQ		0.4182	-0.0010	-0.10	0.4287	0.0080	0.85	CI
68P6EC		0.4206	0.0013	0.12	0.4206	-0.0001	-0.01	CI
6A4DWC		0.4173	-0.0019	-0.18	0.4220	0.0013	0.14	CI
6G3X3E		0.4135	-0.0058	-0.54	0.4183	-0.0023	-0.25	CI
6GC7RZ		0.4257	0.0064	0.60	0.4107	-0.0100	-1.07	AE
6X7JE9		0.4340	0.0148	1.37	0.4240	0.0033	0.35	OE
7KHFNA		0.4200	0.0008	0.07	0.4200	-0.0007	-0.07	OE
7Z77D6		0.4135	-0.0057	-0.53	0.4241	0.0034	0.36	OE
8DAL38		0.4127	-0.0066	-0.61	0.4127	-0.0080	-0.86	CO
8DP437		0.4097	-0.0096	-0.89	0.4273	0.0067	0.71	OE
8PL3Z4		0.4067	-0.0126	-1.17	0.4100	-0.0107	-1.14	OE
8QBM8V		0.4243	0.0051	0.47	0.4237	0.0030	0.32	CI
8QDCHK		0.4203	0.0010	0.10	0.4211	0.0005	0.05	OE
92J9GA		0.4231	0.0039	0.36	0.4251	0.0044	0.47	OE
9368K7		0.4170	-0.0022	-0.21	0.4147	-0.0060	-0.64	OE
96AQFT		0.4188	-0.0005	-0.04	0.4215	0.0008	0.09	OE
9KRL34		0.4170	-0.0022	-0.21	0.4150	-0.0057	-0.61	OE
9LVQAR		0.4294	0.0102	0.94	0.4292	0.0086	0.91	GD
9N2C3Y		0.4040	-0.0152	-1.42	0.4157	-0.0050	-0.54	OE
9T8Y8V		0.4085	-0.0108	-1.00	0.4218	0.0011	0.12	OE
AFUJCA	*	0.4513	0.0321	2.98	0.4377	0.0170	1.81	OE
AJCGBX		0.4132	-0.0060	-0.56	0.4175	-0.0032	-0.34	CI
ANPEK7		0.4087	-0.0106	-0.98	0.4073	-0.0133	-1.42	OE
B7JGQ9		0.4270	0.0078	0.72	0.4280	0.0073	0.78	CO
BF6LMM		0.4070	-0.0122	-1.14	0.4260	0.0053	0.57	GD
BJV76J		0.4038	-0.0155	-1.44	0.4179	-0.0028	-0.30	CO
BPYJV9		0.4197	0.0004	0.04	0.4183	-0.0023	-0.25	XX
C3BMBB		0.4120	-0.0072	-0.67	0.4190	-0.0017	-0.18	OE
C3VHJ4		0.4163	-0.0029	-0.27	0.4147	-0.0060	-0.64	OE
C7YZB7	*	0.4520	0.0328	3.05	0.4423	0.0217	2.31	XX
C92AR2	X	0.3850	-0.0342	-3.18	0.3857	-0.0350	-3.74	XX
CGFRUA		0.4238	0.0046	0.43	0.4257	0.0051	0.54	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
CNG223		0.4163	-0.0029	-0.27	0.4237	0.0030	0.32	OE
DNCYXF		0.4270	0.0078	0.72	0.4223	0.0017	0.18	AE
DRLK4Y		0.3953	-0.0239	-2.22	0.3980	-0.0227	-2.42	CO
DTBWJ7		0.4157	-0.0036	-0.33	0.4253	0.0047	0.50	CI
DTLBHU		0.4391	0.0198	1.84	0.4351	0.0145	1.54	CI
E7RNQ8		0.4433	0.0241	2.24	0.4300	0.0093	0.99	OE
EFDRHE		0.3996	-0.0196	-1.82	0.4057	-0.0150	-1.60	CI
EHGQRL		0.4200	0.0008	0.07	0.4033	-0.0173	-1.85	OE
EHK3JN		0.4177	-0.0016	-0.15	0.4180	-0.0027	-0.29	OE
EQBTX4	X	0.3700	-0.0492	-4.58	0.3533	-0.0673	-7.19	AE
EVB7R9		0.4063	-0.0129	-1.20	0.4093	-0.0113	-1.21	XX
EXPUYY		0.4113	-0.0079	-0.73	0.3980	-0.0227	-2.42	XX
F7HQFN		0.4225	0.0033	0.31	0.4282	0.0075	0.80	OE
F8Y87U		0.4181	-0.0012	-0.11	0.4199	-0.0008	-0.08	OE
FJP23V		0.4130	-0.0062	-0.58	0.4227	0.0020	0.21	CO
FK2Z9Q		0.4133	-0.0059	-0.55	0.4186	-0.0021	-0.23	OE
FWW6KX		0.4193	0.0001	0.01	0.4183	-0.0023	-0.25	CO
GB9KTF		0.4288	0.0096	0.89	0.4330	0.0124	1.32	CI
GX94F7		0.4167	-0.0025	-0.24	0.4203	-0.0003	-0.04	OE
HAVWZY		0.4323	0.0130	1.21	0.4301	0.0094	1.01	OE
HEMZVX		0.4230	0.0038	0.35	0.4170	-0.0037	-0.39	GD
HJ7U9C		0.4124	-0.0068	-0.63	0.4210	0.0004	0.04	CI
HPEYXV		0.4163	-0.0029	-0.27	0.4287	0.0080	0.85	CI
HZXD2X	X	0.3873	-0.0319	-2.97	0.4173	-0.0033	-0.36	CO
J42BFP		0.4270	0.0078	0.72	0.4263	0.0057	0.60	OE
JVAZ49		0.4157	-0.0036	-0.33	0.4150	-0.0057	-0.61	OE
KVUVLN		0.4000	-0.0192	-1.79	0.4000	-0.0207	-2.21	GD
KYNUUR		0.4088	-0.0104	-0.97	0.4095	-0.0111	-1.19	OE
L4DWXP		0.4264	0.0071	0.66	0.4246	0.0039	0.41	OE
LCM4WE		0.4226	0.0034	0.31	0.4282	0.0076	0.81	OE
LH9VQ8	X	0.4427	0.0234	2.18	0.4587	0.0380	4.05	OE
LHKZXX		0.4360	0.0168	1.56	0.4360	0.0153	1.63	OE
LPRGUQ		0.4197	0.0004	0.04	0.4157	-0.0050	-0.54	OE
LWGTEM		0.4261	0.0069	0.64	0.4314	0.0107	1.15	XX
MF8EGP		0.4266	0.0074	0.68	0.4416	0.0209	2.23	CI
MMAGRH		0.4117	-0.0076	-0.70	0.4233	0.0027	0.28	CO
MMBWX9	X	0.4690	0.0498	4.63	0.4600	0.0393	4.20	OE
MMVDDB		0.4183	-0.0009	-0.08	0.4180	-0.0027	-0.29	OE
MTRTKP		0.3927	-0.0266	-2.47	0.4143	-0.0063	-0.68	CO
MZVQEM		0.4250	0.0058	0.54	0.4220	0.0013	0.14	CI
N4LPMP		0.4292	0.0099	0.92	0.4235	0.0028	0.30	OE
N6WKDM	X	0.3797	-0.0396	-3.68	0.4033	-0.0173	-1.85	XX
N98TBT		0.4307	0.0114	1.06	0.4200	-0.0007	-0.07	OE
NNEKLR		0.4213	0.0021	0.20	0.4367	0.0160	1.71	XX
NV63QA		0.4227	0.0034	0.32	0.4233	0.0027	0.28	OE
NW4EFF		0.4357	0.0164	1.53	0.4313	0.0107	1.14	OE
NWFF44		0.4246	0.0054	0.50	0.4193	-0.0014	-0.15	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
PLLWUN		0.4197	0.0005	0.04	0.4382	0.0175	1.87	OE
PP49KD		0.4293	0.0101	0.94	0.4287	0.0080	0.85	OE
Q3Z74H		0.4330	0.0138	1.28	0.4368	0.0161	1.72	OE
QAQ6NA		0.4300	0.0108	1.00	0.4300	0.0093	0.99	OE
QHHJCN		0.4220	0.0028	0.26	0.4263	0.0057	0.60	CI
QPGBGC		0.4283	0.0091	0.85	0.4250	0.0043	0.46	OE
R4UYA7		0.4253	0.0061	0.57	0.4143	-0.0063	-0.68	OE
RK4K9N	X	0.5750	0.1558	14.48	0.5630	0.1423	15.19	GD
RL4KCU		0.3963	-0.0229	-2.13	0.4120	-0.0087	-0.93	OE
RTE6XD		0.4000	-0.0192	-1.79	0.4047	-0.0160	-1.71	OE
RWAFT8	X	0.3940	-0.0252	-2.35	0.3897	-0.0310	-3.31	OE
T77H2L		0.4227	0.0034	0.32	0.4207	0.0000	0.00	OE
T8GVTH		0.4193	0.0001	0.01	0.4260	0.0053	0.56	CI
TBAXJB		0.4117	-0.0076	-0.70	0.4083	-0.0123	-1.32	OE
TBJKGB		0.4130	-0.0062	-0.58	0.4230	0.0023	0.25	OE
TUTQKL		0.4177	-0.0016	-0.15	0.4190	-0.0017	-0.18	CO
U24C8V		0.4090	-0.0102	-0.95	0.3990	-0.0217	-2.31	XX
U8T34Q		0.4183	-0.0009	-0.08	0.4203	-0.0003	-0.04	CI
UAXGZW	*	0.4268	0.0076	0.70	0.4464	0.0257	2.74	OE
UBMQWQ		0.4207	0.0014	0.13	0.4214	0.0007	0.08	OE
UGALR3		0.3997	-0.0196	-1.82	0.3950	-0.0257	-2.74	OE
UL9WYN		0.4256	0.0064	0.59	0.4274	0.0068	0.72	OE
UTMZCG		0.4120	-0.0072	-0.67	0.4217	0.0010	0.11	CI
UU76KL		0.4267	0.0074	0.69	0.4223	0.0017	0.18	OE
UVT9XU		0.4073	-0.0119	-1.11	0.4180	-0.0027	-0.29	CI
VVCK47		0.4177	-0.0016	-0.15	0.4167	-0.0040	-0.43	OE
W4WWAY		0.4197	0.0004	0.04	0.4120	-0.0087	-0.93	OE
WBFPG9		0.4223	0.0031	0.29	0.4180	-0.0027	-0.29	CI
WBVPWR		0.4163	-0.0029	-0.27	0.4227	0.0020	0.21	CI
WC9EY6		0.4106	-0.0087	-0.80	0.4118	-0.0089	-0.95	OE
WJ79W3		0.4138	-0.0054	-0.51	0.4160	-0.0047	-0.50	IC
WU7DU6		0.4033	-0.0159	-1.48	0.4100	-0.0107	-1.14	OE
WUQD99		0.4192	0.0000	0.00	0.4170	-0.0036	-0.39	OE
WVL2MX		0.4290	0.0098	0.91	0.4287	0.0080	0.85	CI
X33VED		0.4073	-0.0119	-1.11	0.4150	-0.0057	-0.61	OE
XHJ87R		0.4163	-0.0029	-0.27	0.4260	0.0053	0.57	OE
XXLNHD		0.4246	0.0054	0.50	0.4212	0.0005	0.05	CI
YDJY24		0.4161	-0.0031	-0.29	0.4184	-0.0023	-0.24	AE
YK6BAJ		0.4400	0.0208	1.93	0.4310	0.0103	1.10	OE
YPTKHB		0.4173	-0.0019	-0.18	0.4217	0.0010	0.11	CI
YU3BH6		0.4236	0.0044	0.41	0.4242	0.0035	0.38	OE
Z4DTZE		0.4047	-0.0146	-1.35	0.3960	-0.0247	-2.63	OE
ZB8DWA		0.4099	-0.0093	-0.87	0.4129	-0.0078	-0.83	OE
ZLV7LD		0.4289	0.0097	0.90	0.4239	0.0032	0.34	OE
ZNUQ3H		0.4316	0.0124	1.15	0.4295	0.0088	0.94	OE
ZVRGAL		0.4063	-0.0129	-1.20	0.4187	-0.0020	-0.21	XX

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.4192	Percent	0.4207	Percent
Stnd Dev Btwn Labs	0.0108	Percent	0.0094	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 130 of 140 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	CI	Combustion / IR
CO	Combustion	GD	Spectrometry - Glow Discharge (GDS)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	IR	IR (Absorption / Detection)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1600

C92AR2 (X) - Data for both samples are low. Possible Systematic Error.

EQBTX4 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample L85.

HZXD2X (X) - Data for sample L85 are low.

LH9VQ8 (X) - Data for sample L86 are high.

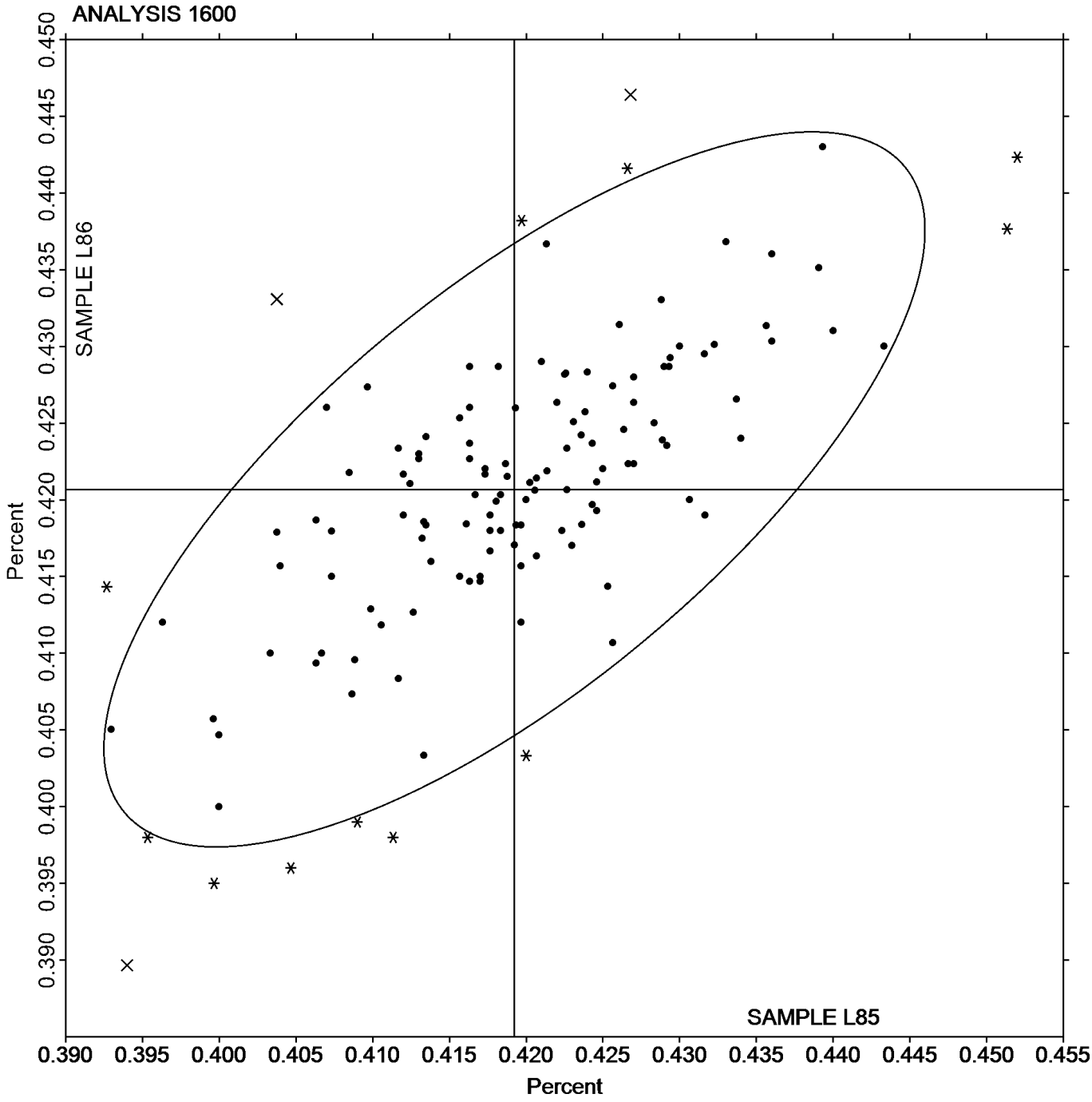
MMBWX9 (X) - Data for both samples are high. Possible Systematic Error.

N6WKDM (X) - Data for sample L85 are low.

RK4K9N (X) - Data for both samples are high. Possible Systematic Error.

RWAFT8 (X) - Data for sample L86 are low.

SAMPLE L85	SAMPLE L86
0.4192 Percent	0.4207 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.9423	0.0097	0.79	0.9427	0.0140	1.15	XX
29TD7T		0.9290	-0.0036	-0.29	0.9250	-0.0037	-0.30	OE
2LZGD9		0.9427	0.0101	0.82	0.9400	0.0113	0.93	XR
2T9K2N		0.9207	-0.0119	-0.97	0.9240	-0.0047	-0.38	OE
38A46D		0.9067	-0.0259	-2.10	0.9000	-0.0287	-2.35	OE
38JRVX		0.9170	-0.0156	-1.26	0.9040	-0.0247	-2.02	OE
3BM2EL		0.9387	0.0061	0.49	0.9380	0.0093	0.77	OE
3CQCZH		0.9250	-0.0076	-0.62	0.9258	-0.0029	-0.24	IC
3VRY33		0.9495	0.0169	1.37	0.9428	0.0141	1.16	OE
4CC7D7		0.9430	0.0104	0.84	0.9363	0.0077	0.63	OE
4D3ECA	*	0.9480	0.0154	1.25	0.9130	-0.0157	-1.28	OE
4JDH93		0.9437	0.0111	0.90	0.9507	0.0220	1.80	OE
4L2RKP		0.9487	0.0161	1.30	0.9447	0.0160	1.31	OE
4LX9HU		0.9230	-0.0096	-0.78	0.9211	-0.0076	-0.62	OE
4XN736		0.9344	0.0018	0.14	0.9288	0.0001	0.01	OE
4YGXDQ		0.9285	-0.0041	-0.33	0.9259	-0.0028	-0.23	IC
68P6EC		0.9379	0.0053	0.43	0.9322	0.0036	0.29	OE
6A4DWC		0.9467	0.0141	1.14	0.9303	0.0017	0.14	IC
6G3X3E		0.9312	-0.0014	-0.12	0.9323	0.0036	0.29	OE
6GC7RZ		0.9387	0.0061	0.49	0.9297	0.0010	0.08	AE
6X7JE9		0.9240	-0.0086	-0.70	0.9150	-0.0137	-1.12	OE
7KHFNA		0.9333	0.0007	0.06	0.9367	0.0080	0.66	OE
7Z77D6		0.9310	-0.0016	-0.13	0.9295	0.0008	0.07	OE
8DAL38		0.9347	0.0021	0.17	0.9233	-0.0053	-0.44	GD
8DP437		0.9253	-0.0073	-0.59	0.9190	-0.0097	-0.79	IC
8PL3Z4	*	0.9033	-0.0293	-2.37	0.9167	-0.0120	-0.98	OE
8QBM8V		0.9380	0.0054	0.44	0.9303	0.0017	0.14	IC
8QDCHK		0.9414	0.0088	0.71	0.9339	0.0052	0.43	OE
92J9GA		0.9264	-0.0062	-0.50	0.9294	0.0007	0.06	OE
9368K7		0.9107	-0.0219	-1.78	0.9053	-0.0233	-1.91	OE
96AQFT		0.9302	-0.0024	-0.20	0.9259	-0.0028	-0.23	OE
9KRL34		0.9203	-0.0123	-0.99	0.9210	-0.0077	-0.63	OE
9LVQAR		0.9368	0.0042	0.34	0.9451	0.0164	1.34	DR
9N2C3Y		0.9313	-0.0013	-0.10	0.9273	-0.0013	-0.11	OE
9T8Y8V		0.9420	0.0094	0.76	0.9373	0.0086	0.70	OE
AFUJCA		0.9410	0.0084	0.68	0.9233	-0.0053	-0.44	OE
AJCGBX		0.9170	-0.0156	-1.26	0.9130	-0.0157	-1.28	IC
ANPEK7		0.9237	-0.0089	-0.72	0.9243	-0.0043	-0.36	OE
B7JGQ9		0.9360	0.0034	0.28	0.9340	0.0053	0.44	OE
BF6LMM	X	0.9640	0.0314	2.54	0.9800	0.0513	4.21	GD
BJV76J		0.9267	-0.0059	-0.48	0.9303	0.0017	0.14	DR
BPYJV9		0.9503	0.0177	1.44	0.9397	0.0110	0.90	XX
C3BMBB		0.9060	-0.0266	-2.15	0.9080	-0.0207	-1.69	OE
C3VHJ4		0.9200	-0.0126	-1.02	0.9067	-0.0220	-1.80	OE
C7YZB7		0.9617	0.0291	2.36	0.9600	0.0313	2.57	XX
C92AR2		0.9387	0.0061	0.49	0.9347	0.0060	0.49	XX
C9VX7Q	*	0.9337	0.0011	0.09	0.9443	0.0157	1.28	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
CGFRUA		0.9290	-0.0036	-0.29	0.9271	-0.0015	-0.13	OE
CNG223		0.9397	0.0071	0.57	0.9440	0.0153	1.26	OE
DNCYXF	X	0.8823	-0.0503	-4.07	0.8757	-0.0530	-4.35	AE
DTBWJ7		0.9345	0.0019	0.15	0.9303	0.0016	0.13	OE
E7RNQ8		0.9467	0.0141	1.14	0.9367	0.0080	0.66	OE
EFDRHE		0.9253	-0.0073	-0.59	0.9247	-0.0040	-0.33	OE
EHGQRL		0.9433	0.0107	0.87	0.9267	-0.0020	-0.16	OE
EHK3JN		0.9217	-0.0109	-0.89	0.9120	-0.0167	-1.37	OE
EQBTX4	X	0.9767	0.0441	3.57	0.9700	0.0413	3.39	AE
EQVP6X	M	No Data Reported			0.9367	0.0081	0.66	IC
EVB7R9		0.9293	-0.0033	-0.26	0.9273	-0.0013	-0.11	XX
EXPUYY		0.9400	0.0074	0.60	0.9300	0.0013	0.11	XX
F7HQFN		0.9186	-0.0140	-1.13	0.9045	-0.0241	-1.98	OE
F8Y87U		0.9221	-0.0105	-0.85	0.9328	0.0041	0.34	OE
FJP23V		0.9300	-0.0026	-0.21	0.9200	-0.0087	-0.71	OE
FK2Z9Q		0.9304	-0.0022	-0.18	0.9280	-0.0006	-0.05	OE
FWW6KX		0.9343	0.0017	0.14	0.9293	0.0007	0.05	OE
GB9KTF		0.9445	0.0119	0.96	0.9433	0.0147	1.20	OE
GX94F7		0.9331	0.0005	0.04	0.9312	0.0025	0.21	OE
H8ETP2		0.9613	0.0287	2.33	0.9547	0.0260	2.13	GD
HAVWZY		0.9452	0.0126	1.02	0.9406	0.0119	0.98	OE
HEMZVX	*	0.9650	0.0324	2.63	0.9640	0.0353	2.90	GD
HJ7U9C		0.9346	0.0020	0.16	0.9370	0.0084	0.69	IC
HPEYXV		0.9483	0.0157	1.28	0.9490	0.0203	1.67	IC
HZXD2X		0.9147	-0.0179	-1.45	0.9203	-0.0083	-0.68	IC
J42BFP		0.9367	0.0041	0.33	0.9330	0.0043	0.36	OE
JVAZ49		0.9530	0.0204	1.65	0.9413	0.0127	1.04	OE
KVUVLN		0.9300	-0.0026	-0.21	0.9267	-0.0020	-0.16	GD
KYNUUR		0.9348	0.0022	0.18	0.9303	0.0016	0.13	OE
L4DWXP		0.9261	-0.0065	-0.53	0.9234	-0.0052	-0.43	OE
LCM4WE		0.9233	-0.0093	-0.75	0.9173	-0.0113	-0.93	OE
LH9VQ8	*	0.8966	-0.0360	-2.91	0.9022	-0.0265	-2.17	OE
LHKZXX		0.9320	-0.0006	-0.05	0.9263	-0.0023	-0.19	OE
LPRGUQ		0.9260	-0.0066	-0.53	0.9200	-0.0087	-0.71	OE
LWGTEM		0.9186	-0.0140	-1.13	0.9177	-0.0110	-0.90	XX
MF8EGP		0.9205	-0.0121	-0.98	0.9265	-0.0021	-0.18	IC
MMAGRH		0.9167	-0.0159	-1.29	0.9177	-0.0110	-0.90	IC
MMBWX9		0.9490	0.0164	1.33	0.9357	0.0070	0.57	OE
MMVDDB		0.9307	-0.0019	-0.16	0.9273	-0.0013	-0.11	OE
MTRTKP		0.9367	0.0041	0.33	0.9310	0.0023	0.19	OE
MZVQEM		0.9263	-0.0063	-0.51	0.9267	-0.0020	-0.16	OE
N4LPMP		0.9425	0.0099	0.80	0.9304	0.0018	0.15	OE
N6WKDM		0.9363	0.0037	0.30	0.9440	0.0153	1.26	XX
N98TBT		0.9400	0.0074	0.60	0.9400	0.0113	0.93	OE
NNEKLR		0.9560	0.0234	1.90	0.9507	0.0220	1.80	XX
NV63QA		0.9130	-0.0196	-1.59	0.9087	-0.0200	-1.64	OE
NW4EFF		0.9353	0.0027	0.22	0.9207	-0.0080	-0.66	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
NWFF44		0.9327	0.0001	0.01	0.9215	-0.0072	-0.59	OE
PLLWUN	X	0.8819	-0.0507	-4.11	0.8924	-0.0363	-2.97	OE
PP49KD		0.9200	-0.0126	-1.02	0.9103	-0.0183	-1.50	OE
Q3Z74H		0.9184	-0.0142	-1.15	0.9194	-0.0093	-0.76	OE
QAQ6NA		0.9600	0.0274	2.22	0.9500	0.0213	1.75	OE
QHHJCN		0.9270	-0.0056	-0.45	0.9230	-0.0057	-0.46	OE
QPGBGC		0.9383	0.0057	0.47	0.9313	0.0027	0.22	OE
R4UYA7		0.9460	0.0134	1.09	0.9323	0.0037	0.30	OE
RK4K9N		0.9300	-0.0026	-0.21	0.9240	-0.0047	-0.38	GD
RL4KCU		0.9127	-0.0199	-1.61	0.9233	-0.0053	-0.44	OE
RTE6XD		0.9253	-0.0073	-0.59	0.9250	-0.0037	-0.30	OE
RWAFT8		0.9110	-0.0216	-1.75	0.9137	-0.0150	-1.23	OE
T77H2L		0.9297	-0.0029	-0.24	0.9303	0.0017	0.14	OE
T8GVTH	*	0.9490	0.0164	1.33	0.9197	-0.0090	-0.74	OE
TBAXJB		0.9327	0.0001	0.01	0.9280	-0.0007	-0.05	OE
TBJKGB		0.9350	0.0024	0.19	0.9340	0.0053	0.44	OE
TUTQKL		0.9357	0.0031	0.25	0.9293	0.0007	0.05	OE
U24C8V	X	0.8290	-0.1036	-8.39	0.8147	-0.1140	-9.35	XX
U8T34Q		0.9270	-0.0056	-0.45	0.9223	-0.0063	-0.52	IC
UAXGZW		0.9380	0.0054	0.44	0.9510	0.0223	1.83	OE
UBMQWQ		0.9249	-0.0077	-0.63	0.9213	-0.0074	-0.61	OE
UGALR3	X	0.8450	-0.0876	-7.10	0.8403	-0.0883	-7.24	OE
UL9WYN		0.9351	0.0025	0.20	0.9258	-0.0029	-0.24	OE
UTMZCG		0.9326	0.0000	0.00	0.9293	0.0007	0.05	IC
UU76KL		0.9353	0.0027	0.22	0.9287	0.0000	0.00	OE
UVT9XU		0.9307	-0.0019	-0.15	0.9258	-0.0028	-0.23	IC
VEG8FX		0.9392	0.0066	0.53	0.9262	-0.0024	-0.20	OE
VVCK47		0.9300	-0.0026	-0.21	0.9236	-0.0051	-0.42	OE
W4WWAY		0.9033	-0.0293	-2.37	0.8950	-0.0337	-2.76	OE
WBFPG9		0.9440	0.0114	0.92	0.9373	0.0087	0.71	IC
WBVPWR		0.9370	0.0044	0.36	0.9437	0.0150	1.23	IC
WC9EY6		0.9416	0.0090	0.73	0.9370	0.0083	0.68	OE
WJ79W3		0.9114	-0.0212	-1.71	0.9054	-0.0233	-1.91	OE
WU7DU6		0.9300	-0.0026	-0.21	0.9267	-0.0020	-0.16	OE
WUQD99		0.9330	0.0004	0.04	0.9250	-0.0037	-0.30	OE
WVL2MX		0.9307	-0.0019	-0.16	0.9250	-0.0037	-0.30	IC
X33VED		0.9207	-0.0119	-0.97	0.9207	-0.0080	-0.66	OE
XHJ87R	*	0.9297	-0.0029	-0.24	0.9540	0.0253	2.08	OE
XXLNHD		0.9269	-0.0057	-0.46	0.9233	-0.0053	-0.44	IC
YDJY24		0.9187	-0.0139	-1.12	0.9234	-0.0052	-0.43	AE
YK6BAJ		0.9400	0.0074	0.60	0.9320	0.0033	0.27	OE
YPTKHB		0.9223	-0.0103	-0.83	0.9187	-0.0100	-0.82	IC
YU3BH6		0.9377	0.0051	0.42	0.9315	0.0028	0.23	OE
Z4DTZE		0.9467	0.0141	1.14	0.9387	0.0100	0.82	OE
ZB8DWA		0.9219	-0.0107	-0.86	0.9096	-0.0191	-1.57	OE
ZLV7LD		0.9463	0.0137	1.11	0.9370	0.0083	0.68	OE
ZNUQ3H		0.9548	0.0222	1.80	0.9408	0.0122	1.00	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
ZVRGAL		0.9563	0.0237	1.92	0.9527	0.0240	1.97	XX

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.9326	Percent	0.9287	Percent
Stnd Dev Btwn Labs	0.0123	Percent	0.0122	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 131 of 142 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	DR	Spectrometry - Direct Reading OE (DROES)
GD	Spectrometry - Glow Discharge (GDS)	IC	Spectrometry - Inductively Coupled Plasma (ICP)
OE	Spectrometry - Optical Emission (OES)	XR	X-Ray Fluorescence - ED or WD not specified
XX	Please Indicate Method Used for Current Element		

Comments on Assigned Data Flags for Test #1601

BF6LMM (X) - Data for sample L86 are high.

DNCYXF (X) - Data for both samples are low. Possible Systematic Error.

EQBTX4 (X) - Data for both samples are high. Possible Systematic Error.

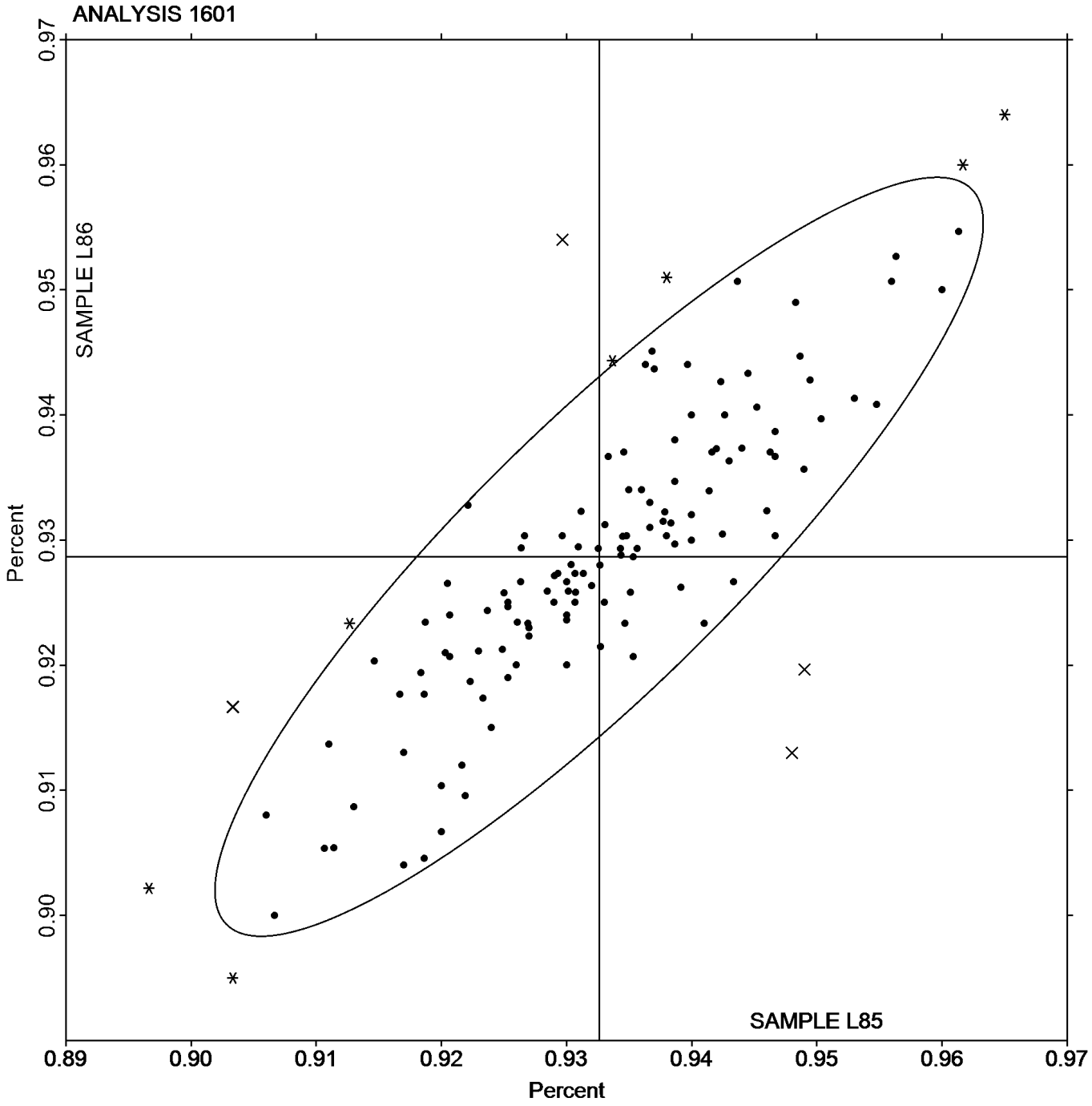
EQVP6X (M) - Participant did not submit data for sample L85.

PLLWUN (X) - Data for both samples are low. Possible Systematic Error.

U24C8V (X) - Data for both samples are low. Possible Systematic Error.

UGALR3 (X) - Data for both samples are low. Possible Systematic Error.

SAMPLE L85	SAMPLE L86
0.9326 Percent	0.9287 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.0117	0.0007	0.64	0.0157	0.0000	0.04	XX
29TD7T		0.0110	0.0000	0.00	0.0143	-0.0013	-1.10	OE
2LZGD9		0.0137	0.0027	2.58	0.0170	0.0014	1.18	XR
2T9K2N		0.0109	-0.0001	-0.10	0.0156	0.0000	0.01	OE
38A46D		0.0128	0.0018	1.74	0.0180	0.0024	2.04	OE
38JRVX		0.00900	-0.0020	-1.94	0.0130	-0.0026	-2.25	OE
3BM2EL		0.0125	0.0015	1.45	0.0152	-0.0004	-0.33	OE
3CQCZH		0.0108	-0.0002	-0.20	0.0158	0.0002	0.15	IC
3VRY33		0.0114	0.0004	0.40	0.0147	-0.0009	-0.75	OE
4CC7D7		0.0108	-0.0002	-0.16	0.0150	-0.0006	-0.53	OE
4D3ECA	X	0.0170	0.0060	5.85	0.0213	0.0057	4.90	OE
4JDH93	X	0.0145	0.0035	3.42	0.0185	0.0029	2.47	OE
4L2RKP		0.0103	-0.0007	-0.65	0.0150	-0.0006	-0.53	OE
4LX9HU		0.0113	0.0003	0.26	0.0160	0.0003	0.30	OE
4XN736		0.0110	0.0000	-0.03	0.0146	-0.0010	-0.85	OE
4YGXDQ		0.0107	-0.0003	-0.29	0.0159	0.0003	0.24	IC
68P6EC		0.0111	0.0001	0.10	0.0154	-0.0003	-0.22	XX
6A4DWC		0.00970	-0.0013	-1.26	0.0139	-0.0018	-1.50	IC
6G3X3E		0.0118	0.0008	0.81	0.0173	0.0017	1.44	OE
6GC7RZ		0.0125	0.0015	1.45	0.0155	-0.0001	-0.07	AE
6X7JE9		0.0116	0.0006	0.58	0.0163	0.0007	0.58	OE
7KHFNA		0.0120	0.0010	0.97	0.0160	0.0004	0.33	OE
7Z77D6		0.00973	-0.0013	-1.23	0.0147	-0.0009	-0.76	OE
8DAL38		0.0117	0.0007	0.64	0.0160	0.0004	0.33	GD
8DP437		0.0106	-0.0004	-0.42	0.0162	0.0006	0.53	IC
8PL3Z4		0.0108	-0.0002	-0.20	0.0154	-0.0002	-0.16	OE
8QBM8V		0.0110	0.0000	0.00	0.0157	0.0000	0.04	IC
8QDCHK		0.0123	0.0013	1.29	0.0167	0.0011	0.96	OE
92J9GA		0.0126	0.0016	1.55	0.0163	0.0007	0.61	OE
9368K7		0.0111	0.0001	0.06	0.0158	0.0002	0.18	OE
96AQFT		0.0111	0.0001	0.07	0.0157	0.0000	0.04	OE
9KRL34		0.0110	0.0000	0.00	0.0150	-0.0006	-0.53	OE
9LVQAR		0.00908	-0.0019	-1.87	0.0144	-0.0012	-1.06	GD
9N2C3Y		0.0113	0.0003	0.32	0.0157	0.0000	0.04	OE
9T8Y8V		0.0112	0.0002	0.16	0.0159	0.0002	0.21	OE
AFUJCA		0.0117	0.0007	0.71	0.0153	-0.0003	-0.27	OE
AJCGBX		0.00987	-0.0011	-1.10	0.0147	-0.0009	-0.79	IC
ANPEK7		0.0101	-0.0009	-0.84	0.0154	-0.0002	-0.19	OE
B7JGQ9		0.0111	0.0001	0.10	0.0162	0.0006	0.50	OE
BF6LMM	X	0.0110	0.0000	0.00	0.0120	-0.0036	-3.11	GD
BJV76J		0.0110	0.0000	0.00	0.0150	-0.0006	-0.53	DR
BPYJV9		0.0109	-0.0001	-0.13	0.0158	0.0002	0.15	XX
C3BMBB		0.00900	-0.0020	-1.94	0.0140	-0.0016	-1.39	OE
C3VHJ4		0.0120	0.0010	0.97	0.0157	0.0000	0.04	OE
C7YZB7		0.0120	0.0010	0.97	0.0177	0.0020	1.76	XX
C92AR2		0.0103	-0.0007	-0.65	0.0153	-0.0003	-0.25	XX
C9VX7Q		0.0128	0.0018	1.74	0.0164	0.0008	0.70	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
CGFRUA		0.0110	0.0000	-0.03	0.0160	0.0004	0.35	OE
CNG223		0.0101	-0.0009	-0.87	0.0146	-0.0011	-0.90	OE
DNCYXF	X	0.0116	0.0006	0.55	0.0123	-0.0033	-2.82	AE
DTBWJ7		0.0123	0.0013	1.29	0.0176	0.0019	1.67	OE
E7RNQ8		0.0130	0.0020	1.94	0.0170	0.0014	1.18	OE
EFDRHE		0.00967	-0.0013	-1.29	0.0141	-0.0016	-1.33	OE
EHGQRL	*	0.0120	0.0010	0.97	0.0130	-0.0026	-2.25	OE
EHK3JN		0.0103	-0.0007	-0.65	0.0150	-0.0006	-0.53	OE
EQBTX4	*	0.0105	-0.0005	-0.45	0.0125	-0.0032	-2.71	AE
EQVP6X	M	No Data Reported			0.0137	-0.0019	-1.62	XX
EXPUYY		0.00900	-0.0020	-1.94	0.0127	-0.0030	-2.53	XX
F7HQFN		0.0122	0.0012	1.16	0.0172	0.0015	1.33	OE
F8Y87U		0.0106	-0.0004	-0.42	0.0156	0.0000	-0.02	OE
FJP23V		0.0123	0.0013	1.29	0.0150	-0.0006	-0.53	OE
FK2Z9Q		0.0116	0.0006	0.55	0.0169	0.0013	1.10	OE
FWW6KX		0.0100	-0.0010	-0.97	0.0153	-0.0003	-0.25	OE
GB9KTF		0.0113	0.0003	0.26	0.0162	0.0005	0.47	OE
GX94F7		0.0110	0.0000	0.00	0.0159	0.0003	0.27	OE
H8ETP2		0.0137	0.0027	2.58	0.0188	0.0032	2.73	GD
HAVWZY		0.0105	-0.0005	-0.49	0.0151	-0.0005	-0.42	OE
HEMZVX		0.0104	-0.0006	-0.58	0.0150	-0.0006	-0.53	GD
HJ7U9C		0.0100	-0.0010	-0.97	0.0153	-0.0003	-0.25	IC
HPEYXV		0.00967	-0.0013	-1.29	0.0143	-0.0013	-1.10	IC
HZXD2X	*	0.00967	-0.0013	-1.29	0.0163	0.0007	0.61	IC
J42BFP		0.0101	-0.0009	-0.87	0.0151	-0.0006	-0.47	OE
JVAZ49		0.00993	-0.0011	-1.04	0.0132	-0.0024	-2.08	OE
KVUVLN		0.0100	-0.0010	-0.97	0.0147	-0.0010	-0.82	GD
KYNUUR		0.0118	0.0008	0.73	0.0162	0.0006	0.51	OE
L4DWXP		0.0103	-0.0007	-0.65	0.0152	-0.0004	-0.36	OE
LCM4WE		0.0107	-0.0003	-0.32	0.0160	0.0004	0.33	OE
LHKZXX		0.0117	0.0007	0.71	0.0167	0.0011	0.96	OE
LPRGUQ		0.0111	0.0001	0.10	0.0157	0.0000	0.04	OE
LWGTEM		0.0121	0.0010	1.02	0.0183	0.0027	2.28	XX
MF8EGP		0.0107	-0.0003	-0.26	0.0153	-0.0003	-0.25	WD
MMAGRH	X	0.0140	0.0030	2.91	0.0147	-0.0010	-0.82	IC
MMBWX9		0.00900	-0.0020	-1.94	0.0130	-0.0026	-2.25	OE
MMVDDB		0.0110	0.0000	0.00	0.0147	-0.0010	-0.82	OE
MTRTKP		0.0103	-0.0007	-0.68	0.0147	-0.0009	-0.79	OE
MZVQEM		0.00980	-0.0012	-1.16	0.0150	-0.0007	-0.56	IC
N4LPMP		0.0111	0.0001	0.10	0.0151	-0.0005	-0.41	OE
N6WKDM		0.0127	0.0017	1.61	0.0170	0.0014	1.18	XX
N98TBT		0.0117	0.0007	0.64	0.0170	0.0014	1.18	OE
NNEKLR		0.00967	-0.0013	-1.29	0.0157	0.0000	0.04	XX
NV63QA	*	0.0108	-0.0002	-0.23	0.0174	0.0018	1.53	OE
NW4EFF		0.0113	0.0003	0.32	0.0164	0.0008	0.67	OE
NWFF44		0.0114	0.0004	0.42	0.0162	0.0005	0.47	OE
PLLWUN	X	0.0166	0.0056	5.43	0.0150	-0.0006	-0.53	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
PP49KD		0.0107	-0.0003	-0.32	0.0150	-0.0006	-0.53	OE
Q3Z74H		0.0100	-0.0010	-0.94	0.0144	-0.0013	-1.08	OE
QAQ6NA	X	0.1400	0.1290	125.07	0.2000	0.1844	158.24	OE
QHHJCN		0.0105	-0.0005	-0.49	0.0140	-0.0016	-1.36	OE
QPGBGC		0.0110	0.0000	0.00	0.0160	0.0004	0.33	OE
R4UYA7		0.0102	-0.0008	-0.74	0.0138	-0.0019	-1.59	OE
RK4K9N	X	0.0160	0.0050	4.85	0.0210	0.0054	4.62	XX
RTE6XD		0.0131	0.0021	2.03	0.0182	0.0026	2.21	OE
RWAFT8	X	0.0169	0.0059	5.75	0.0221	0.0065	5.56	OE
T77H2L		0.0123	0.0013	1.26	0.0175	0.0019	1.64	OE
T8GVTH		0.0114	0.0004	0.42	0.0155	-0.0001	-0.10	OE
TBAXJB		0.0109	-0.0001	-0.07	0.0156	-0.0001	-0.05	OE
TBJKGB		0.0130	0.0020	1.94	0.0170	0.0014	1.18	OE
TUTQKL		0.0102	-0.0008	-0.81	0.0148	-0.0008	-0.70	OE
U24C8V		0.0113	0.0003	0.32	0.0153	-0.0003	-0.25	XX
U8T34Q		0.0110	0.0000	-0.03	0.0151	-0.0005	-0.42	IC
UAXGZW		0.0110	0.0000	-0.03	0.0161	0.0005	0.41	OE
UBMQWQ		0.0107	-0.0003	-0.32	0.0153	-0.0003	-0.25	OE
UL9WYN		0.0124	0.0014	1.39	0.0178	0.0021	1.84	OE
UTMZCG		0.0101	-0.0009	-0.87	0.0147	-0.0009	-0.79	IC
UU76KL		0.0127	0.0017	1.61	0.0182	0.0025	2.19	OE
UVT9XU		0.0106	-0.0004	-0.42	0.0155	-0.0002	-0.13	IC
VEG8FX		0.0109	-0.0001	-0.10	0.0157	0.0000	0.04	OE
VVCK47		0.0110	0.0000	0.03	0.0160	0.0003	0.30	OE
W4WWAY		0.0109	-0.0001	-0.10	0.0159	0.0003	0.27	OE
WBFPG9		0.00990	-0.0011	-1.07	0.0144	-0.0012	-1.05	IC
WBVPWR		0.0127	0.0017	1.61	0.0180	0.0024	2.04	IC
WC9EY6		0.0114	0.0004	0.40	0.0167	0.0010	0.90	OE
WJ79W3		0.0111	0.0001	0.06	0.0167	0.0010	0.90	OE
WU7DU6		0.0110	0.0000	0.00	0.0160	0.0004	0.33	OE
WUQD99		0.0104	-0.0006	-0.62	0.0153	-0.0003	-0.25	OE
WVL2MX		0.0106	-0.0004	-0.36	0.0151	-0.0005	-0.42	IC
X33VED	*	0.00807	-0.0029	-2.85	0.0134	-0.0023	-1.93	OE
XHJ87R	X	0.0100	-0.0010	-0.94	0.0109	-0.0047	-4.05	OE
XXLNHD		0.0102	-0.0008	-0.74	0.0151	-0.0005	-0.45	IC
YDJY24		0.0105	-0.0005	-0.45	0.0142	-0.0014	-1.22	AE
YK6BAJ		0.0120	0.0010	0.97	0.0167	0.0011	0.93	OE
YPTKHB		0.0109	-0.0001	-0.13	0.0152	-0.0004	-0.33	IC
YU3BH6		0.0111	0.0001	0.13	0.0153	-0.0003	-0.25	OE
ZB8DWA		0.0113	0.0003	0.29	0.0151	-0.0005	-0.42	OE
ZLV7LD		0.0104	-0.0006	-0.58	0.0156	0.0000	-0.02	OE
ZNUQ3H		0.0111	0.0001	0.13	0.0155	-0.0001	-0.10	OE
ZVRGAL		0.00937	-0.0016	-1.58	0.0134	-0.0022	-1.88	XX

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.0110	Percent	0.0156	Percent
Stnd Dev Btwn Labs	0.0010	Percent	0.0012	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 124 of 137 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	DR	Spectrometry - Direct Reading OE (DROES)
GD	Spectrometry - Glow Discharge (GDS)	IC	Spectrometry - Inductively Coupled Plasma (ICP)
OE	Spectrometry - Optical Emission (OES)	WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)
XR	X-Ray Fluorescence - ED or WD not specified	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1602

4D3ECA (X) - Data for both samples are high. Possible Systematic Error.

4JDH93 (X) - Data for sample L85 are high.

BF6LMM (X) - Data for sample L86 are low.

DNCYXF (X) - Data for sample L86 are low. Inconsistent within the determinations of sample L85.

EQVP6X (M) - Participant did not submit data for sample L85.

MMAGRH (X) - Data for sample L85 are high.

PLLWUN (X) - Data for sample L85 are high.

QAQ6NA (X) - Extreme data.

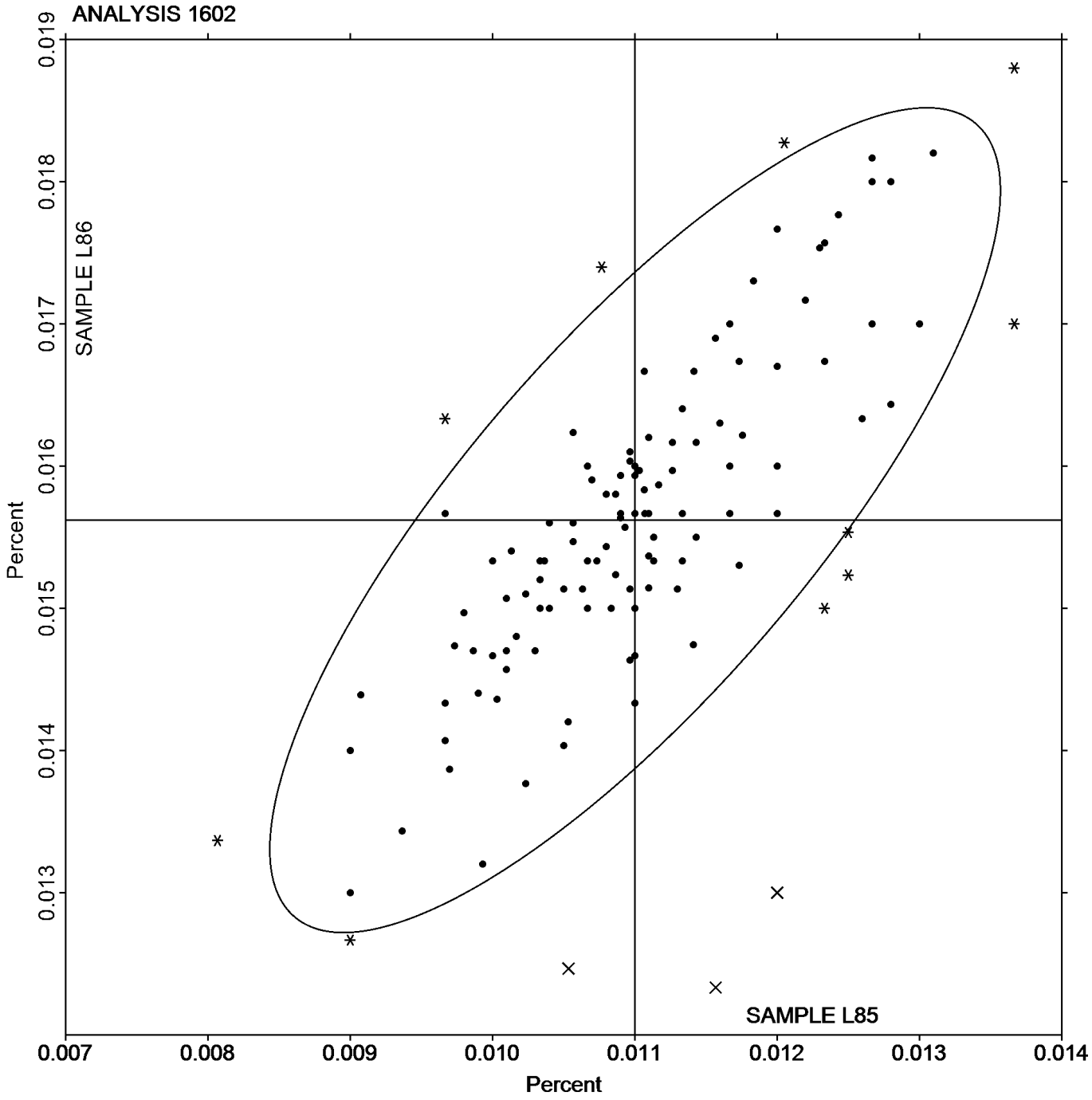
RK4K9N (X) - Data for both samples are high. Possible Systematic Error.

RWAFT8 (X) - Data for both samples are high. Possible Systematic Error.

XHJ87R (X) - Data for sample L86 are low.

SAMPLE L85
0.0110 Percent

SAMPLE L86
0.0156 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.0230	0.0002	0.12	0.0273	0.0009	0.42	XX
29TD7T		0.0207	-0.0021	-1.18	0.0240	-0.0025	-1.21	OE
2LZGD9	X	0.0193	-0.0035	-1.91	0.0190	-0.0075	-3.66	XR
2T9K2N		0.0217	-0.0011	-0.59	0.0249	-0.0015	-0.75	CI
38A46D		0.0246	0.0018	1.00	0.0283	0.0018	0.88	OE
38JRVX		0.0230	0.0002	0.10	0.0266	0.0002	0.08	OE
3BM2EL		0.0223	-0.0005	-0.25	0.0273	0.0009	0.42	CI
3VRY33		0.0236	0.0008	0.47	0.0268	0.0003	0.14	OE
4CC7D7		0.0205	-0.0023	-1.27	0.0231	-0.0034	-1.67	OE
4D3ECA	X	0.0302	0.0074	4.12	0.0302	0.0037	1.81	OE
4JDH93		0.0214	-0.0014	-0.77	0.0237	-0.0028	-1.36	OE
4L2RKP		0.0203	-0.0025	-1.36	0.0237	-0.0028	-1.37	OE
4LX9HU		0.0258	0.0030	1.67	0.0290	0.0026	1.25	OE
4XN736		0.0202	-0.0026	-1.42	0.0232	-0.0032	-1.58	OE
4YGXDQ		0.0216	-0.0012	-0.64	0.0255	-0.0010	-0.49	CI
68P6EC		0.0225	-0.0003	-0.18	0.0261	-0.0004	-0.20	CI
6A4DWC		0.0211	-0.0017	-0.94	0.0250	-0.0015	-0.72	CI
6G3X3E		0.0226	-0.0002	-0.12	0.0267	0.0003	0.13	CI
6GC7RZ		0.0227	-0.0001	-0.07	0.0254	-0.0011	-0.54	AE
6X7JE9		0.0248	0.0020	1.09	0.0286	0.0021	1.04	OE
7KHFNA		0.0250	0.0022	1.22	0.0283	0.0019	0.91	OE
8DAL38		0.0212	-0.0016	-0.88	0.0247	-0.0018	-0.88	CO
8DP437		0.0211	-0.0017	-0.94	0.0251	-0.0014	-0.69	OE
8PL3Z4		0.0246	0.0018	1.02	0.0282	0.0018	0.86	OE
8QBM8V		0.0207	-0.0021	-1.18	0.0267	0.0002	0.09	CI
8QDCHK		0.0252	0.0024	1.33	0.0287	0.0023	1.10	OE
92J9GA		0.0227	-0.0001	-0.05	0.0288	0.0023	1.12	OE
9368K7		0.0249	0.0021	1.19	0.0287	0.0022	1.09	OE
96AQFT		0.0238	0.0010	0.54	0.0268	0.0003	0.16	OE
9KRL34		0.0200	-0.0028	-1.55	0.0233	-0.0031	-1.54	OE
9LVQAR		0.0224	-0.0004	-0.23	0.0263	-0.0002	-0.10	GD
9N2C3Y	*	0.0177	-0.0051	-2.84	0.0213	-0.0051	-2.51	OE
9T8Y8V		0.0240	0.0012	0.65	0.0274	0.0009	0.45	OE
AFUJCA	*	0.0267	0.0039	2.15	0.0264	-0.0001	-0.05	OE
AJCGBX		0.0212	-0.0016	-0.86	0.0242	-0.0022	-1.10	CI
ANPEK7		0.0211	-0.0017	-0.95	0.0263	-0.0002	-0.10	OE
B7JGQ9		0.0220	-0.0008	-0.44	0.0255	-0.0010	-0.48	CO
BF6LMM	X	0.0210	-0.0018	-0.99	0.0180	-0.0085	-4.14	GD
BJV76J	X	0.0158	-0.0070	-3.87	0.0201	-0.0063	-3.10	CO
BPYJV9		0.0223	-0.0005	-0.29	0.0257	-0.0008	-0.39	XX
C3BMBB		0.0250	0.0022	1.22	0.0300	0.0035	1.72	OE
C3VHJ4		0.0227	-0.0001	-0.07	0.0253	-0.0011	-0.56	OE
C7YZB7	X	0.0270	0.0042	2.33	0.0350	0.0085	4.17	XX
C92AR2	X	0.0283	0.0055	3.07	0.0307	0.0042	2.05	XX
CGFRUA		0.0215	-0.0013	-0.70	0.0274	0.0009	0.45	OE
CNG223		0.0232	0.0004	0.25	0.0271	0.0006	0.31	OE
DNCYXF		0.0190	-0.0038	-2.10	0.0217	-0.0048	-2.35	AE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
DRLK4Y		0.0232	0.0004	0.25	0.0251	-0.0014	-0.67	CO
DTBWJ7		0.0217	-0.0011	-0.62	0.0255	-0.0010	-0.49	CI
E7RNQ8		0.0227	-0.0001	-0.07	0.0267	0.0002	0.09	OE
EFDRHE		0.0224	-0.0004	-0.23	0.0258	-0.0007	-0.35	CI
EHGQRL		0.0193	-0.0035	-1.91	0.0220	-0.0045	-2.19	XX
EHK3JN		0.0230	0.0002	0.12	0.0267	0.0002	0.09	OE
EQBTX4		0.0226	-0.0002	-0.11	0.0246	-0.0019	-0.92	AE
EXPUYY		0.0237	0.0009	0.49	0.0260	-0.0005	-0.23	XX
F7HQFN		0.0248	0.0020	1.09	0.0288	0.0024	1.15	OE
F8Y87U	X	0.0300	0.0072	4.01	0.0287	0.0022	1.07	OE
FJP23V		0.0211	-0.0017	-0.92	0.0251	-0.0013	-0.66	CO
FK2Z9Q		0.0220	-0.0008	-0.45	0.0254	-0.0011	-0.52	OE
FWW6KX		0.0220	-0.0008	-0.44	0.0267	0.0002	0.09	OE
GB9KTF		0.0222	-0.0006	-0.33	0.0264	0.0000	-0.02	CI
GX94F7		0.0222	-0.0006	-0.31	0.0269	0.0004	0.21	OE
H8ETP2		0.0217	-0.0011	-0.62	0.0247	-0.0018	-0.87	GD
HAVWZY		0.0195	-0.0033	-1.80	0.0231	-0.0034	-1.65	OE
HEMZVX		0.0225	-0.0003	-0.16	0.0261	-0.0004	-0.18	GD
HJ7U9C		0.0209	-0.0019	-1.03	0.0247	-0.0018	-0.88	CI
HPEYXV		0.0240	0.0012	0.67	0.0290	0.0025	1.24	CI
HZXD2X		0.0203	-0.0025	-1.36	0.0250	-0.0015	-0.72	CO
J42BFP		0.0254	0.0026	1.43	0.0301	0.0037	1.79	OE
JVAZ49		0.0249	0.0021	1.17	0.0259	-0.0005	-0.26	OE
KVUVLN	X	0.0217	-0.0011	-0.62	0.0147	-0.0118	-5.77	GD
KYNUUR		0.0228	0.0000	0.01	0.0273	0.0009	0.42	OE
L4DWXP		0.0220	-0.0008	-0.42	0.0255	-0.0010	-0.49	OE
LCM4WE		0.0241	0.0013	0.73	0.0277	0.0012	0.58	OE
LHKZXX		0.0238	0.0010	0.58	0.0264	-0.0001	-0.04	OE
LPRGUQ		0.0231	0.0003	0.15	0.0256	-0.0009	-0.44	OE
LWGTEM		0.0235	0.0007	0.38	0.0266	0.0002	0.08	XX
MF8EGP		0.0221	-0.0007	-0.38	0.0275	0.0010	0.50	CI
MMAGRH		0.0253	0.0025	1.41	0.0297	0.0032	1.56	CO
MMBWX9		0.0223	-0.0005	-0.25	0.0260	-0.0005	-0.23	OE
MMVDDB		0.0250	0.0022	1.22	0.0280	0.0015	0.75	OE
MTRTKP		0.0197	-0.0031	-1.73	0.0237	-0.0028	-1.37	CO
MZVQEM		0.0208	-0.0020	-1.08	0.0233	-0.0032	-1.55	CI
N4LPMP		0.0243	0.0015	0.82	0.0280	0.0016	0.77	OE
N6WKDM	X	0.0277	0.0049	2.70	0.0340	0.0075	3.68	XX
N98TBT		0.0263	0.0035	1.96	0.0290	0.0025	1.24	OE
NNEKLR		0.0233	0.0005	0.30	0.0290	0.0025	1.24	XX
NV63QA		0.0216	-0.0012	-0.66	0.0274	0.0009	0.45	OE
NW4EFF		0.0232	0.0004	0.23	0.0239	-0.0026	-1.26	OE
NWFF44		0.0244	0.0016	0.91	0.0270	0.0006	0.27	OE
PLLWUN		0.0208	-0.0020	-1.10	0.0230	-0.0035	-1.70	OE
PP49KD		0.0250	0.0022	1.22	0.0270	0.0005	0.26	OE
Q3Z74H		0.0261	0.0033	1.81	0.0307	0.0042	2.05	XX
QAQ6NA		0.0260	0.0032	1.78	0.0300	0.0035	1.72	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
QHHJCN		0.0225	-0.0003	-0.14	0.0268	0.0003	0.14	OE
QPGBGC		0.0233	0.0005	0.30	0.0267	0.0002	0.09	OE
R4UYA7		0.0222	-0.0006	-0.31	0.0255	-0.0010	-0.48	OE
RK4K9N		0.0240	0.0012	0.67	0.0280	0.0015	0.75	GD
RL4KCU	*	0.0211	-0.0017	-0.94	0.0295	0.0031	1.50	OE
RTE6XD		0.0262	0.0034	1.91	0.0287	0.0023	1.10	OE
RWAFT8		0.0210	-0.0018	-0.97	0.0254	-0.0010	-0.51	OE
T77H2L		0.0258	0.0030	1.67	0.0309	0.0044	2.16	OE
T8GVTH		0.0227	-0.0001	-0.06	0.0265	0.0000	-0.01	CI
TBAXJB		0.0256	0.0028	1.57	0.0284	0.0020	0.96	OE
TBJKGB		0.0230	0.0002	0.12	0.0270	0.0005	0.26	OE
TUTQKL		0.0239	0.0011	0.63	0.0283	0.0018	0.89	CO
U24C8V		0.0253	0.0025	1.41	0.0297	0.0032	1.56	XX
U8T34Q		0.0237	0.0009	0.52	0.0275	0.0011	0.52	CI
UAXGZW		0.0242	0.0014	0.76	0.0266	0.0001	0.06	OE
UBMQWQ		0.0204	-0.0024	-1.32	0.0241	-0.0024	-1.16	OE
UL9WYN		0.0260	0.0032	1.78	0.0318	0.0054	2.62	OE
UTMZCG		0.0227	-0.0001	-0.03	0.0268	0.0003	0.16	CI
UU76KL		0.0256	0.0028	1.54	0.0269	0.0005	0.22	OE
UVT9XU		0.0222	-0.0006	-0.33	0.0275	0.0011	0.52	CI
VEG8FX		0.0215	-0.0013	-0.73	0.0258	-0.0007	-0.35	OE
VVCK47		0.0229	0.0001	0.06	0.0264	-0.0001	-0.04	OE
W4WWAY		0.0213	-0.0015	-0.83	0.0244	-0.0020	-1.00	OE
WBFPG9		0.0202	-0.0026	-1.42	0.0242	-0.0022	-1.10	CI
WBVPWR		0.0211	-0.0017	-0.92	0.0243	-0.0022	-1.08	CI
WC9EY6		0.0235	0.0007	0.40	0.0282	0.0017	0.82	OE
WJ79W3		0.0221	-0.0007	-0.38	0.0265	0.0000	0.01	OE
WU7DU6		0.0207	-0.0021	-1.18	0.0240	-0.0025	-1.21	OE
WUQD99		0.0223	-0.0005	-0.27	0.0271	0.0006	0.29	OE
WVL2MX		0.0217	-0.0011	-0.62	0.0251	-0.0014	-0.67	CI
X33VED		0.0233	0.0005	0.26	0.0268	0.0004	0.18	OE
XHJ87R	*	0.0209	-0.0019	-1.03	0.0211	-0.0053	-2.61	OE
XXLNHD		0.0221	-0.0007	-0.40	0.0258	-0.0007	-0.35	CI
YDJY24		0.0226	-0.0002	-0.11	0.0259	-0.0006	-0.30	AE
YK6BAJ		0.0260	0.0032	1.78	0.0298	0.0033	1.63	OE
YPTKHB		0.0233	0.0005	0.30	0.0261	-0.0003	-0.17	IC
YU3BH6		0.0225	-0.0003	-0.16	0.0254	-0.0010	-0.51	OE
ZB8DWA		0.0236	0.0008	0.43	0.0273	0.0009	0.42	OE
ZLV7LD		0.0254	0.0026	1.44	0.0287	0.0022	1.09	OE
ZNUQ3H		0.0254	0.0026	1.44	0.0315	0.0050	2.46	OE
ZVRGAL		0.0200	-0.0028	-1.55	0.0247	-0.0018	-0.88	XX

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.0228	Percent	0.0265	Percent
Stnd Dev Btwn Labs	0.0018	Percent	0.0020	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 123 of 135 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	CI	Combustion / IR
CO	Combustion	GD	Spectrometry - Glow Discharge (GDS)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	OE	Spectrometry - Optical Emission (OES)
XR	X-Ray Fluorescence - ED or WD not specified	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1603

2LZGD9 (X) - Data for sample L86 are low.

4D3ECA (X) - Data for sample L85 are high.

BF6LMM (X) - Data for sample L86 are low.

BJV76J (X) - Data for both samples are low. Possible Systematic Error.

C7YZB7 (X) - Data for sample L86 are high. Inconsistent within the determinations of sample L85.

C92AR2 (X) - Data for sample L85 are high.

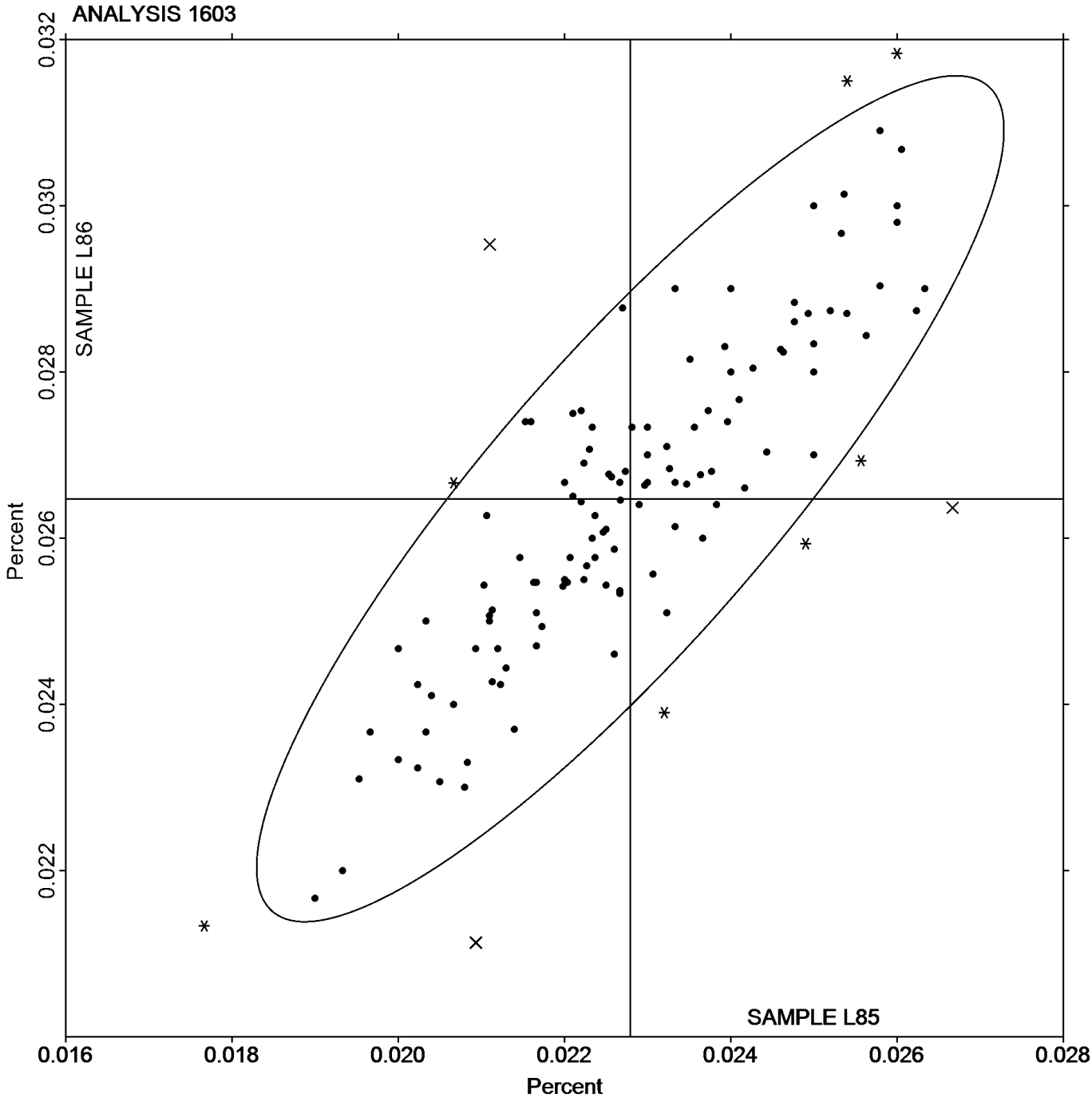
F8Y87U (X) - Data for sample L85 are high.

KVUVLN (X) - Data for sample L86 are low.

N6WKDM (X) - Data for sample L86 are high.

SAMPLE L85
0.0228 Percent

SAMPLE L86
0.0265 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.2550	-0.0091	-1.50	0.2543	-0.0087	-1.36	XX
29TD7T		0.2640	-0.0001	-0.02	0.2630	0.0000	-0.01	OE
2LZGD9		0.2687	0.0045	0.75	0.2660	0.0030	0.46	XR
2T9K2N		0.2640	-0.0001	-0.02	0.2673	0.0043	0.67	OE
38A46D		0.2500	-0.0141	-2.32	0.2500	-0.0130	-2.04	OE
38JRVX		0.2633	-0.0008	-0.13	0.2593	-0.0037	-0.58	OE
3BM2EL		0.2630	-0.0011	-0.18	0.2653	0.0023	0.36	OE
3CQCZH		0.2617	-0.0025	-0.40	0.2621	-0.0009	-0.14	IC
3VRY33		0.2687	0.0046	0.76	0.2653	0.0023	0.36	OE
4CC7D7		0.2567	-0.0075	-1.23	0.2550	-0.0080	-1.25	OE
4D3ECA	X	0.2577	-0.0065	-1.06	0.2753	0.0123	1.92	OE
4JDH93		0.2693	0.0052	0.86	0.2703	0.0073	1.14	OE
4L2RKP		0.2633	-0.0008	-0.13	0.2617	-0.0014	-0.21	XX
4LX9HU	X	0.2814	0.0172	2.84	0.2834	0.0204	3.18	OE
4XN736		0.2642	0.0001	0.02	0.2627	-0.0003	-0.05	OE
4YGXDQ		0.2635	-0.0006	-0.10	0.2632	0.0001	0.02	IC
68P6EC		0.2639	-0.0002	-0.04	0.2601	-0.0030	-0.46	OE
6A4DWC	*	0.2540	-0.0101	-1.66	0.2630	0.0000	-0.01	IC
6G3X3E		0.2548	-0.0093	-1.53	0.2550	-0.0080	-1.25	OE
6GC7RZ		0.2547	-0.0095	-1.56	0.2567	-0.0064	-0.99	AE
6X7JE9		0.2650	0.0009	0.14	0.2603	-0.0027	-0.42	OE
7KHFNA		0.2700	0.0059	0.97	0.2667	0.0036	0.57	OE
7Z77D6		0.2586	-0.0055	-0.91	0.2602	-0.0028	-0.44	OE
8DAL38		0.2500	-0.0141	-2.32	0.2473	-0.0157	-2.45	GD
8DP437		0.2673	0.0032	0.53	0.2683	0.0053	0.83	IC
8PL3Z4		0.2773	0.0132	2.17	0.2760	0.0130	2.02	OE
8QBM8V		0.2703	0.0062	1.02	0.2690	0.0060	0.93	IC
8QDCHK		0.2717	0.0076	1.25	0.2712	0.0081	1.27	OE
92J9GA		0.2602	-0.0039	-0.64	0.2583	-0.0047	-0.73	OE
9368K7		0.2527	-0.0115	-1.88	0.2520	-0.0110	-1.72	OE
96AQFT		0.2644	0.0002	0.04	0.2638	0.0008	0.12	OE
9KRL34		0.2660	0.0019	0.31	0.2637	0.0006	0.10	OE
9LVQAR		0.2701	0.0060	0.98	0.2713	0.0083	1.29	OE
9N2C3Y		0.2543	-0.0098	-1.61	0.2540	-0.0090	-1.41	OE
9T8Y8V		0.2632	-0.0010	-0.16	0.2614	-0.0017	-0.26	OE
AFUJCA		0.2673	0.0032	0.53	0.2613	-0.0017	-0.27	OE
AJCGBX		0.2650	0.0009	0.14	0.2620	-0.0010	-0.16	IC
ANPEK7		0.2630	-0.0011	-0.18	0.2633	0.0003	0.05	OE
B7JGQ9		0.2800	0.0159	2.61	0.2800	0.0170	2.65	OE
BF6LMM		0.2510	-0.0131	-2.16	0.2460	-0.0170	-2.66	GD
BJV76J		0.2610	-0.0031	-0.51	0.2597	-0.0034	-0.53	DR
BPYJV9		0.2643	0.0002	0.03	0.2637	0.0006	0.10	XX
C3BMBB		0.2520	-0.0121	-1.99	0.2520	-0.0110	-1.72	OE
C3VHJ4		0.2640	-0.0001	-0.02	0.2670	0.0040	0.62	OE
C7YZB7		0.2643	0.0002	0.03	0.2643	0.0013	0.20	XX
C92AR2		0.2607	-0.0035	-0.57	0.2593	-0.0037	-0.58	XX
C9VX7Q		0.2593	-0.0048	-0.79	0.2567	-0.0064	-0.99	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
CGFRUA		0.2668	0.0027	0.44	0.2662	0.0032	0.50	OE
CNG223		0.2570	-0.0071	-1.17	0.2563	-0.0067	-1.05	OE
DNCYXF		0.2680	0.0039	0.64	0.2663	0.0033	0.51	AE
DTBWJ7		0.2678	0.0036	0.60	0.2656	0.0025	0.39	OE
E7RNQ8		0.2700	0.0059	0.97	0.2700	0.0070	1.09	OE
EFDRHE		0.2563	-0.0078	-1.28	0.2570	-0.0060	-0.94	OE
EHGQRL		0.2667	0.0025	0.42	0.2633	0.0003	0.05	OE
EHK3JN		0.2577	-0.0065	-1.06	0.2560	-0.0070	-1.10	OE
EQBTX4		0.2543	-0.0098	-1.61	0.2500	-0.0130	-2.04	AE
EQVP6X	M	No Data Reported			0.2682	0.0052	0.81	XX
EVB7R9		0.2640	-0.0001	-0.02	0.2637	0.0006	0.10	XX
EXPUYY		0.2680	0.0039	0.64	0.2643	0.0013	0.20	XX
F7HQFN		0.2682	0.0040	0.67	0.2659	0.0029	0.45	OE
F8Y87U		0.2628	-0.0014	-0.22	0.2672	0.0042	0.65	OE
FJP23V		0.2663	0.0022	0.36	0.2660	0.0030	0.46	OE
FK2Z9Q		0.2646	0.0005	0.09	0.2613	-0.0018	-0.28	OE
FWW6KX		0.2640	-0.0001	-0.02	0.2637	0.0006	0.10	OE
GB9KTF		0.2616	-0.0026	-0.42	0.2615	-0.0015	-0.24	OE
GX94F7		0.2676	0.0035	0.58	0.2690	0.0059	0.93	OE
H8ETP2		0.2630	-0.0011	-0.18	0.2630	0.0000	-0.01	GD
HAVWZY		0.2722	0.0081	1.33	0.2711	0.0080	1.25	OE
HEMZVX		0.2550	-0.0091	-1.50	0.2530	-0.0100	-1.57	GD
HJ7U9C		0.2728	0.0087	1.43	0.2758	0.0128	2.00	IC
HPEYXV		0.2597	-0.0045	-0.73	0.2597	-0.0034	-0.53	IC
HZXD2X		0.2593	-0.0048	-0.79	0.2603	-0.0027	-0.42	IC
J42BFP		0.2660	0.0019	0.31	0.2657	0.0026	0.41	OE
JVAZ49	X	0.2423	-0.0218	-3.58	0.2417	-0.0214	-3.34	OE
KVUVLN		0.2700	0.0059	0.97	0.2700	0.0070	1.09	GD
KYNUUR		0.2646	0.0005	0.08	0.2630	0.0000	0.00	OE
L4DWXP		0.2644	0.0003	0.05	0.2643	0.0012	0.19	OE
LCM4WE		0.2803	0.0162	2.67	0.2800	0.0170	2.65	OE
LH9VQ8	X	0.3010	0.0368	6.06	0.3073	0.0443	6.91	OE
LHKZXX		0.2680	0.0039	0.64	0.2667	0.0036	0.57	OE
LPRGUQ		0.2603	-0.0038	-0.62	0.2583	-0.0047	-0.73	OE
LWGTEM		0.2668	0.0027	0.44	0.2653	0.0023	0.36	XX
MF8EGP	X	0.2467	-0.0174	-2.86	0.2409	-0.0221	-3.46	WD
MMAGRH	X	0.2033	-0.0608	-10.00	0.1980	-0.0650	-10.15	IC
MMBWX9		0.2783	0.0142	2.34	0.2757	0.0126	1.97	OE
MMVDDB		0.2680	0.0039	0.64	0.2697	0.0066	1.03	XX
MTRTKP		0.2577	-0.0065	-1.06	0.2573	-0.0057	-0.89	OE
MZVQEM		0.2600	-0.0041	-0.68	0.2593	-0.0037	-0.58	IC
N4LPMP		0.2587	-0.0054	-0.89	0.2534	-0.0096	-1.50	OE
N6WKDM		0.2633	-0.0008	-0.13	0.2623	-0.0007	-0.11	XX
N98TBT		0.2647	0.0005	0.09	0.2650	0.0020	0.31	OE
NNEKLR	*	0.2567	-0.0075	-1.23	0.2633	0.0003	0.05	XX
NV63QA		0.2723	0.0082	1.35	0.2707	0.0076	1.19	OE
NW4EFF		0.2627	-0.0015	-0.24	0.2587	-0.0044	-0.68	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
NWFF44		0.2640	-0.0001	-0.01	0.2610	-0.0020	-0.32	OE
PLLWUN	X	0.2459	-0.0182	-3.00	0.2587	-0.0043	-0.68	OE
PP49KD		0.2600	-0.0041	-0.68	0.2573	-0.0057	-0.89	OE
Q3Z74H		0.2737	0.0096	1.57	0.2761	0.0131	2.04	OE
QAQ6NA		0.2700	0.0059	0.97	0.2700	0.0070	1.09	OE
QHHJCN		0.2610	-0.0031	-0.51	0.2593	-0.0037	-0.58	OE
QPGBGC		0.2693	0.0052	0.86	0.2670	0.0040	0.62	OE
R4UYA7		0.2617	-0.0025	-0.40	0.2597	-0.0034	-0.53	OE
RK4K9N	*	0.2500	-0.0141	-2.32	0.2600	-0.0030	-0.47	GD
RL4KCU		0.2587	-0.0055	-0.90	0.2593	-0.0037	-0.58	OE
RTE6XD		0.2517	-0.0125	-2.05	0.2463	-0.0167	-2.61	OE
RWAFT8		0.2620	-0.0021	-0.35	0.2607	-0.0024	-0.37	OE
T77H2L		0.2687	0.0045	0.75	0.2693	0.0063	0.98	OE
T8GVTH		0.2630	-0.0011	-0.18	0.2613	-0.0017	-0.27	OE
TBAXJB		0.2693	0.0052	0.86	0.2670	0.0040	0.62	OE
TBJKGB		0.2710	0.0069	1.13	0.2680	0.0050	0.77	OE
TUTQKL		0.2653	0.0012	0.20	0.2663	0.0033	0.51	OE
U24C8V		0.2540	-0.0101	-1.66	0.2543	-0.0087	-1.36	XX
U8T34Q		0.2610	-0.0031	-0.51	0.2597	-0.0034	-0.53	IC
UAXGZW	*	0.2523	-0.0119	-1.95	0.2563	-0.0067	-1.05	OE
UBMQWQ		0.2581	-0.0060	-0.98	0.2583	-0.0048	-0.74	OE
UGALR3	X	0.2157	-0.0485	-7.97	0.2170	-0.0460	-7.19	OE
UL9WYN		0.2668	0.0027	0.45	0.2683	0.0053	0.82	OE
UTMZCG		0.2605	-0.0036	-0.59	0.2595	-0.0036	-0.56	IC
UU76KL		0.2753	0.0112	1.84	0.2733	0.0103	1.61	OE
UVT9XU		0.2681	0.0040	0.65	0.2678	0.0048	0.74	IC
VEG8FX		0.2660	0.0018	0.30	0.2659	0.0029	0.45	OE
VVCK47		0.2618	-0.0023	-0.38	0.2602	-0.0028	-0.44	OE
W4WWAY		0.2677	0.0035	0.58	0.2673	0.0043	0.67	OE
WBFPG9		0.2577	-0.0065	-1.06	0.2573	-0.0057	-0.89	IC
WBVPWR	X	0.2810	0.0169	2.78	0.2900	0.0270	4.21	IC
WC9EY6		0.2653	0.0012	0.20	0.2668	0.0037	0.58	OE
WJ79W3		0.2795	0.0154	2.53	0.2772	0.0142	2.21	OE
WU7DU6		0.2700	0.0059	0.97	0.2633	0.0003	0.05	OE
WUQD99		0.2600	-0.0041	-0.68	0.2567	-0.0064	-0.99	OE
WVL2MX		0.2630	-0.0011	-0.18	0.2607	-0.0024	-0.37	IC
X33VED		0.2640	-0.0001	-0.02	0.2637	0.0006	0.10	XX
XHJ87R	*	0.2530	-0.0111	-1.83	0.2673	0.0043	0.67	OE
XXLNHD		0.2645	0.0004	0.07	0.2645	0.0015	0.23	IC
YDJY24		0.2631	-0.0010	-0.17	0.2625	-0.0006	-0.09	AE
YK6BAJ		0.2670	0.0029	0.47	0.2630	0.0000	-0.01	OE
YPTKHB		0.2653	0.0012	0.20	0.2657	0.0026	0.41	IC
YU3BH6		0.2641	0.0000	0.00	0.2620	-0.0011	-0.17	OE
Z4DTZE		0.2653	0.0012	0.20	0.2653	0.0023	0.36	OE
ZB8DWA	X	0.2787	0.0145	2.39	0.2684	0.0053	0.83	OE
ZLV7LD		0.2696	0.0055	0.90	0.2670	0.0040	0.62	OE
ZNUQ3H		0.2686	0.0045	0.74	0.2638	0.0008	0.12	OE

Analysis 1604

Carbon & Low Alloy Steel, SILICON (Si)
SILICON (Si)

WebCode	Data Flag	Sample L85 Lab Mean	Sample L85 Diff. from Grand Mean	Sample L85 CPV	Sample L86 Lab Mean	Sample L86 Diff. from Grand Mean	Sample L86 CPV	Method
ZVRGAL		0.2613	-0.0028	-0.46	0.2620	-0.0010	-0.16	XX

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.2641	Percent	0.2630	Percent
Stnd Dev Btwn Labs	0.0061	Percent	0.0064	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 126 of 142 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	DR	Spectrometry - Direct Reading OE (DROES)
GD	Spectrometry - Glow Discharge (GDS)	IC	Spectrometry - Inductively Coupled Plasma (ICP)
OE	Spectrometry - Optical Emission (OES)	WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)
XR	X-Ray Fluorescence - ED or WD not specified	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1604

4D3ECA (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L86.

4LX9HU (X) - Data for both samples are high. Possible Systematic Error.

EQVP6X (M) - Participant did not submit data for sample L85.

JVAZ49 (X) - Data for both samples are low. Possible Systematic Error.

LH9VQ8 (X) - Data for both samples are high. Possible Systematic Error.

MF8EGP (X) - Data for both samples are low. Possible Systematic Error.

MMAGRH (X) - Data for both samples are low. Possible Systematic Error.

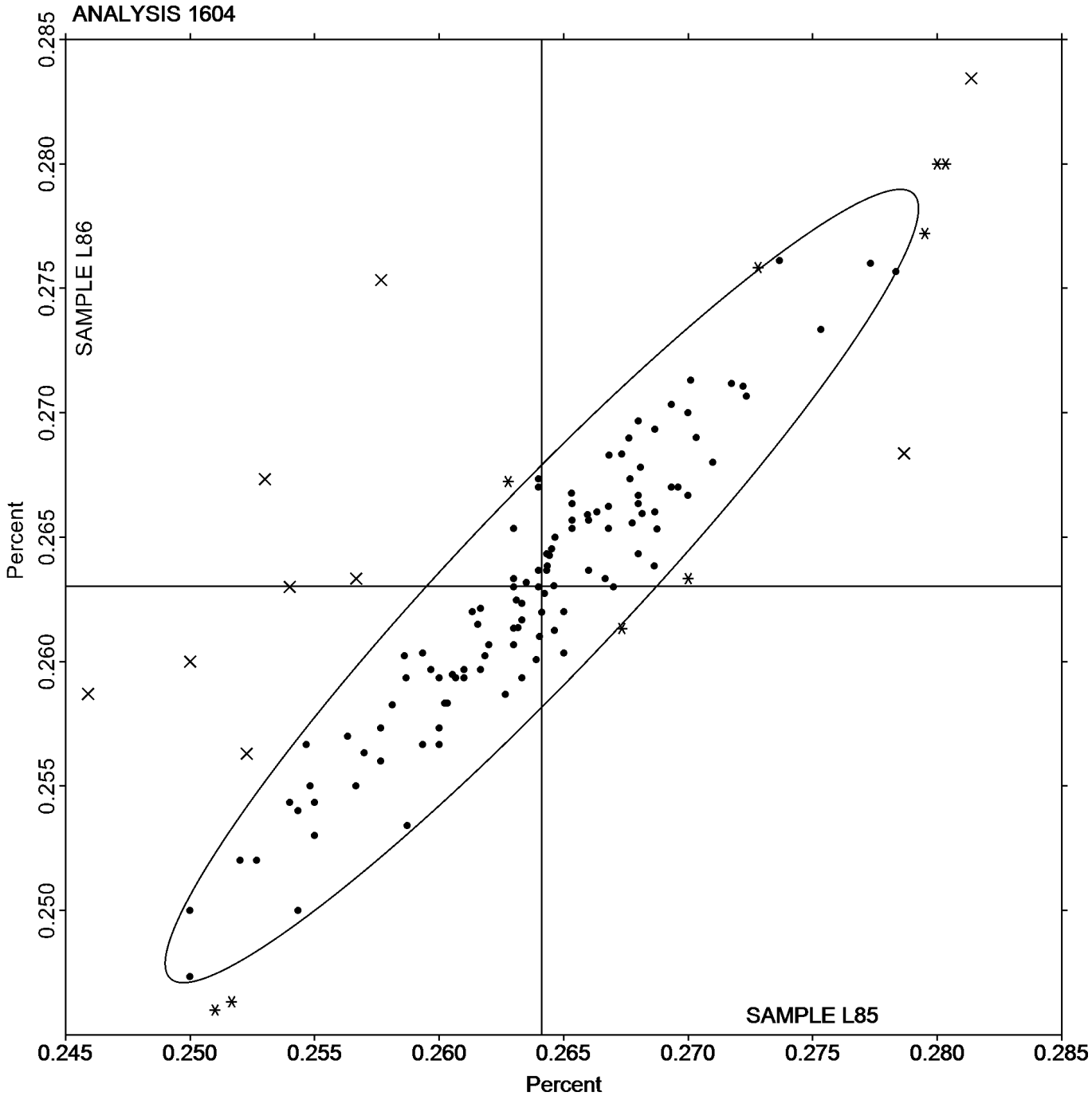
PLLWUN (X) - Data for sample L85 are low.

UGALR3 (X) - Data for both samples are low. Possible Systematic Error.

WBVPWR (X) - Data for both samples are high. Possible Systematic Error.

ZB8DWA (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L86.

SAMPLE L85	SAMPLE L86
0.2641 Percent	0.2630 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.1833	0.0003	0.07	0.1563	0.0011	0.24	XX
29TD7T		0.1840	0.0010	0.20	0.1563	0.0011	0.24	OE
2LZGD9		0.1850	0.0020	0.40	0.1583	0.0031	0.68	XR
2T9K2N		0.1767	-0.0063	-1.27	0.1543	-0.0009	-0.19	OE
38A46D	X	0.1700	-0.0130	-2.61	0.1400	-0.0152	-3.32	OE
38JRVX		0.1937	0.0107	2.14	0.1617	0.0065	1.41	OE
3BM2EL		0.1830	0.0000	0.00	0.1570	0.0018	0.39	OE
3CQCZH		0.1775	-0.0055	-1.09	0.1515	-0.0037	-0.80	IC
3VRY33		0.1859	0.0029	0.59	0.1561	0.0009	0.19	OE
4CC7D7		0.1837	0.0007	0.14	0.1547	-0.0005	-0.12	OE
4D3ECA	*	0.1843	0.0013	0.27	0.1630	0.0078	1.70	OE
4JDH93		0.1773	-0.0057	-1.13	0.1533	-0.0019	-0.41	OE
4L2RKP		0.1803	-0.0027	-0.53	0.1543	-0.0009	-0.19	OE
4LX9HU		0.1871	0.0041	0.83	0.1571	0.0019	0.42	OE
4XN736		0.1847	0.0017	0.35	0.1543	-0.0009	-0.20	OE
4YGXDQ		0.1818	-0.0012	-0.24	0.1551	-0.0001	-0.03	IC
68P6EC		0.1901	0.0071	1.44	0.1623	0.0071	1.55	OE
6A4DWC		0.1747	-0.0083	-1.67	0.1453	-0.0099	-2.16	IC
6G3X3E		0.1848	0.0018	0.36	0.1581	0.0029	0.64	OE
6GC7RZ		0.1903	0.0073	1.48	0.1603	0.0051	1.12	AE
6X7JE9		0.1857	0.0027	0.54	0.1563	0.0011	0.24	OE
7KHFNA		0.1800	-0.0030	-0.60	0.1500	-0.0052	-1.14	OE
7Z77D6		0.1806	-0.0024	-0.47	0.1553	0.0001	0.03	OE
8DAL38		0.1760	-0.0070	-1.40	0.1453	-0.0099	-2.16	GD
8DP437		0.1797	-0.0033	-0.67	0.1527	-0.0025	-0.56	IC
8PL3Z4	*	0.1693	-0.0137	-2.74	0.1487	-0.0065	-1.43	OE
8QBM8V		0.1827	-0.0003	-0.06	0.1563	0.0011	0.24	IC
8QDCHK		0.1804	-0.0026	-0.52	0.1524	-0.0028	-0.61	OE
92J9GA		0.1823	-0.0007	-0.14	0.1548	-0.0004	-0.08	OE
9368K7		0.1873	0.0043	0.87	0.1570	0.0018	0.39	OE
96AQFT		0.1795	-0.0034	-0.69	0.1516	-0.0036	-0.79	OE
9KRL34		0.1810	-0.0020	-0.40	0.1523	-0.0029	-0.63	OE
9N2C3Y		0.1760	-0.0070	-1.40	0.1520	-0.0032	-0.70	OE
9T8Y8V		0.1879	0.0049	0.98	0.1614	0.0062	1.34	OE
AFUJCA		0.1937	0.0107	2.14	0.1607	0.0055	1.19	OE
AJCGBX		0.1823	-0.0007	-0.13	0.1540	-0.0012	-0.27	IC
ANPEK7		0.1790	-0.0040	-0.80	0.1487	-0.0065	-1.43	OE
B7JGQ9		0.1870	0.0040	0.81	0.1580	0.0028	0.61	OE
BF6LMM		0.1770	-0.0060	-1.20	0.1540	-0.0012	-0.27	GD
BJV76J		0.1853	0.0023	0.47	0.1583	0.0031	0.68	DR
BPYJV9		0.1810	-0.0020	-0.40	0.1537	-0.0015	-0.34	XX
C3BMBB		0.1790	-0.0040	-0.80	0.1530	-0.0022	-0.48	OE
C3VHJ4		0.1833	0.0003	0.07	0.1557	0.0005	0.10	OE
C7YZB7		0.1867	0.0037	0.74	0.1600	0.0048	1.04	XX
C92AR2		0.1807	-0.0023	-0.47	0.1507	-0.0045	-0.99	XX
C9VX7Q		0.1763	-0.0067	-1.34	0.1510	-0.0042	-0.92	OE
CGFRUA		0.1833	0.0003	0.06	0.1561	0.0009	0.19	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
CNG223		0.1870	0.0040	0.81	0.1587	0.0035	0.75	OE
DNCYXF	*	0.1973	0.0143	2.88	0.1690	0.0138	3.01	AE
DTBWJ7		0.1824	-0.0006	-0.12	0.1542	-0.0010	-0.22	OE
E7RNQ8		0.1900	0.0070	1.41	0.1600	0.0048	1.04	OE
EFDRHE		0.1820	-0.0010	-0.20	0.1550	-0.0002	-0.05	OE
EHGQRL		0.1800	-0.0030	-0.60	0.1500	-0.0052	-1.14	OE
EHK3JN		0.1797	-0.0033	-0.67	0.1520	-0.0032	-0.70	OE
EQBTX4		0.1720	-0.0110	-2.21	0.1430	-0.0122	-2.67	AE
EQVP6X	M	No Data Reported			0.1575	0.0023	0.50	XX
EVB7R9		0.1807	-0.0023	-0.47	0.1537	-0.0015	-0.34	XX
EXPUYY	X	0.1600	-0.0230	-4.62	0.1353	-0.0199	-4.34	XX
F7HQFN		0.1912	0.0082	1.65	0.1614	0.0062	1.36	OE
F8Y87U	*	0.1913	0.0083	1.66	0.1555	0.0003	0.07	OE
FJP23V	*	0.1863	0.0033	0.67	0.1520	-0.0032	-0.70	OE
FK2Z9Q		0.1825	-0.0004	-0.09	0.1568	0.0016	0.35	OE
FWW6KX		0.1813	-0.0017	-0.33	0.1550	-0.0002	-0.05	OE
GB9KTF		0.1895	0.0065	1.31	0.1647	0.0095	2.08	XX
GX94F7		0.1774	-0.0056	-1.11	0.1527	-0.0025	-0.55	OE
H8ETP2		0.1730	-0.0100	-2.00	0.1480	-0.0072	-1.58	GD
HAVWZY		0.1926	0.0096	1.94	0.1672	0.0120	2.62	OE
HEMZVX	*	0.1840	0.0010	0.20	0.1480	-0.0072	-1.58	GD
HJ7U9C		0.1838	0.0008	0.17	0.1593	0.0041	0.88	IC
HPEYXV		0.1773	-0.0057	-1.13	0.1530	-0.0022	-0.48	IC
HZXD2X		0.1793	-0.0037	-0.73	0.1547	-0.0005	-0.12	IC
J42BFP		0.1840	0.0010	0.20	0.1533	-0.0019	-0.41	OE
JVAZ49	X	0.1823	-0.0007	-0.13	0.1700	0.0148	3.23	OE
KVUVLN		0.1800	-0.0030	-0.60	0.1500	-0.0052	-1.14	GD
KYNUUR		0.1820	-0.0010	-0.19	0.1558	0.0006	0.13	OE
L4DWXP		0.1802	-0.0028	-0.57	0.1532	-0.0020	-0.45	OE
LCM4WE		0.1780	-0.0050	-1.00	0.1503	-0.0049	-1.07	OE
LH9VQ8	X	0.1979	0.0149	3.00	0.1713	0.0161	3.50	OE
LHKZXX		0.1763	-0.0067	-1.34	0.1497	-0.0055	-1.21	OE
LPRGUQ		0.1860	0.0030	0.61	0.1567	0.0015	0.32	OE
LWGTEM		0.1789	-0.0041	-0.83	0.1523	-0.0029	-0.64	XX
MF8EGP		0.1811	-0.0019	-0.37	0.1539	-0.0013	-0.28	IC
MMAGRH		0.1807	-0.0023	-0.47	0.1553	0.0001	0.03	IC
MMBWX9	X	0.1350	-0.0480	-9.63	0.1133	-0.0419	-9.14	OE
MMVDDB		0.1883	0.0053	1.07	0.1590	0.0038	0.83	OE
MTRTKP		0.1810	-0.0020	-0.40	0.1529	-0.0023	-0.51	OE
MZVQEM		0.1823	-0.0007	-0.13	0.1533	-0.0019	-0.41	IC
N4LPMP		0.1788	-0.0042	-0.84	0.1491	-0.0061	-1.34	OE
N6WKDM		0.1833	0.0003	0.07	0.1510	-0.0042	-0.92	XX
N98TBT		0.1800	-0.0030	-0.60	0.1520	-0.0032	-0.70	OE
NNEKLR	*	0.1863	0.0033	0.67	0.1667	0.0115	2.50	XX
NV63QA	*	0.1973	0.0143	2.88	0.1667	0.0115	2.50	OE
NW4EFF		0.1843	0.0013	0.27	0.1577	0.0025	0.54	OE
NWFF44		0.1835	0.0005	0.10	0.1548	-0.0004	-0.09	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
PLLWUN		0.1894	0.0064	1.29	0.1608	0.0056	1.22	OE
PP49KD		0.1823	-0.0007	-0.13	0.1533	-0.0019	-0.41	OE
Q3Z74H		0.1895	0.0065	1.31	0.1607	0.0055	1.21	OE
QAQ6NA	X	0.1800	-0.0030	-0.60	0.1700	0.0148	3.23	OE
QHHJCN		0.1823	-0.0007	-0.13	0.1543	-0.0009	-0.19	OE
R4UYA7		0.1873	0.0043	0.87	0.1580	0.0028	0.61	OE
RK4K9N		0.1730	-0.0100	-2.00	0.1480	-0.0072	-1.58	GD
RL4KCU		0.1847	0.0017	0.34	0.1583	0.0031	0.68	OE
RTE6XD		0.1890	0.0060	1.21	0.1570	0.0018	0.39	OE
RWAFT8		0.1910	0.0080	1.61	0.1637	0.0085	1.85	OE
T77H2L		0.1889	0.0059	1.19	0.1605	0.0053	1.15	OE
T8GVTH		0.1834	0.0004	0.08	0.1564	0.0012	0.25	WD
TBAXJB		0.1857	0.0027	0.54	0.1563	0.0011	0.24	OE
TBJKGB		0.1780	-0.0050	-1.00	0.1520	-0.0032	-0.70	OE
TUTQKL		0.1820	-0.0010	-0.20	0.1537	-0.0015	-0.34	OE
U24C8V	*	0.1753	-0.0077	-1.54	0.1563	0.0011	0.24	XX
U8T34Q		0.1797	-0.0033	-0.67	0.1550	-0.0002	-0.05	IC
UAXGZW		0.1902	0.0072	1.46	0.1646	0.0094	2.05	OE
UBMQWQ		0.1851	0.0021	0.42	0.1564	0.0012	0.27	OE
UGALR3	X	0.1630	-0.0200	-4.01	0.1413	-0.0139	-3.03	OE
UL9WYN		0.1903	0.0073	1.48	0.1620	0.0068	1.49	OE
UTMZCG		0.1824	-0.0006	-0.12	0.1552	0.0000	-0.01	IC
UU76KL		0.1950	0.0120	2.41	0.1653	0.0101	2.21	OE
UVT9XU		0.1805	-0.0025	-0.51	0.1536	-0.0016	-0.36	IC
VEG8FX		0.1824	-0.0006	-0.11	0.1563	0.0011	0.24	WD
VVCK47		0.1843	0.0013	0.26	0.1558	0.0006	0.13	OE
W4WWAY		0.1827	-0.0003	-0.06	0.1550	-0.0002	-0.05	OE
WBFPG9		0.1825	-0.0005	-0.10	0.1544	-0.0008	-0.19	IC
WBVPWR		0.1797	-0.0033	-0.67	0.1550	-0.0002	-0.05	IC
WC9EY6		0.1846	0.0016	0.33	0.1580	0.0028	0.61	OE
WJ79W3		0.1839	0.0009	0.19	0.1552	0.0000	0.00	OE
WU7DU6		0.1800	-0.0030	-0.60	0.1500	-0.0052	-1.14	OE
WUQD99		0.1753	-0.0077	-1.54	0.1467	-0.0085	-1.87	OE
WVL2MX		0.1833	0.0003	0.07	0.1553	0.0001	0.03	IC
X33VED		0.1810	-0.0020	-0.40	0.1553	0.0001	0.03	OE
XHJ87R	*	0.1771	-0.0059	-1.19	0.1561	0.0009	0.19	OE
XXLNHD		0.1804	-0.0026	-0.51	0.1527	-0.0025	-0.56	IC
YDJY24		0.1848	0.0018	0.37	0.1573	0.0021	0.46	AE
YK6BAJ		0.1810	-0.0020	-0.40	0.1540	-0.0012	-0.27	OE
YPTKHB		0.1803	-0.0027	-0.53	0.1510	-0.0042	-0.92	IC
YU3BH6		0.1852	0.0022	0.44	0.1554	0.0002	0.04	OE
Z4DTZE		0.1850	0.0020	0.40	0.1563	0.0011	0.24	OE
ZB8DWA		0.1802	-0.0028	-0.57	0.1494	-0.0058	-1.26	OE
ZLV7LD		0.1844	0.0014	0.28	0.1557	0.0005	0.11	OE
ZNUQ3H		0.1863	0.0033	0.66	0.1571	0.0019	0.40	OE
ZVRGAL	*	0.1700	-0.0130	-2.61	0.1423	-0.0129	-2.81	AA

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.1830	Percent	0.1552	Percent
Stnd Dev Btwn Labs	0.0050	Percent	0.0046	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 124 of 140 reporting participants

Key to Method Codes Reported by Participants

AA	Spectrometry - Atomic Absorption (AAS)	AE	Spectrometry - Atomic Emission (AES)
DR	Spectrometry - Direct Reading OE (DROES)	GD	Spectrometry - Glow Discharge (GDS)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	OE	Spectrometry - Optical Emission (OES)
WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)	XR	X-Ray Fluorescence - ED or WD not specified
XX	Please Indicate Method Used for Current Element		

Comments on Assigned Data Flags for Test #1605

38A46D (X) - Data for sample L86 are low.

EQVP6X (M) - Participant did not submit data for sample L85.

EXPUYY (X) - Data for both samples are low. Possible Systematic Error.

JVAZ49 (X) - Data for sample L86 are high.

LH9VQ8 (X) - Data for both samples are high. Possible Systematic Error.

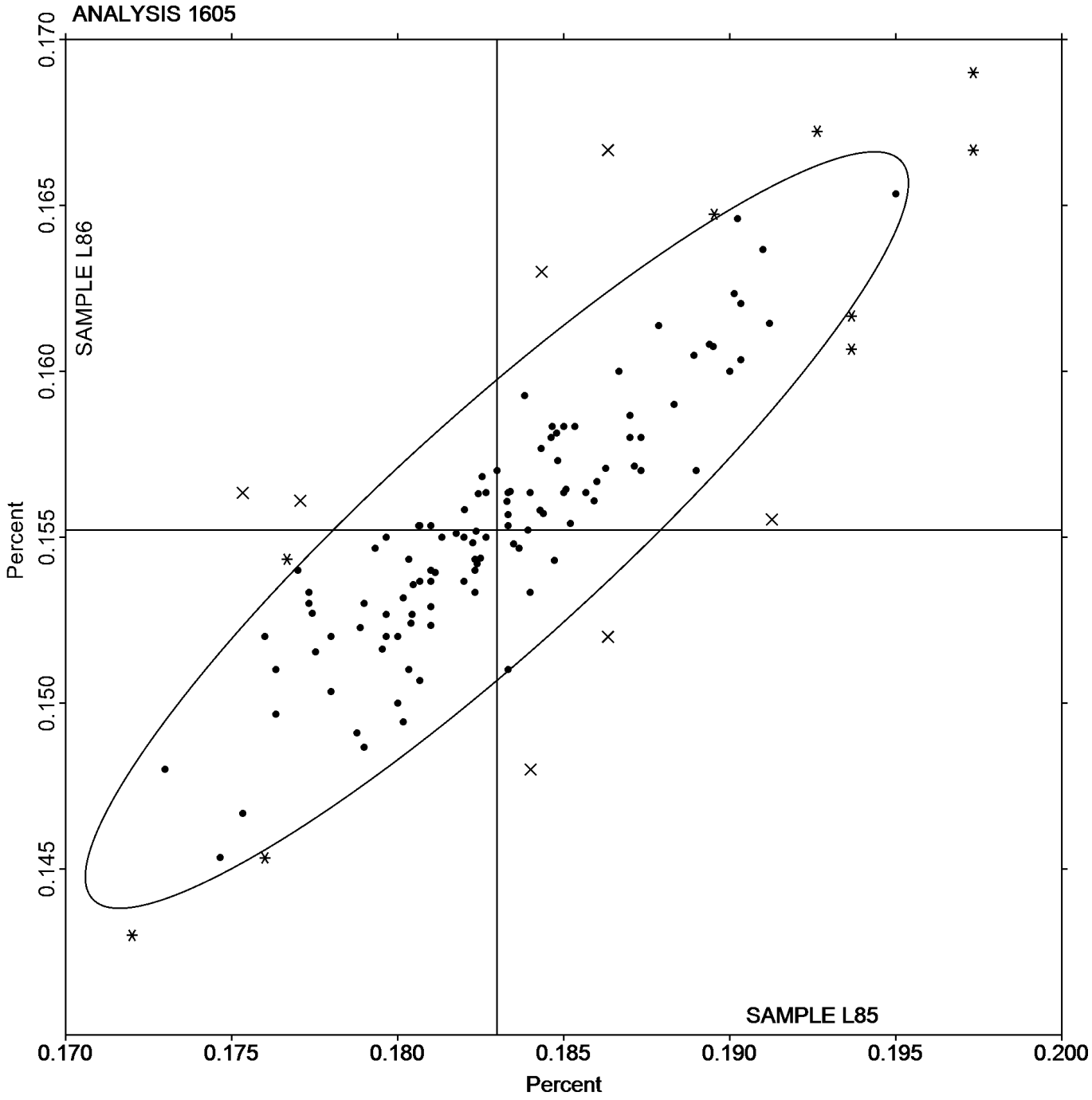
MMBWX9 (X) - Data for both samples are low. Possible Systematic Error.

QAQ6NA (X) - Data for sample L86 are high.

UGALR3 (X) - Data for both samples are low. Possible Systematic Error.

SAMPLE L85
0.1830 Percent

SAMPLE L86
0.1552 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.0687	0.0012	0.51	0.1233	0.0018	0.55	XX
29TD7T		0.0687	0.0012	0.51	0.1267	0.0051	1.60	OE
2LZGD9		0.0657	-0.0018	-0.79	0.1203	-0.0012	-0.39	XR
2T9K2N		0.0680	0.0005	0.22	0.1220	0.0004	0.14	OE
38A46D		0.0660	-0.0015	-0.64	0.1190	-0.0026	-0.80	OE
38JRVX		0.0693	0.0018	0.80	0.1243	0.0028	0.87	OE
3BM2EL		0.0680	0.0005	0.22	0.1210	-0.0006	-0.18	OE
3CQCZH		0.0679	0.0004	0.16	0.1233	0.0018	0.55	IC
3VRY33	X	0.0755	0.0080	3.46	0.1167	-0.0049	-1.54	OE
4CC7D7		0.0663	-0.0012	-0.50	0.1187	-0.0029	-0.91	OE
4D3ECA	X	0.0604	-0.0071	-3.09	0.1097	-0.0119	-3.73	OE
4JDH93		0.0646	-0.0029	-1.24	0.1170	-0.0046	-1.43	OE
4LX9HU		0.0664	-0.0011	-0.46	0.1204	-0.0012	-0.36	OE
4XN736		0.0714	0.0039	1.71	0.1267	0.0052	1.62	OE
4YGXDQ		0.0676	0.0001	0.04	0.1199	-0.0016	-0.51	IC
68P6EC	*	0.0712	0.0037	1.61	0.1198	-0.0018	-0.56	XX
6A4DWC	X	0.0663	-0.0012	-0.50	0.1078	-0.0138	-4.31	IC
6G3X3E		0.0625	-0.0050	-2.18	0.1159	-0.0056	-1.76	OE
6GC7RZ		0.0650	-0.0025	-1.09	0.1163	-0.0052	-1.64	AE
6X7JE9		0.0690	0.0015	0.66	0.1227	0.0011	0.35	OE
7KHFNA	X	0.0800	0.0125	5.43	0.1300	0.0084	2.64	OE
7Z77D6		0.0662	-0.0013	-0.54	0.1199	-0.0016	-0.51	OE
8DAL38		0.0647	-0.0028	-1.22	0.1213	-0.0002	-0.07	GD
8DP437		0.0663	-0.0012	-0.51	0.1183	-0.0032	-1.01	IC
8PL3Z4	X	0.0707	0.0032	1.38	0.1310	0.0094	2.96	OE
8QBM8V		0.0677	0.0002	0.08	0.1207	-0.0009	-0.28	IC
8QDCHK		0.0675	0.0000	0.02	0.1226	0.0010	0.31	OE
92J9GA		0.0671	-0.0004	-0.18	0.1220	0.0004	0.14	OE
9368K7		0.0653	-0.0022	-0.93	0.1213	-0.0002	-0.07	OE
96AQFT		0.0635	-0.0040	-1.72	0.1176	-0.0040	-1.25	OE
9KRL34		0.0650	-0.0025	-1.08	0.1213	-0.0002	-0.07	OE
9LVQAR		0.0724	0.0050	2.15	0.1232	0.0017	0.52	GD
9N2C3Y		0.0667	-0.0008	-0.36	0.1227	0.0011	0.35	OE
9T8Y8V		0.0675	0.0000	0.01	0.1221	0.0005	0.17	OE
AFUJCA	X	0.0767	0.0092	3.99	0.1320	0.0104	3.27	OE
AJCGBX		0.0670	-0.0005	-0.21	0.1230	0.0014	0.45	IC
ANPEK7		0.0677	0.0002	0.08	0.1230	0.0014	0.45	OE
B7JGQ9		0.0690	0.0015	0.66	0.1240	0.0024	0.76	OE
BF6LMM		0.0660	-0.0015	-0.64	0.1240	0.0024	0.76	GD
BJV76J		0.0687	0.0012	0.51	0.1230	0.0014	0.45	DR
BPYJV9		0.0667	-0.0008	-0.34	0.1227	0.0011	0.35	XX
C3BMBB		0.0660	-0.0015	-0.64	0.1220	0.0004	0.14	OE
C3VHJ4	X	0.0617	-0.0058	-2.53	0.1060	-0.0156	-4.88	OE
C7YZB7		0.0663	-0.0012	-0.50	0.1170	-0.0046	-1.43	XX
C92AR2		0.0623	-0.0052	-2.24	0.1163	-0.0052	-1.64	XX
C9VX7Q	*	0.0685	0.0010	0.43	0.1167	-0.0049	-1.53	OE
CGFRUA		0.0690	0.0015	0.66	0.1234	0.0018	0.58	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
CNG223		0.0690	0.0015	0.66	0.1253	0.0038	1.18	OE
DNCYXF		0.0643	-0.0032	-1.37	0.1190	-0.0026	-0.80	AE
DTBWJ7		0.0680	0.0005	0.21	0.1217	0.0001	0.03	OE
E7RNQ8		0.0700	0.0025	1.09	0.1200	-0.0016	-0.49	OE
EFDRHE		0.0680	0.0005	0.22	0.1207	-0.0009	-0.28	OE
EHGQRL		0.0663	-0.0012	-0.50	0.1200	-0.0016	-0.49	OE
EHK3JN		0.0703	0.0028	1.24	0.1277	0.0061	1.91	OE
EQBTX4		0.0690	0.0015	0.66	0.1233	0.0018	0.55	AE
EQVP6X	M	No Data Reported			0.1272	0.0056	1.76	XX
EVB7R9		0.0650	-0.0025	-1.08	0.1190	-0.0026	-0.80	XX
EXPUYY		0.0720	0.0045	1.96	0.1227	0.0011	0.35	XX
F7HQFN		0.0700	0.0025	1.09	0.1256	0.0040	1.27	OE
F8Y87U	X	0.1059	0.0384	16.66	0.1186	-0.0030	-0.93	OE
FJP23V		0.0687	0.0012	0.51	0.1170	-0.0046	-1.43	OE
FK2Z9Q		0.0676	0.0001	0.06	0.1271	0.0056	1.74	OE
FWW6KX		0.0647	-0.0028	-1.22	0.1203	-0.0012	-0.39	OE
GB9KTF		0.0700	0.0025	1.08	0.1276	0.0061	1.90	OE
GX94F7		0.0690	0.0015	0.64	0.1242	0.0026	0.82	OE
H8ETP2		0.0700	0.0025	1.11	0.1253	0.0038	1.18	GD
HAVWZY		0.0688	0.0013	0.59	0.1256	0.0040	1.27	OE
HEMZVX	X	0.0607	-0.0068	-2.95	0.1100	-0.0116	-3.62	GD
HJ7U9C		0.0672	-0.0003	-0.11	0.1225	0.0009	0.29	IC
HPEYXV		0.0687	0.0012	0.51	0.1253	0.0038	1.18	IC
HZXD2X	X	0.0613	-0.0062	-2.67	0.1210	-0.0006	-0.18	IC
J42BFP		0.0660	-0.0015	-0.64	0.1203	-0.0012	-0.39	OE
JVAZ49	X	0.0562	-0.0113	-4.91	0.1050	-0.0166	-5.19	OE
KVUVLN		0.0660	-0.0015	-0.64	0.1200	-0.0016	-0.49	GD
KYNUUR		0.0664	-0.0010	-0.45	0.1231	0.0015	0.48	OE
L4DWXP		0.0667	-0.0008	-0.36	0.1203	-0.0013	-0.40	OE
LCM4WE		0.0647	-0.0028	-1.22	0.1173	-0.0042	-1.33	OE
LH9VQ8	X	0.0501	-0.0174	-7.55	0.0496	-0.0719	-22.54	OE
LHKZXX		0.0647	-0.0028	-1.21	0.1173	-0.0042	-1.33	XX
LPRGUQ		0.0677	0.0002	0.08	0.1223	0.0008	0.24	OE
LWGTEM		0.0654	-0.0021	-0.89	0.1169	-0.0046	-1.46	XX
MF8EGP		0.0687	0.0012	0.54	0.1234	0.0019	0.59	WD
MMAGRH	X	0.0553	-0.0122	-5.28	0.1143	-0.0072	-2.27	IC
MMBWX9		0.0660	-0.0015	-0.64	0.1200	-0.0016	-0.49	OE
MMVDDB		0.0670	-0.0005	-0.21	0.1207	-0.0009	-0.28	IC
MTRTKP		0.0663	-0.0012	-0.50	0.1210	-0.0006	-0.18	OE
MZVQEM		0.0660	-0.0015	-0.64	0.1190	-0.0026	-0.80	IC
N4LPMP		0.0666	-0.0008	-0.37	0.1195	-0.0020	-0.63	OE
N6WKDM		0.0643	-0.0032	-1.37	0.1153	-0.0062	-1.95	XX
N98TBT		0.0687	0.0012	0.51	0.1210	-0.0006	-0.18	OE
NNEKLR	*	0.0673	-0.0002	-0.07	0.1140	-0.0076	-2.37	XX
NV63QA		0.0720	0.0045	1.95	0.1270	0.0054	1.70	OE
NW4EFF		0.0703	0.0028	1.21	0.1253	0.0038	1.18	OE
NWFF44		0.0668	-0.0007	-0.31	0.1215	0.0000	-0.01	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
PLLWUN		0.0620	-0.0055	-2.38	0.1181	-0.0035	-1.08	OE
PP49KD		0.0683	0.0008	0.37	0.1243	0.0028	0.87	OE
Q3Z74H		0.0676	0.0001	0.06	0.1204	-0.0011	-0.35	OE
QAQ6NA		0.0680	0.0005	0.22	0.1200	-0.0016	-0.49	OE
QHHJCN		0.0647	-0.0028	-1.22	0.1197	-0.0019	-0.59	OE
R4UYA7		0.0701	0.0026	1.15	0.1260	0.0044	1.39	OE
RK4K9N		0.0690	0.0015	0.66	0.1210	-0.0006	-0.18	GD
RL4KCU		0.0657	-0.0018	-0.79	0.1197	-0.0019	-0.59	OE
RTE6XD	X	0.0777	0.0102	4.45	0.1380	0.0164	5.15	OE
RWAFT8		0.0724	0.0049	2.15	0.1277	0.0061	1.91	OE
T77H2L		0.0690	0.0015	0.66	0.1247	0.0031	0.97	OE
T8GVTH		0.0696	0.0021	0.93	0.1185	-0.0031	-0.97	OE
TBAXJB		0.0640	-0.0035	-1.51	0.1183	-0.0032	-1.01	OE
TBJKGB		0.0710	0.0035	1.53	0.1230	0.0014	0.45	OE
TUTQKL		0.0690	0.0015	0.66	0.1250	0.0034	1.08	OE
U24C8V	X	0.0373	-0.0302	-13.09	0.0820	-0.0396	-12.40	XX
U8T34Q		0.0660	-0.0015	-0.64	0.1197	-0.0019	-0.59	IC
UAXGZW	X	0.0758	0.0083	3.61	0.1327	0.0111	3.49	OE
UBMQWQ		0.0726	0.0051	2.21	0.1280	0.0064	2.02	OE
UGALR3	X	0.0953	0.0278	12.09	0.0503	-0.0712	-22.32	OE
UL9WYN		0.0653	-0.0022	-0.95	0.1177	-0.0038	-1.20	OE
UTMZCG		0.0659	-0.0016	-0.70	0.1197	-0.0019	-0.58	IC
UU76KL		0.0680	0.0005	0.21	0.1200	-0.0016	-0.49	OE
UVT9XU		0.0671	-0.0004	-0.18	0.1217	0.0001	0.03	IC
VEG8FX		0.0687	0.0012	0.51	0.1215	-0.0001	-0.03	OE
VVCK47		0.0671	-0.0004	-0.18	0.1209	-0.0007	-0.22	OE
W4WWAY	*	0.0743	0.0068	2.97	0.1303	0.0088	2.75	OE
WBFPG9		0.0667	-0.0008	-0.36	0.1198	-0.0017	-0.54	IC
WBVPWR		0.0667	-0.0008	-0.36	0.1230	0.0014	0.45	IC
WC9EY6		0.0674	-0.0001	-0.04	0.1203	-0.0013	-0.41	OE
WJ79W3		0.0666	-0.0009	-0.40	0.1195	-0.0020	-0.64	OE
WU7DU6		0.0710	0.0035	1.53	0.1233	0.0018	0.55	OE
WUQD99		0.0623	-0.0052	-2.25	0.1170	-0.0045	-1.42	XX
WVL2MX		0.0669	-0.0006	-0.24	0.1203	-0.0012	-0.39	IC
X33VED		0.0670	-0.0005	-0.21	0.1207	-0.0009	-0.28	OE
XHJ87R		0.0657	-0.0018	-0.79	0.1170	-0.0046	-1.43	XX
XXLNHD		0.0680	0.0005	0.22	0.1206	-0.0010	-0.31	IC
YDJY24		0.0690	0.0015	0.66	0.1224	0.0009	0.27	AE
YK6BAJ		0.0690	0.0015	0.66	0.1220	0.0004	0.14	OE
YPTKHB		0.0667	-0.0008	-0.36	0.1190	-0.0026	-0.80	IC
YU3BH6		0.0690	0.0015	0.67	0.1252	0.0037	1.15	OE
ZB8DWA		0.0647	-0.0028	-1.22	0.1148	-0.0068	-2.13	OE
ZLV7LD		0.0679	0.0004	0.18	0.1207	-0.0009	-0.27	OE
ZNUQ3H		0.0693	0.0018	0.79	0.1276	0.0060	1.88	OE
ZVRGAL		0.0727	0.0052	2.25	0.1297	0.0081	2.54	AA

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.0675	Percent	0.1216	Percent
Stnd Dev Btwn Labs	0.0023	Percent	0.0032	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 119 of 139 reporting participants

Key to Method Codes Reported by Participants

AA	Spectrometry - Atomic Absorption (AAS)	AE	Spectrometry - Atomic Emission (AES)
DR	Spectrometry - Direct Reading OE (DROES)	GD	Spectrometry - Glow Discharge (GDS)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	OE	Spectrometry - Optical Emission (OES)
WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)	XR	X-Ray Fluorescence - ED or WD not specified
XX	Please Indicate Method Used for Current Element		

Comments on Assigned Data Flags for Test #1606

3VRY33 (X) - Data for sample L85 are high.

4D3ECA (X) - Data for both samples are low. Inconsistent within the determinations of sample L85.

6A4DWC (X) - Data for sample L86 are low. Inconsistent within the determinations of sample L86.

7KHFNA (X) - Data for sample L85 are high.

8PL3Z4 (X) - Data for sample L86 are high. Inconsistent within the determinations of sample L85.

AFUJCA (X) - Data for both samples are high.

C3VHJ4 (X) - Data for sample L86 are low.

EQVP6X (M) - Participant did not submit data for sample L85.

F8Y87U (X) - Data for sample L85 are high.

HEMZVX (X) - Data for both samples are low.

HZXD2X (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L85.

JVAZ49 (X) - Data for both samples are low.

LH9VQ8 (X) - Data for both samples are low.

MMAGRH (X) - Data for sample L85 are low.

RTE6XD (X) - Data for both samples are high.

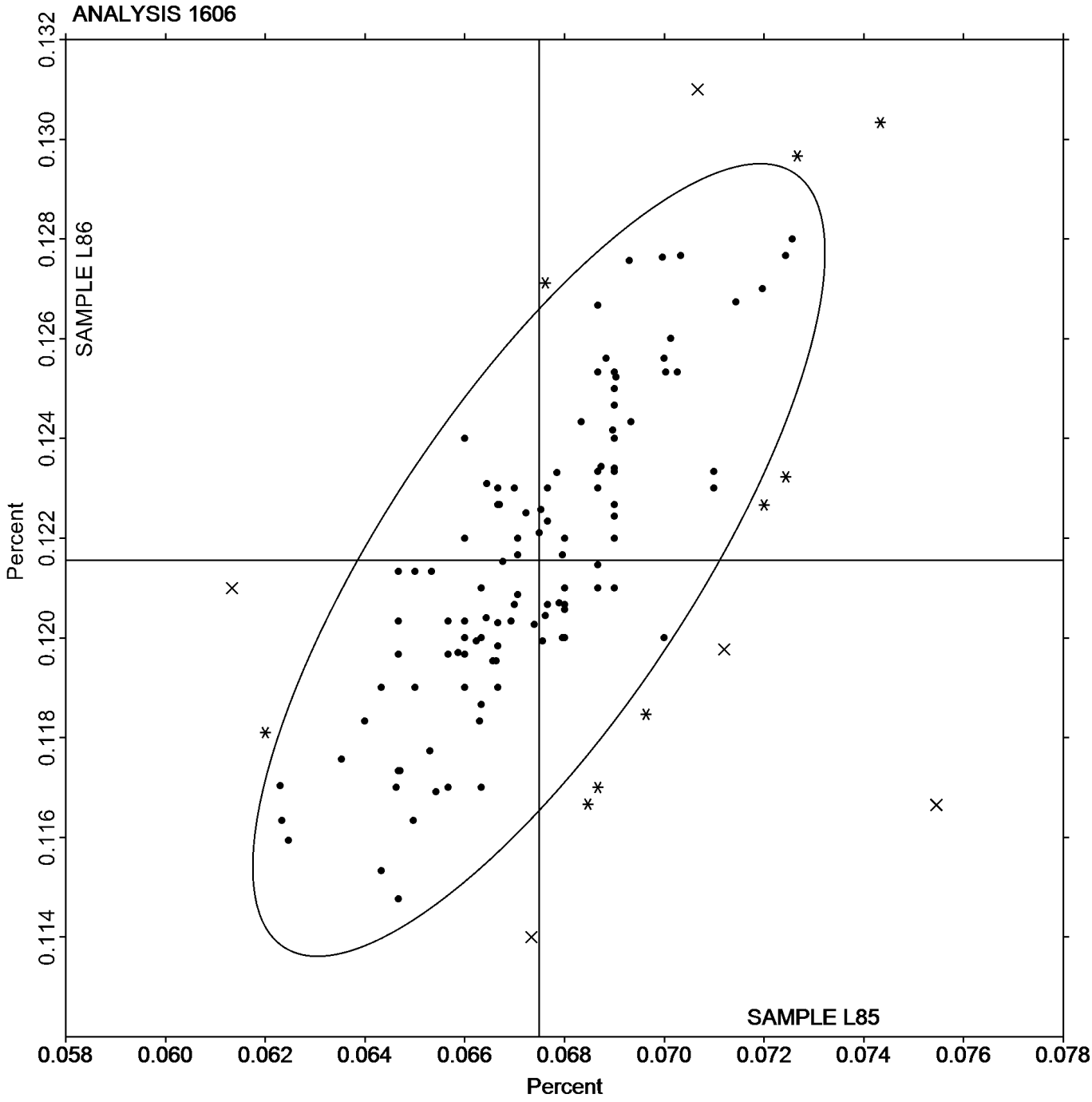
U24C8V (X) - Data for both samples are low.

UAXGZW (X) - Data for both samples are high.

UGALR3 (X) - Data for sample L85 are high and data for sample L86 are low.

SAMPLE L85
0.0675 Percent

SAMPLE L86
0.1216 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.9877	0.0010	0.06	0.9690	0.0032	0.21	XX
29TD7T		0.9880	0.0013	0.08	0.9670	0.0012	0.08	OE
2LZGD9		0.9893	0.0026	0.16	0.9717	0.0059	0.39	XR
2T9K2N		0.9800	-0.0067	-0.40	0.9643	-0.0014	-0.09	OE
38A46D	X	0.9133	-0.0734	-4.35	0.8900	-0.0758	-5.01	OE
38JRVX		0.9990	0.0123	0.73	0.9717	0.0059	0.39	OE
3BM2EL		0.9953	0.0086	0.51	0.9830	0.0172	1.14	OE
3CQCZH		0.9850	-0.0017	-0.10	0.9661	0.0003	0.02	IC
3VRY33		0.9972	0.0105	0.63	0.9733	0.0076	0.50	OE
4CC7D7		0.9690	-0.0177	-1.05	0.9483	-0.0174	-1.15	OE
4D3ECA		0.9500	-0.0367	-2.18	0.9453	-0.0204	-1.35	OE
4JDH93		0.9877	0.0010	0.06	0.9767	0.0109	0.72	OE
4L2RKP		0.9977	0.0110	0.65	0.9743	0.0086	0.57	OE
4LX9HU		0.9775	-0.0092	-0.55	0.9496	-0.0161	-1.07	OE
4XN736		0.9796	-0.0071	-0.42	0.9535	-0.0122	-0.81	OE
4YGXDQ		0.9916	0.0049	0.29	0.9734	0.0077	0.51	IC
68P6EC		0.9935	0.0068	0.40	0.9662	0.0005	0.03	OE
6A4DWC	*	0.9797	-0.0070	-0.42	0.9850	0.0192	1.27	IC
6G3X3E		0.9523	-0.0344	-2.04	0.9400	-0.0258	-1.71	OE
6GC7RZ		1.017	0.0300	1.78	0.9870	0.0212	1.41	AE
6X7JE9		0.9957	0.0090	0.53	0.9737	0.0079	0.52	OE
7KHFNA		0.9900	0.0033	0.20	0.9667	0.0009	0.06	OE
7Z77D6		0.9836	-0.0031	-0.18	0.9655	-0.0003	-0.02	OE
8DAL38		0.9917	0.0050	0.29	0.9643	-0.0014	-0.09	GD
8DP437		0.9800	-0.0067	-0.40	0.9590	-0.0068	-0.45	IC
8PL3Z4		1.017	0.0300	1.78	1.000	0.0342	2.27	XX
8QBM8V		0.9913	0.0046	0.28	0.9713	0.0056	0.37	IC
8QDCHK		0.9983	0.0116	0.69	0.9678	0.0020	0.14	OE
92J9GA		0.9912	0.0045	0.27	0.9725	0.0068	0.45	OE
9368K7		0.9890	0.0023	0.14	0.9660	0.0002	0.02	OE
96AQFT		0.9592	-0.0275	-1.63	0.9462	-0.0196	-1.30	OE
9KRL34		0.9767	-0.0100	-0.60	0.9580	-0.0078	-0.51	XX
9LVQAR		0.9436	-0.0431	-2.56	0.9350	-0.0308	-2.04	GD
9N2C3Y		1.012	0.0253	1.50	0.9940	0.0282	1.87	OE
9T8Y8V		1.003	0.0164	0.97	0.9826	0.0168	1.11	OE
AFUJCA		0.9947	0.0080	0.47	0.9637	-0.0021	-0.14	OE
AJCGBX		0.9873	0.0006	0.04	0.9657	-0.0001	-0.01	IC
ANPEK7		0.9757	-0.0110	-0.65	0.9573	-0.0084	-0.56	OE
B7JGQ9		0.9720	-0.0147	-0.87	0.9540	-0.0118	-0.78	OE
BF6LMM		0.9880	0.0013	0.08	0.9640	-0.0018	-0.12	GD
BJV76J		0.9950	0.0083	0.49	0.9767	0.0109	0.72	DR
BPYJV9		0.9903	0.0036	0.22	0.9687	0.0029	0.19	XX
C3BMBB		0.9680	-0.0187	-1.11	0.9500	-0.0158	-1.04	XX
C3VHJ4		0.9900	0.0033	0.20	0.9567	-0.0091	-0.60	OE
C7YZB7	*	0.9807	-0.0060	-0.36	0.9887	0.0229	1.52	XX
C92AR2		0.9850	-0.0017	-0.10	0.9667	0.0009	0.06	XX
C9VX7Q	X	0.9017	-0.0850	-5.05	0.8897	-0.0761	-5.03	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
CGFRUA		0.9736	-0.0131	-0.78	0.9553	-0.0105	-0.69	OE
CNG223		0.9717	-0.0150	-0.89	0.9530	-0.0128	-0.84	OE
DNCYXF		1.002	0.0156	0.93	0.9783	0.0126	0.83	AE
DTBWJ7		1.000	0.0135	0.80	0.9758	0.0100	0.66	OE
E7RNQ8		1.007	0.0200	1.18	0.9800	0.0142	0.94	OE
EFDRHE		0.9877	0.0010	0.06	0.9670	0.0012	0.08	OE
EHGQRL		0.9933	0.0066	0.39	0.9600	-0.0058	-0.38	OE
EHK3JN		0.9837	-0.0030	-0.18	0.9570	-0.0088	-0.58	OE
EQBTX4		0.9733	-0.0134	-0.79	0.9500	-0.0158	-1.04	AE
EQVP6X	M	No Data Reported			0.9834	0.0176	1.17	XX
EVB7R9		0.9723	-0.0144	-0.85	0.9477	-0.0181	-1.20	XX
EXPUYY		1.003	0.0166	0.99	0.9767	0.0109	0.72	XX
F7HQFN	*	0.9781	-0.0086	-0.51	0.9339	-0.0318	-2.11	OE
F8Y87U		0.9931	0.0064	0.38	0.9717	0.0060	0.40	OE
FJP23V		0.9833	-0.0034	-0.20	0.9600	-0.0058	-0.38	OE
FK2Z9Q		0.9844	-0.0023	-0.14	0.9679	0.0022	0.14	OE
GB9KTF		0.9603	-0.0264	-1.57	0.9395	-0.0263	-1.74	OE
GX94F7		0.9823	-0.0044	-0.26	0.9647	-0.0011	-0.07	OE
H8ETP2		1.027	0.0400	2.37	0.9973	0.0316	2.09	GD
HAVWZY		1.004	0.0173	1.03	0.9837	0.0179	1.18	OE
HEMZVX		1.020	0.0333	1.98	0.9970	0.0312	2.07	GD
HJ7U9C		0.9937	0.0070	0.41	0.9688	0.0031	0.20	IC
HPEYXV		0.9947	0.0080	0.47	0.9797	0.0139	0.92	IC
HZXD2X		0.9900	0.0033	0.20	0.9707	0.0049	0.32	IC
J42BFP		0.9750	-0.0117	-0.69	0.9547	-0.0111	-0.73	OE
JVAZ49		0.9923	0.0056	0.33	0.9750	0.0092	0.61	OE
KVUVLN	*	0.9400	-0.0467	-2.77	0.9200	-0.0458	-3.03	GD
KYNUUR		0.9743	-0.0124	-0.73	0.9502	-0.0156	-1.03	OE
L4DWXP		1.005	0.0183	1.08	0.9805	0.0148	0.98	OE
LCM4WE		0.9797	-0.0070	-0.42	0.9550	-0.0108	-0.71	OE
LH9VQ8	X	1.050	0.0633	3.76	1.033	0.0672	4.45	OE
LHKZXX		0.9880	0.0013	0.08	0.9647	-0.0011	-0.07	OE
LPRGUQ		0.9937	0.0070	0.41	0.9693	0.0036	0.24	OE
LWGTEM		1.009	0.0218	1.30	0.9881	0.0223	1.48	XX
MF8EGP		1.012	0.0252	1.49	0.9788	0.0130	0.86	IC
MMAGRH		0.9730	-0.0137	-0.81	0.9557	-0.0101	-0.67	IC
MMBWX9		0.9950	0.0083	0.49	0.9603	-0.0054	-0.36	OE
MMVDDB		1.006	0.0190	1.13	0.9830	0.0172	1.14	OE
MTRTKP		0.9907	0.0040	0.24	0.9710	0.0052	0.35	OE
MZVQEM		0.9927	0.0060	0.35	0.9753	0.0096	0.63	IC
N4LPMP		1.013	0.0266	1.58	0.9902	0.0244	1.61	OE
N6WKDM	*	1.020	0.0333	1.98	0.9720	0.0062	0.41	XX
NNEKLR	X	1.035	0.0480	2.85	0.9943	0.0286	1.89	XX
NV63QA		0.9507	-0.0360	-2.14	0.9287	-0.0371	-2.45	OE
NW4EFF		1.010	0.0233	1.38	0.9787	0.0129	0.85	OE
NWFF44		0.9871	0.0004	0.02	0.9648	-0.0010	-0.06	OE
PLLWUN		0.9548	-0.0319	-1.89	0.9410	-0.0248	-1.64	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
PP49KD		0.9677	-0.0190	-1.13	0.9440	-0.0218	-1.44	OE
Q3Z74H		0.9845	-0.0022	-0.13	0.9594	-0.0064	-0.42	OE
QAQ6NA	X	0.3900	-0.5967	-35.41	0.3667	-0.5991	-39.64	OE
QHHJCN		0.9940	0.0073	0.43	0.9713	0.0056	0.37	OE
R4UYA7		1.013	0.0266	1.58	0.9890	0.0232	1.54	OE
RK4K9N		0.9420	-0.0447	-2.65	0.9290	-0.0368	-2.43	GD
RL4KCU		0.9827	-0.0040	-0.24	0.9647	-0.0011	-0.07	OE
RTE6XD	X	0.8853	-0.1014	-6.01	0.8727	-0.0931	-6.16	OE
RWAFT8		0.9797	-0.0070	-0.42	0.9617	-0.0041	-0.27	XX
T77H2L		0.9449	-0.0418	-2.48	0.9301	-0.0357	-2.36	OE
T8GVTH		0.9964	0.0097	0.58	0.9745	0.0087	0.58	OE
TBAXJB		0.9917	0.0050	0.29	0.9643	-0.0014	-0.09	OE
TBJKGB		0.9950	0.0083	0.49	0.9770	0.0112	0.74	OE
TUTQKL		0.9723	-0.0144	-0.85	0.9390	-0.0268	-1.77	OE
U24C8V	X	0.9323	-0.0544	-3.23	0.9097	-0.0561	-3.71	XX
U8T34Q		0.9790	-0.0077	-0.46	0.9610	-0.0048	-0.31	IC
UAXGZW		0.9597	-0.0270	-1.60	0.9537	-0.0121	-0.80	OE
UBMQWQ		0.9728	-0.0139	-0.82	0.9627	-0.0031	-0.20	OE
UGALR3	X	0.9107	-0.0760	-4.51	0.8913	-0.0744	-4.92	OE
UL9WYN		0.9965	0.0098	0.58	0.9753	0.0095	0.63	OE
UTMZCG		0.9863	-0.0004	-0.03	0.9658	0.0000	0.00	IC
UU76KL		0.9753	-0.0114	-0.67	0.9530	-0.0128	-0.84	OE
UVT9XU		0.9815	-0.0052	-0.31	0.9719	0.0061	0.40	IC
VEG8FX		0.9911	0.0044	0.26	0.9722	0.0064	0.43	WD
VVCK47		0.9833	-0.0034	-0.20	0.9590	-0.0068	-0.45	OE
W4WWAY		0.9923	0.0056	0.33	0.9653	-0.0004	-0.03	OE
WBFPG9		1.000	0.0133	0.79	0.9793	0.0136	0.90	IC
WBVPWR		0.9950	0.0083	0.49	0.9820	0.0162	1.07	IC
WC9EY6		0.9966	0.0099	0.59	0.9677	0.0019	0.13	OE
WJ79W3		0.9584	-0.0283	-1.68	0.9412	-0.0246	-1.62	OE
WU7DU6		0.9700	-0.0167	-0.99	0.9500	-0.0158	-1.04	OE
WUQD99		0.9718	-0.0149	-0.89	0.9487	-0.0171	-1.13	OE
WVL2MX		0.9867	0.0000	0.00	0.9630	-0.0028	-0.18	IC
X33VED		0.9847	-0.0020	-0.12	0.9667	0.0009	0.06	OE
XHJ87R		0.9773	-0.0094	-0.56	0.9720	0.0062	0.41	OE
XXLNHD		1.003	0.0167	0.99	0.9792	0.0134	0.89	IC
YDJY24		0.9794	-0.0073	-0.43	0.9680	0.0023	0.15	AE
YK6BAJ	X	0.9280	-0.0587	-3.48	0.9090	-0.0568	-3.76	OE
YPTKHB		0.9930	0.0063	0.37	0.9733	0.0076	0.50	IC
YU3BH6		0.9857	-0.0010	-0.06	0.9669	0.0011	0.08	OE
Z4DTZE		1.006	0.0196	1.17	0.9833	0.0176	1.16	OE
ZB8DWA	X	0.9399	-0.0468	-2.77	0.9108	-0.0550	-3.64	OE
ZLV7LD		1.022	0.0357	2.12	0.9980	0.0322	2.13	OE
ZNUQ3H		0.9903	0.0036	0.22	0.9696	0.0038	0.25	OE
ZVRGAL		1.001	0.0143	0.85	0.9883	0.0226	1.49	AA

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.9867	Percent	0.9658	Percent
Stnd Dev Btwn Labs	0.0169	Percent	0.0151	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 124 of 139 reporting participants

Key to Method Codes Reported by Participants

AA	Spectrometry - Atomic Absorption (AAS)	AE	Spectrometry - Atomic Emission (AES)
DR	Spectrometry - Direct Reading OE (DROES)	GD	Spectrometry - Glow Discharge (GDS)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	OE	Spectrometry - Optical Emission (OES)
WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)	XR	X-Ray Fluorescence - ED or WD not specified
XX	Please Indicate Method Used for Current Element		

Comments on Assigned Data Flags for Test #1607

38A46D (X) - Data for both samples are low. Possible Systematic Error.

C9VX7Q (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample L86.

EQVP6X (M) - Participant did not submit data for sample L85.

LH9VQ8 (X) - Data for both samples are high. Possible Systematic Error.

NNEKLR (X) - Data for sample L85 are high.

QAQ6NA (X) - Data for both samples are extremely low. Possible Systematic Error.

RTE6XD (X) - Data for both samples are low. Possible Systematic Error.

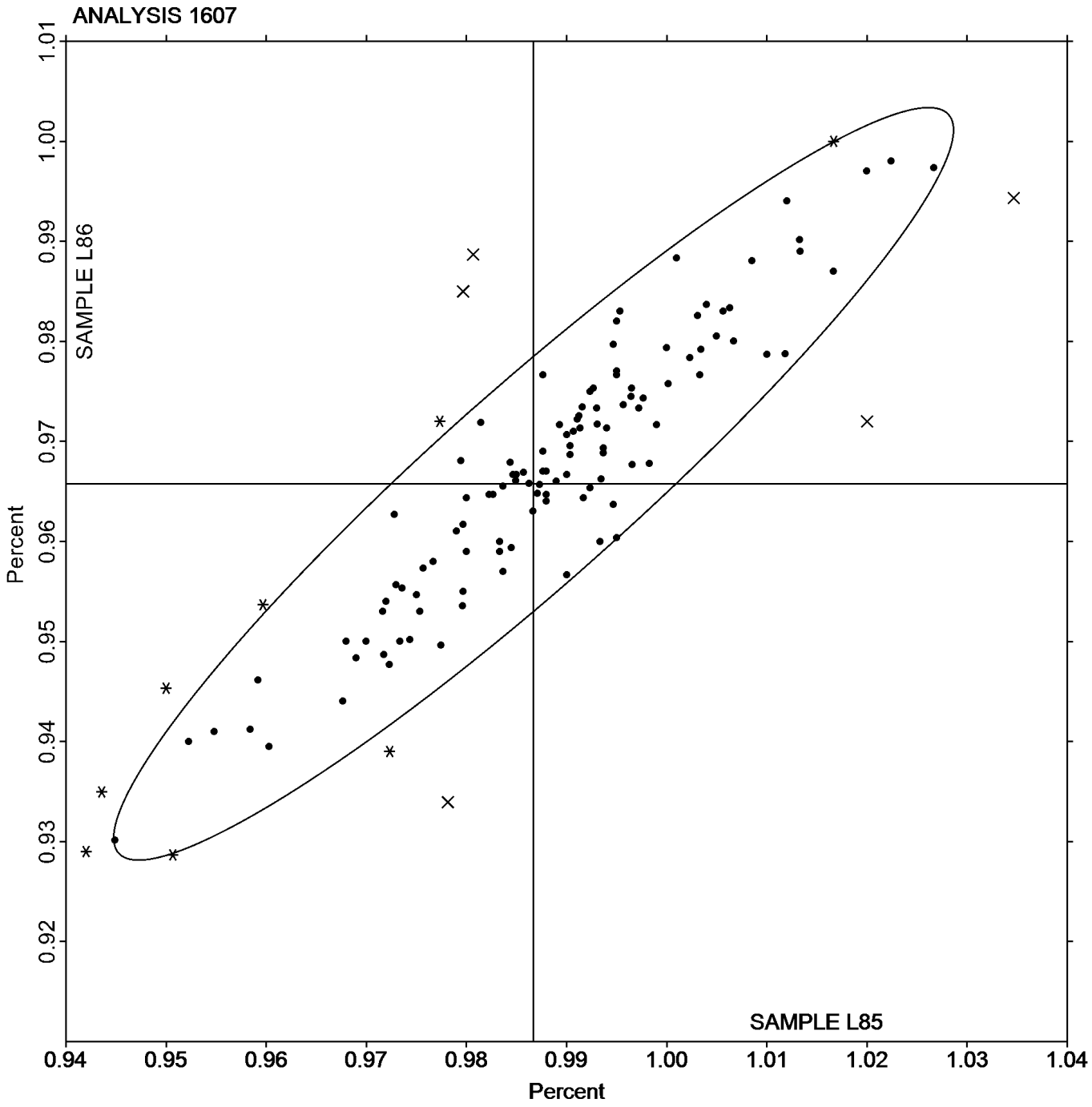
U24C8V (X) - Data for both samples are low. Possible Systematic Error.

UGALR3 (X) - Data for both samples are low. Possible Systematic Error.

YK6BAJ (X) - Data for both samples are low. Possible Systematic Error.

ZB8DWA (X) - Data for both samples are low. Possible Systematic Error.

SAMPLE L85	SAMPLE L86
0.9867 Percent	0.9658 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
23TXJ7		0.1863	0.0013	0.26	0.2113	0.0021	0.41	XX
29TD7T		0.1797	-0.0054	-1.12	0.2013	-0.0079	-1.54	OE
2LZGD9		0.1857	0.0006	0.12	0.2103	0.0011	0.22	XR
2T9K2N		0.1860	0.0009	0.19	0.2093	0.0001	0.02	OE
38A46D		0.1847	-0.0004	-0.09	0.2100	0.0008	0.15	OE
38JRVX		0.1980	0.0129	2.69	0.2203	0.0111	2.17	OE
3BM2EL		0.1847	-0.0004	-0.09	0.2100	0.0008	0.15	OE
3CQCZH		0.1844	-0.0007	-0.14	0.2094	0.0001	0.03	XX
3VRY33		0.1874	0.0024	0.49	0.2105	0.0012	0.24	OE
4CC7D7		0.1860	0.0009	0.19	0.2100	0.0008	0.15	OE
4D3ECA	*	0.1733	-0.0117	-2.44	0.2053	-0.0039	-0.76	OE
4JDH93		0.1813	-0.0037	-0.78	0.2063	-0.0029	-0.57	OE
4LX9HU		0.1929	0.0078	1.62	0.2189	0.0097	1.89	OE
4XN736		0.1835	-0.0015	-0.32	0.2071	-0.0021	-0.41	OE
4YGXDQ		0.1869	0.0019	0.39	0.2112	0.0019	0.38	IC
68P6EC	*	0.1963	0.0112	2.33	0.2219	0.0127	2.49	OE
6A4DWC		0.1897	0.0046	0.95	0.2097	0.0004	0.09	IC
6G3X3E		0.1947	0.0097	2.01	0.2182	0.0090	1.76	OE
6GC7RZ	X	0.1337	-0.0514	-10.69	0.1507	-0.0586	-11.46	AE
6X7JE9		0.1890	0.0039	0.82	0.2153	0.0061	1.20	OE
7KHFNA		0.1900	0.0049	1.02	0.2100	0.0008	0.15	OE
7Z77D6		0.1837	-0.0014	-0.29	0.2111	0.0019	0.37	OE
8DAL38		0.1837	-0.0014	-0.29	0.2087	-0.0006	-0.11	GD
8DP437		0.1848	-0.0002	-0.05	0.2080	-0.0012	-0.24	IC
8PL3Z4		0.1793	-0.0057	-1.19	0.2033	-0.0059	-1.15	OE
8QBM8V		0.1837	-0.0014	-0.29	0.2083	-0.0009	-0.17	IC
8QDCHK		0.1846	-0.0005	-0.11	0.2064	-0.0028	-0.55	OE
92J9GA		0.1871	0.0020	0.42	0.2133	0.0041	0.80	OE
9368K7		0.1877	0.0026	0.54	0.2120	0.0028	0.54	OE
96AQFT		0.1866	0.0015	0.31	0.2133	0.0041	0.80	OE
9KRL34		0.1850	-0.0001	-0.02	0.2090	-0.0002	-0.04	OE
9LVQAR	*	0.1712	-0.0139	-2.89	0.1981	-0.0112	-2.19	GD
9N2C3Y	*	0.1800	-0.0051	-1.06	0.1990	-0.0102	-2.00	OE
9T8Y8V		0.1884	0.0033	0.69	0.2111	0.0018	0.36	OE
AFUJCA		0.1897	0.0046	0.95	0.2110	0.0018	0.35	OE
AJCGBX		0.1927	0.0076	1.58	0.2117	0.0024	0.48	IC
ANPEK7		0.1817	-0.0034	-0.71	0.2060	-0.0032	-0.63	OE
B7JGQ9		0.1870	0.0019	0.40	0.2110	0.0018	0.35	OE
BF6LMM		0.1860	0.0009	0.19	0.2160	0.0068	1.33	GD
BJV76J		0.1750	-0.0101	-2.10	0.2013	-0.0079	-1.54	DR
BPYJV9		0.1917	0.0066	1.37	0.2180	0.0088	1.72	XX
C3BMBB		0.1720	-0.0131	-2.72	0.1960	-0.0132	-2.59	OE
C3VHJ4		0.1820	-0.0031	-0.64	0.2017	-0.0076	-1.48	OE
C7YZB7		0.1840	-0.0011	-0.22	0.2070	-0.0022	-0.44	XX
C92AR2		0.1783	-0.0067	-1.40	0.2033	-0.0059	-1.15	XX
C9VX7Q		0.1883	0.0033	0.68	0.2140	0.0048	0.93	OE
CGFRUA		0.1906	0.0056	1.16	0.2149	0.0057	1.11	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
CNG223		0.1863	0.0013	0.26	0.2113	0.0021	0.41	OE
DNCYXF		0.1827	-0.0024	-0.50	0.2140	0.0048	0.93	AE
DTBWJ7	*	0.1736	-0.0115	-2.39	0.1941	-0.0151	-2.96	OE
E7RNQ8		0.1900	0.0049	1.02	0.2100	0.0008	0.15	OE
EFDRHE		0.1803	-0.0047	-0.99	0.2057	-0.0036	-0.70	OE
EHGQRL		0.1800	-0.0051	-1.06	0.2033	-0.0059	-1.15	OE
EHK3JN		0.1813	-0.0037	-0.78	0.2063	-0.0029	-0.57	OE
EQBTX4		0.1867	0.0016	0.33	0.2100	0.0008	0.15	AE
EQVP6X	M	No Data Reported			0.2167	0.0075	1.46	XX
EXPUYY		0.1830	-0.0021	-0.43	0.2067	-0.0026	-0.50	XX
F7HQFN		0.1844	-0.0007	-0.15	0.2070	-0.0022	-0.44	OE
F8Y87U		0.1847	-0.0004	-0.09	0.2128	0.0036	0.71	OE
FJP23V		0.1867	0.0016	0.33	0.2107	0.0014	0.28	OE
FK2Z9Q		0.1823	-0.0027	-0.57	0.2091	-0.0001	-0.03	OE
FWW6KX		0.1873	0.0023	0.47	0.2103	0.0011	0.22	OE
GB9KTF		0.1870	0.0019	0.39	0.2122	0.0030	0.58	OE
GX94F7		0.1837	-0.0014	-0.29	0.2077	-0.0016	-0.30	OE
H8ETP2		0.1880	0.0029	0.61	0.2117	0.0024	0.48	GD
HAVWZY		0.1949	0.0098	2.04	0.2168	0.0076	1.48	OE
HEMZVX		0.1800	-0.0051	-1.06	0.2070	-0.0022	-0.44	GD
HJ7U9C		0.1833	-0.0017	-0.36	0.2099	0.0007	0.13	IC
HPEYXV		0.1910	0.0059	1.23	0.2183	0.0091	1.78	IC
HZXD2X		0.1823	-0.0027	-0.57	0.2087	-0.0006	-0.11	IC
J42BFP		0.1753	-0.0097	-2.03	0.1990	-0.0102	-2.00	OE
JVAZ49		0.1877	0.0026	0.54	0.2107	0.0014	0.28	OE
KVUVLN		0.1800	-0.0051	-1.06	0.2000	-0.0092	-1.80	GD
KYNUUR		0.1809	-0.0042	-0.87	0.2042	-0.0050	-0.98	OE
L4DWXP		0.1872	0.0021	0.44	0.2097	0.0005	0.09	OE
LCM4WE		0.1913	0.0063	1.30	0.2173	0.0081	1.59	OE
LH9VQ8	X	0.1763	-0.0088	-1.83	0.1597	-0.0495	-9.69	OE
LHKZXX		0.1910	0.0059	1.23	0.2173	0.0081	1.59	OE
LPRGUQ		0.1853	0.0003	0.05	0.2090	-0.0002	-0.04	OE
LWGTEM		0.1859	0.0008	0.17	0.2052	-0.0040	-0.78	XX
MF8EGP		0.1879	0.0028	0.58	0.2066	-0.0026	-0.51	IC
MMAGRH		0.1813	-0.0037	-0.78	0.2040	-0.0052	-1.02	IC
MMBWX9		0.1827	-0.0024	-0.50	0.2040	-0.0052	-1.02	OE
MMVDDB		0.1880	0.0029	0.61	0.2080	-0.0012	-0.24	OE
MTRTKP		0.1813	-0.0037	-0.78	0.2043	-0.0049	-0.96	OE
MZVQEM		0.1860	0.0009	0.19	0.2097	0.0004	0.09	IC
N4LPMP		0.1954	0.0103	2.14	0.2221	0.0128	2.51	OE
N6WKDM		0.1823	-0.0027	-0.57	0.2077	-0.0016	-0.30	XX
N98TBT		0.1817	-0.0034	-0.71	0.2053	-0.0039	-0.76	OE
NNEKLR		0.1917	0.0066	1.37	0.2127	0.0034	0.67	XX
NV63QA	X	0.2143	0.0293	6.08	0.1903	-0.0189	-3.70	OE
NW4EFF		0.1910	0.0059	1.23	0.2133	0.0041	0.80	OE
NWFF44		0.1856	0.0005	0.11	0.2083	-0.0010	-0.19	OE
PLLWUN		0.1857	0.0006	0.13	0.2114	0.0022	0.43	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
PP49KD		0.1840	-0.0011	-0.22	0.2103	0.0011	0.22	OE
Q3Z74H		0.1865	0.0015	0.30	0.2112	0.0020	0.39	OE
QAQ6NA		0.1800	-0.0051	-1.06	0.2100	0.0008	0.15	OE
QHHJCN		0.1757	-0.0094	-1.96	0.2017	-0.0076	-1.48	OE
R4UYA7		0.1850	-0.0001	-0.02	0.2090	-0.0002	-0.04	OE
RK4K9N		0.1880	0.0029	0.61	0.2100	0.0008	0.15	GD
RL4KCU		0.1833	-0.0017	-0.36	0.2097	0.0004	0.09	OE
RTE6XD		0.1877	0.0026	0.54	0.2147	0.0054	1.06	OE
RWAFT8		0.1867	0.0016	0.33	0.2093	0.0001	0.02	OE
T77H2L		0.1843	-0.0007	-0.15	0.2080	-0.0012	-0.24	OE
T8GVTH		0.1846	-0.0005	-0.10	0.2084	-0.0008	-0.15	OE
TBAXJB		0.1890	0.0039	0.82	0.2117	0.0024	0.48	OE
TBJKGB		0.1820	-0.0031	-0.64	0.2060	-0.0032	-0.63	OE
TUTQKL		0.1807	-0.0044	-0.92	0.2067	-0.0026	-0.50	OE
U24C8V		0.1733	-0.0117	-2.44	0.1960	-0.0132	-2.59	XX
U8T34Q		0.1793	-0.0057	-1.19	0.2050	-0.0042	-0.83	IC
UAXGZW		0.1798	-0.0053	-1.10	0.2085	-0.0007	-0.14	OE
UBMQWQ		0.1811	-0.0040	-0.83	0.2041	-0.0052	-1.01	OE
UGALR3	X	0.1633	-0.0217	-4.52	0.1840	-0.0252	-4.93	OE
UL9WYN		0.1842	-0.0009	-0.18	0.2105	0.0012	0.24	OE
UTMZCG		0.1865	0.0014	0.30	0.2110	0.0018	0.35	IC
UU76KL		0.1883	0.0033	0.68	0.2127	0.0034	0.67	OE
UVT9XU		0.1828	-0.0023	-0.48	0.2108	0.0016	0.31	IC
VEG8FX		0.1870	0.0019	0.40	0.2122	0.0030	0.58	WD
VVCK47		0.1827	-0.0023	-0.49	0.2051	-0.0042	-0.81	OE
W4WWAY		0.1823	-0.0027	-0.57	0.2050	-0.0042	-0.83	OE
WBFPG9		0.1850	0.0000	-0.01	0.2069	-0.0023	-0.45	IC
WBVPWR	X	0.1867	0.0016	0.33	0.2220	0.0128	2.50	IC
WC9EY6		0.1870	0.0019	0.39	0.2155	0.0063	1.23	OE
WJ79W3		0.1934	0.0083	1.72	0.2183	0.0090	1.77	OE
WU7DU6		0.1800	-0.0051	-1.06	0.2100	0.0008	0.15	OE
WUQD99		0.1833	-0.0017	-0.36	0.2070	-0.0023	-0.44	XX
WVL2MX		0.1840	-0.0011	-0.22	0.2080	-0.0012	-0.24	IC
X33VED		0.1910	0.0059	1.23	0.2163	0.0071	1.39	OE
XHJ87R		0.1867	0.0016	0.33	0.2087	-0.0006	-0.11	OE
XXLNHD		0.1852	0.0001	0.03	0.2097	0.0005	0.10	IC
YDJY24		0.1952	0.0101	2.10	0.2196	0.0104	2.03	AE
YK6BAJ		0.1830	-0.0021	-0.43	0.2060	-0.0032	-0.63	OE
YPTKHB		0.1797	-0.0054	-1.12	0.2043	-0.0049	-0.96	IC
YU3BH6	*	0.1811	-0.0040	-0.83	0.1952	-0.0140	-2.74	OE
ZB8DWA		0.1862	0.0012	0.24	0.2104	0.0012	0.23	OE
ZLV7LD		0.1856	0.0005	0.11	0.2074	-0.0018	-0.36	OE
ZNUQ3H		0.1867	0.0016	0.33	0.2047	-0.0045	-0.88	OE
ZVRGAL		0.1867	0.0016	0.33	0.2107	0.0014	0.28	AA

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.1851	Percent	0.2092	Percent
Stnd Dev Btwn Labs	0.0048	Percent	0.0051	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 130 of 138 reporting participants

Key to Method Codes Reported by Participants

AA	Spectrometry - Atomic Absorption (AAS)	AE	Spectrometry - Atomic Emission (AES)
DR	Spectrometry - Direct Reading OE (DROES)	GD	Spectrometry - Glow Discharge (GDS)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	OE	Spectrometry - Optical Emission (OES)
WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)	XR	X-Ray Fluorescence - ED or WD not specified
XX	Please Indicate Method Used for Current Element		

Comments on Assigned Data Flags for Test #1608

6GC7RZ (X) - Data for both samples are low. Possible Systematic Error.

EQVP6X (M) - Participant did not submit data for sample L85.

LH9VQ8 (X) - Data for sample L86 are low.

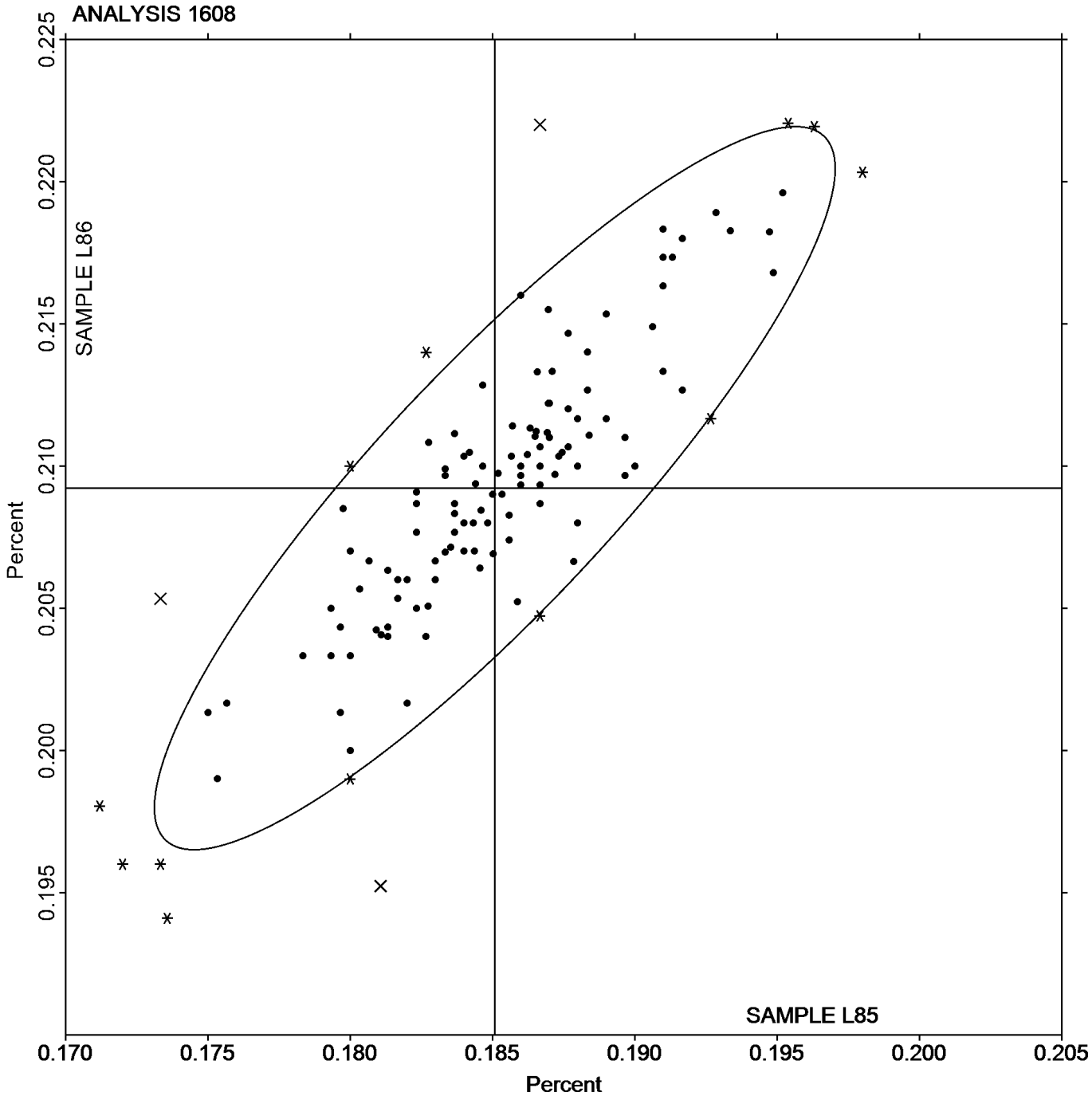
NV63QA (X) - Data for sample L85 are high and data for sample L86 are low. Inconsistent in testing between samples.

UGALR3 (X) - Data for both samples are low. Possible Systematic Error.

WBVPWR (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L86.

SAMPLE L85
0.1851 Percent

SAMPLE L86
0.2092 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2T9K2N		0.00603	-0.00201	-2.58	0.00563	-0.00136	-2.01	OE
4JDH93	*	0.00567	-0.00238	-3.05	0.00513	-0.00186	-2.75	OE
4XN736	X	0.0112	0.00316	4.05	0.00743	0.00044	0.66	OE
4YGXDQ		0.00813	0.00009	0.12	0.00710	0.00011	0.16	CO
6A4DWC		0.00820	0.00016	0.20	0.00707	0.00008	0.11	CO
6G3X3E		0.00763	-0.00041	-0.52	0.00653	-0.00046	-0.68	CO
6X7JE9		0.00830	0.00026	0.33	0.00693	-0.00006	-0.09	OE
7KHFNA		0.00803	-0.00001	-0.01	0.00700	0.00001	0.01	CO
8DP437		0.00797	-0.00008	-0.10	0.00670	-0.00029	-0.43	OE
8QBM8V		0.00833	0.00029	0.37	0.00700	0.00001	0.01	XX
8QDCHK		0.00713	-0.00091	-1.17	0.00680	-0.00019	-0.28	OE
9368K7		0.00830	0.00026	0.33	0.00707	0.00008	0.11	OE
9KRL34	X	0.0110	0.00296	3.79	0.00900	0.00201	2.97	OE
9N2C3Y	*	0.00887	0.00082	1.06	0.00863	0.00164	2.43	OE
9T8Y8V		0.00777	-0.00028	-0.35	0.00630	-0.00069	-1.02	OE
AJCGBX		0.00890	0.00086	1.10	0.00823	0.00124	1.84	CO
ANPEK7		0.00777	-0.00028	-0.35	0.00713	0.00014	0.21	OE
B7JGQ9		0.00820	0.00016	0.20	0.00730	0.00031	0.46	CO
BJV76J		0.00743	-0.00062	-0.79	0.00627	-0.00072	-1.07	CO
C3BMBB	X	0.00700	-0.00104	-1.34	0.00400	-0.00299	-4.43	OE
C3VHJ4	X	0.00533	-0.00271	-3.47	0.00250	-0.00449	-6.65	OE
CGFRUA		0.00787	-0.00018	-0.22	0.00687	-0.00012	-0.18	OE
CNG223		0.00800	-0.00004	-0.05	0.00677	-0.00022	-0.33	OE
DNCYXF	X	0.0593	0.05129	65.79	0.0493	0.04234	62.68	AE
DTBWJ7		0.00864	0.00060	0.77	0.00751	0.00052	0.77	XX
EFDRHE	X	0.0107	0.00268	3.44	0.0108	0.00383	5.67	XX
EHGQRL		0.00800	-0.00004	-0.05	0.00800	0.00101	1.49	OE
F7HQFN	X	0.0700	0.06196	79.48	0.1256	0.11861	175.59	OE
FK2Z9Q		0.00800	-0.00004	-0.05	0.00687	-0.00012	-0.18	CI
FWW6KX		0.00843	0.00039	0.50	0.00677	-0.00022	-0.33	CO
GB9KTF		0.00793	-0.00011	-0.14	0.00623	-0.00076	-1.12	XX
GX94F7		0.00793	-0.00011	-0.14	0.00663	-0.00036	-0.53	OE
HJ7U9C		0.00757	-0.00048	-0.61	0.00650	-0.00049	-0.73	CI
J42BFP	X	0.0757	0.06762	86.74	0.00670	-0.00029	-0.43	XX
JVAZ49	X	0.0153	0.00722	9.27	0.0154	0.00844	12.50	OE
L4DWXP		0.00820	0.00016	0.20	0.00710	0.00011	0.16	OE
LCM4WE	M	0.00850	0.00046	0.59	No Data Reported			OE
LWGTEM	X	0.0244	0.01640	21.04	0.0340	0.02696	39.92	XX
MTRTKP		0.00740	-0.00064	-0.82	0.00660	-0.00039	-0.58	CO
MZVQEM		0.00843	0.00039	0.50	0.00710	0.00011	0.16	XX
N98TBT		0.00853	0.00049	0.63	0.00783	0.00084	1.25	OE
NV63QA	X	0.0124	0.00436	5.59	0.0117	0.00468	6.92	OE
NW4EFF		0.00930	0.00126	1.61	0.00850	0.00151	2.23	OE
Q3Z74H		0.00925	0.00121	1.55	0.00768	0.00069	1.03	OE
QHHJCN		0.00820	0.00016	0.20	0.00707	0.00008	0.11	XX
R4UYA7		0.00807	0.00002	0.03	0.00797	0.00098	1.44	OE
RTE6XD	X	0.0131	0.00509	6.53	0.0110	0.00404	5.98	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
T77H2L		0.00744	-0.00060	-0.77	0.00638	-0.00061	-0.91	OE
T8GVTH		0.00817	0.00012	0.16	0.00698	-0.00001	-0.01	CO
TBJKGB		0.00700	-0.00104	-1.34	0.00600	-0.00099	-1.47	OE
TUTQKL		0.00840	0.00036	0.46	0.00663	-0.00036	-0.53	OE
U8T34Q	*	0.00680	-0.00124	-1.59	0.00810	0.00111	1.64	CO
UAXGZW		0.0100	0.00199	2.55	0.00783	0.00084	1.25	OE
UBMQWQ		0.00720	-0.00084	-1.08	0.00627	-0.00072	-1.07	OE
UL9WYN		0.00640	-0.00164	-2.11	0.00607	-0.00092	-1.37	OE
UTMZCG		0.00810	0.00006	0.08	0.00694	-0.00005	-0.07	CO
UU76KL		0.00713	-0.00091	-1.17	0.00657	-0.00042	-0.63	OE
UVT9XU		0.00727	-0.00078	-0.99	0.00713	0.00014	0.21	CO
VVCK47		0.00813	0.00009	0.12	0.00697	-0.00002	-0.04	CI
WBFPG9		0.00777	-0.00028	-0.35	0.00657	-0.00042	-0.63	IR
WBVPWR		0.00943	0.00139	1.78	0.00820	0.00121	1.79	OE
WJ79W3	M	0.00840	0.00036	0.46	No Data Reported			OE
WU7DU6		0.00860	0.00056	0.72	0.00723	0.00024	0.36	XX
WVL2MX		0.00810	0.00006	0.07	0.00703	0.00004	0.06	XX
XHJ87R	X	0.0250	0.01699	21.80	0.00460	-0.00239	-3.54	OE
XXLNHD		0.00830	0.00026	0.33	0.00710	0.00011	0.16	CO
YDJY24		0.00870	0.00066	0.84	0.00693	-0.00006	-0.09	AE
YK6BAJ		0.00940	0.00136	1.74	0.00800	0.00101	1.49	OE
YPTKHB		0.00793	-0.00011	-0.14	0.00670	-0.00029	-0.43	CI
YU3BH6	X	0.00843	0.00039	0.50	0.00983	0.00284	4.21	OE
ZNUQ3H		0.00840	0.00036	0.46	0.00723	0.00024	0.36	OE
ZVRGAL		0.00797	-0.00008	-0.10	0.00690	-0.00009	-0.13	XX

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.00804	Percent	0.00699	Percent
Stnd Dev Btwn Labs	0.00078	Percent	0.00068	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 55 of 72 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	CI	Combustion / IR
CO	Combustion	IR	IR (Absorption / Detection)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1612

4XN736 (X) - Data for sample L85 are high. Inconsistent within the determinations of both samples.

9KRL34 (X) - Data for both samples are high. Possible Systematic Error.

C3BMBB (X) - Data for sample L86 are low.

C3VHJ4 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample L85.

DNCYXF (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.

EFDRHE (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample L86.

F7HQFN (X) - Extreme data.

J42BFP (X) - Data for sample L85 are extemely high. Perhaps off by a factor of ten.

JVAZ49 (X) - Data for both samples are high. Possible Systematic Error.

LCM4WE (M) - Participant did not submit data for sample L86.

LWGTEM (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample L85.

NV63QA (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.

RTE6XD (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.

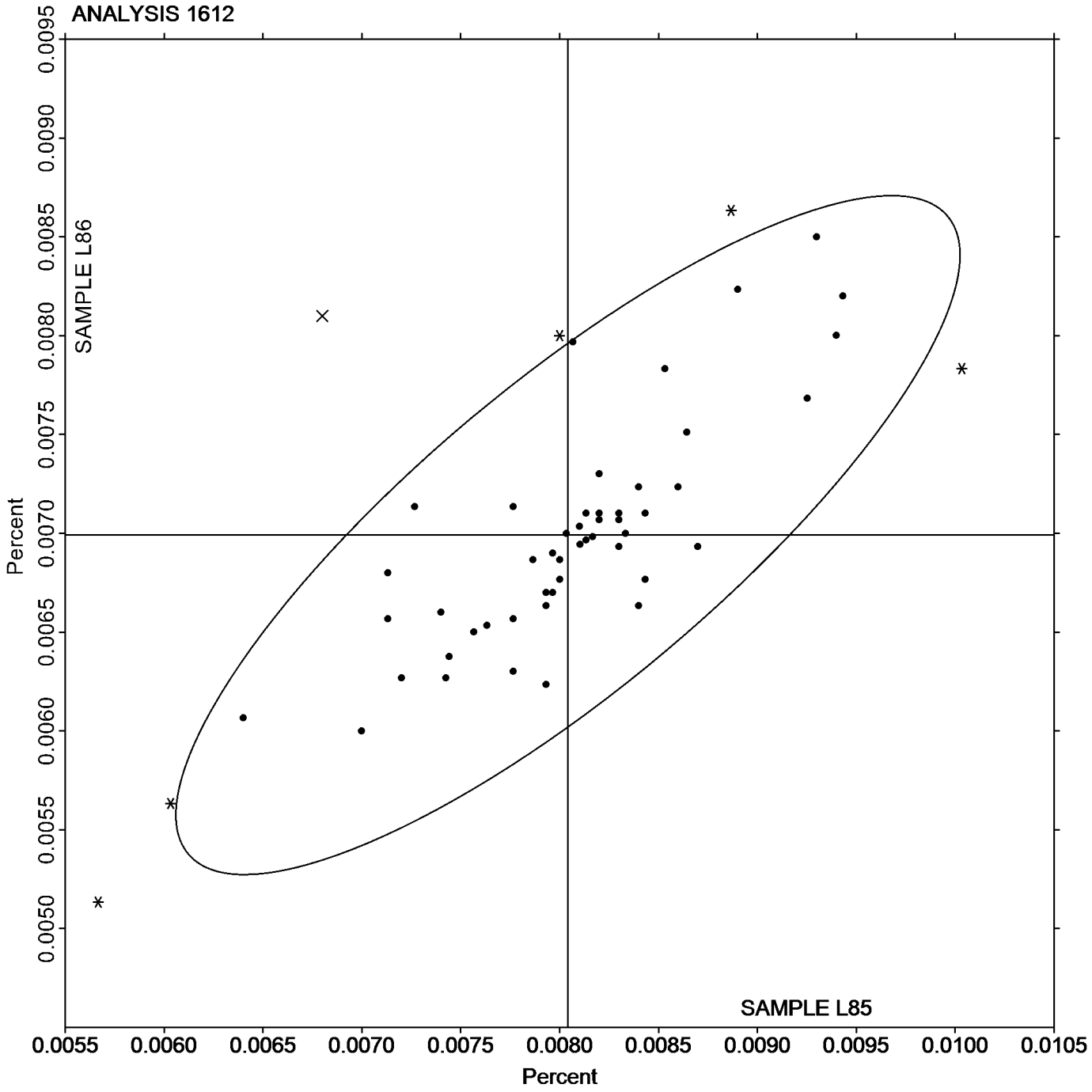
WJ79W3 (M) - Participant did not submit data for sample L86.

XHJ87R (X) - Data for sample L85 are high and data for sample L86 are low. Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

YU3BH6 (X) - Data for sample L86 are high. Inconsistent within the determinations of sample L86.

SAMPLE L85
0.00804 Percent

SAMPLE L86
0.00699 Percent



		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LZGD9	M	0.0220	-0.0056	-3.46	No Data Reported			XR
2T9K2N		0.0278	0.0002	0.13	0.0202	0.0004	0.29	OE
38A46D		0.0246	-0.0030	-1.84	0.0173	-0.0025	-1.63	OE
3BM2EL		0.0263	-0.0013	-0.79	0.0200	0.0002	0.16	OE
3CQCZH		0.0274	-0.0002	-0.13	0.0185	-0.0013	-0.82	IC
3VRY33		0.0271	-0.0005	-0.33	0.0203	0.0006	0.37	OE
4CC7D7		0.0255	-0.0022	-1.32	0.0178	-0.0019	-1.26	OE
4D3ECA		0.0263	-0.0013	-0.81	0.0197	-0.0001	-0.04	OE
4JDH93		0.0272	-0.0004	-0.26	0.0189	-0.0009	-0.56	OE
4XN736		0.0284	0.0008	0.50	0.0212	0.0014	0.92	OE
4YGXDQ		0.0283	0.0007	0.42	0.0190	-0.0008	-0.49	IC
68P6EC		0.0297	0.0020	1.26	0.0207	0.0009	0.62	OE
6A4DWC		0.0280	0.0004	0.23	0.0197	-0.0001	-0.06	IC
6G3X3E		0.0253	-0.0023	-1.41	0.0169	-0.0029	-1.87	OE
6GC7RZ		0.0270	-0.0006	-0.36	0.0208	0.0010	0.66	AE
6X7JE9		0.0281	0.0005	0.31	0.0203	0.0006	0.38	OE
7KHFNA		0.0300	0.0024	1.46	0.0200	0.0002	0.16	OE
7Z77D6		0.0274	-0.0003	-0.16	0.0190	-0.0008	-0.52	OE
8DAL38	X	0.0250	-0.0026	-1.61	0.0203	0.0006	0.38	GD
8DP437		0.0281	0.0005	0.29	0.0189	-0.0009	-0.56	IC
8PL3Z4		0.0250	-0.0026	-1.61	0.0178	-0.0019	-1.26	OE
8QBM8V		0.0280	0.0004	0.23	0.0197	-0.0001	-0.06	IC
8QDCHK		0.0293	0.0016	1.01	0.0215	0.0018	1.16	OE
92J9GA		0.0275	-0.0001	-0.07	0.0212	0.0014	0.92	OE
9368K7		0.0275	-0.0001	-0.07	0.0197	-0.0001	-0.06	OE
96AQFT		0.0316	0.0040	2.44	0.0236	0.0039	2.53	OE
9KRL34		0.0270	-0.0006	-0.38	0.0190	-0.0008	-0.49	OE
9N2C3Y	X	0.0183	-0.0093	-5.71	0.00950	-0.0103	-6.71	OE
9T8Y8V		0.0285	0.0009	0.54	0.0198	0.0000	0.01	OE
AFUJCA		0.0253	-0.0023	-1.43	0.0167	-0.0031	-2.02	OE
AJCGBX		0.0275	-0.0001	-0.05	0.0180	-0.0018	-1.17	IC
ANPEK7		0.0292	0.0015	0.95	0.0217	0.0019	1.25	OE
B7JGQ9		0.0271	-0.0005	-0.32	0.0205	0.0007	0.49	OE
BF6LMM		0.0290	0.0014	0.85	0.0200	0.0002	0.16	GD
BJV76J		0.0287	0.0010	0.64	0.0213	0.0016	1.03	DR
BPYJV9		0.0283	0.0006	0.40	0.0193	-0.0004	-0.28	XX
C3BMBB	X	0.0240	-0.0036	-2.23	0.1700	0.1502	98.35	OE
C3VHJ4		0.0290	0.0014	0.85	0.0213	0.0016	1.03	OE
C7YZB7		0.0290	0.0014	0.85	0.0210	0.0012	0.81	XX
C92AR2		0.0250	-0.0026	-1.61	0.0177	-0.0021	-1.37	XX
CGFRUA		0.0271	-0.0005	-0.32	0.0195	-0.0002	-0.15	OE
CNG223		0.0269	-0.0007	-0.42	0.0191	-0.0006	-0.41	OE
DNCYXF	M	0.0250	-0.0026	-1.61	No Data Reported			AE
DTBWJ7	X	0.0327	0.0051	3.14	0.0224	0.0027	1.75	OE
E7RNQ8		0.0280	0.0004	0.23	0.0203	0.0006	0.38	OE
EFDRHE		0.0270	-0.0006	-0.36	0.0193	-0.0005	-0.30	OE
EHGQRL	X	0.0283	0.0007	0.44	0.2067	0.1869	122.35	XX

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
EHK3JN		0.0267	-0.0010	-0.59	0.0190	-0.0008	-0.49	OE
EQBTX4		0.0290	0.0014	0.87	0.0209	0.0012	0.77	AE
EQVP6X	M	No Data Reported			0.0184	-0.0014	-0.91	XX
EXPUYY		0.0277	0.0000	0.03	0.0193	-0.0004	-0.28	XX
F7HQFN		0.0314	0.0037	2.30	0.0236	0.0039	2.54	OE
F8Y87U		0.0263	-0.0013	-0.81	0.0205	0.0007	0.49	OE
FJP23V		0.0277	0.0000	0.03	0.0197	-0.0001	-0.06	OE
FK2Z9Q		0.0279	0.0002	0.15	0.0206	0.0008	0.55	OE
FWW6KX		0.0290	0.0014	0.85	0.0220	0.0022	1.47	OE
GB9KTF		0.0274	-0.0002	-0.12	0.0200	0.0002	0.16	XX
GX94F7		0.0279	0.0003	0.17	0.0201	0.0003	0.23	OE
H8ETP2		0.0275	-0.0002	-0.09	0.0195	-0.0003	-0.17	GD
HAVWZY		0.0274	-0.0002	-0.14	0.0206	0.0009	0.57	OE
HEMZVX		0.0284	0.0008	0.48	0.0206	0.0008	0.55	GD
HJ7U9C		0.0280	0.0004	0.23	0.0202	0.0005	0.31	IC
HPEYXV		0.0243	-0.0033	-2.02	0.0160	-0.0038	-2.46	IC
HZXD2X		0.0257	-0.0020	-1.20	0.0190	-0.0008	-0.49	IC
J42BFP		0.0260	-0.0016	-1.00	0.0203	0.0006	0.38	OE
JVAZ49		0.0240	-0.0036	-2.21	0.0172	-0.0026	-1.69	OE
KVUVLN		0.0270	-0.0006	-0.38	0.0190	-0.0008	-0.49	GD
KYNUUR		0.0260	-0.0016	-0.99	0.0177	-0.0021	-1.37	OE
L4DWXP		0.0277	0.0001	0.05	0.0200	0.0002	0.16	OE
LCM4WE		0.0277	0.0000	0.03	0.0193	-0.0004	-0.28	OE
LH9VQ8		0.0273	-0.0003	-0.18	0.0203	0.0006	0.38	OE
LHKZXX		0.0299	0.0023	1.42	0.0208	0.0010	0.68	OE
LPRGUQ		0.0295	0.0019	1.16	0.0211	0.0014	0.90	OE
LWGTEM		0.0272	-0.0004	-0.23	0.0192	-0.0006	-0.39	XX
MF8EGP	X	0.0331	0.0054	3.35	0.0233	0.0036	2.34	WD
MMAGRH		0.0303	0.0027	1.67	0.0233	0.0036	2.34	IC
MMBWX9		0.0280	0.0004	0.23	0.0193	-0.0004	-0.28	OE
MMVDDB		0.0260	-0.0016	-1.00	0.0193	-0.0004	-0.28	OE
MTRTKP		0.0268	-0.0009	-0.53	0.0197	-0.0001	-0.06	OE
MZVQEM		0.0268	-0.0008	-0.48	0.0190	-0.0007	-0.47	IC
N4LPMP		0.0290	0.0014	0.87	0.0215	0.0018	1.16	OE
N6WKDM		0.0283	0.0007	0.44	0.0207	0.0009	0.60	XX
N98TBT		0.0280	0.0004	0.23	0.0207	0.0009	0.60	OE
NV63QA		0.0273	-0.0003	-0.18	0.0189	-0.0008	-0.54	OE
NW4EFF	*	0.0325	0.0049	3.02	0.0234	0.0037	2.41	OE
NWFF44		0.0277	0.0000	0.03	0.0201	0.0004	0.25	OE
PLLWUN		0.0287	0.0011	0.66	0.0198	0.0000	0.03	OE
PP49KD		0.0260	-0.0016	-1.00	0.0180	-0.0018	-1.15	OE
Q3Z74H		0.0295	0.0019	1.16	0.0209	0.0011	0.75	OE
QAQ6NA		0.0250	-0.0026	-1.61	0.0170	-0.0028	-1.80	OE
QHHJCN		0.0287	0.0010	0.64	0.0193	-0.0004	-0.28	OE
R4UYA7		0.0274	-0.0002	-0.14	0.0198	0.0000	0.03	OE
RK4K9N		0.0290	0.0014	0.85	0.0200	0.0002	0.16	GD
RL4KCU	X	0.0215	-0.0061	-3.74	0.0153	-0.0044	-2.89	OE

		Sample L85			Sample L86			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
RTE6XD		0.0292	0.0016	0.99	0.0209	0.0011	0.75	OE
RWAFT8	*	0.0314	0.0038	2.34	0.0241	0.0043	2.82	OE
T77H2L		0.0263	-0.0014	-0.83	0.0179	-0.0018	-1.19	OE
T8GVTH		0.0278	0.0002	0.13	0.0193	-0.0005	-0.32	IC
TBAXJB		0.0283	0.0007	0.44	0.0202	0.0004	0.29	OE
TBJKGB		0.0240	-0.0036	-2.23	0.0160	-0.0038	-2.46	OE
TUTQKL		0.0264	-0.0012	-0.75	0.0194	-0.0003	-0.21	OE
U24C8V		0.0243	-0.0033	-2.02	0.0157	-0.0041	-2.68	XX
U8T34Q		0.0298	0.0022	1.36	0.0212	0.0014	0.95	IC
UAXGZW		0.0296	0.0020	1.24	0.0206	0.0008	0.55	OE
UBMQWQ		0.0290	0.0014	0.85	0.0186	-0.0012	-0.78	OE
UGALR3		0.0263	-0.0013	-0.79	0.0197	-0.0001	-0.06	OE
UL9WYN		0.0269	-0.0008	-0.46	0.0191	-0.0007	-0.45	OE
UTMZCG		0.0278	0.0002	0.13	0.0191	-0.0006	-0.41	AA
UU76KL		0.0275	-0.0001	-0.07	0.0194	-0.0004	-0.23	OE
UVT9XU		0.0271	-0.0005	-0.30	0.0202	0.0005	0.31	IC
VEG8FX		0.0282	0.0006	0.38	0.0197	-0.0001	-0.06	OE
VVCK47		0.0257	-0.0019	-1.16	0.0183	-0.0014	-0.93	OE
WBFPG9		0.0287	0.0010	0.64	0.0215	0.0017	1.14	IC
WBVPWR		0.0257	-0.0020	-1.20	0.0193	-0.0004	-0.28	IC
WC9EY6		0.0255	-0.0021	-1.30	0.0183	-0.0015	-0.96	OE
WJ79W3		0.0266	-0.0010	-0.61	0.0192	-0.0006	-0.39	OE
WU7DU6		0.0280	0.0004	0.23	0.0200	0.0002	0.16	OE
WUQD99		0.0275	-0.0001	-0.07	0.0208	0.0011	0.71	OE
WVL2MX		0.0276	0.0000	-0.01	0.0195	-0.0003	-0.17	IC
X33VED		0.0262	-0.0015	-0.89	0.0172	-0.0025	-1.65	OE
XHJ87R		0.0265	-0.0012	-0.71	0.0203	0.0005	0.33	OE
XXLNHD		0.0276	0.0000	0.01	0.0197	-0.0001	-0.06	IC
YDJY24		0.0246	-0.0030	-1.84	0.0179	-0.0019	-1.21	AE
YK6BAJ		0.0263	-0.0013	-0.81	0.0190	-0.0008	-0.49	OE
YPTKHB		0.0277	0.0001	0.07	0.0210	0.0012	0.81	IC
YU3BH6		0.0275	-0.0002	-0.09	0.0194	-0.0004	-0.23	OE
ZB8DWA		0.0308	0.0032	1.95	0.0219	0.0022	1.43	OE
ZLV7LD		0.0311	0.0035	2.14	0.0226	0.0028	1.86	OE
ZNUQ3H		0.0286	0.0009	0.58	0.0204	0.0007	0.44	OE
ZVRGAL		0.0284	0.0007	0.46	0.0186	-0.0012	-0.76	AA

Summary Statistics

	Sample L85		Sample L86	
Grand Means	0.0276	Percent	0.0198	Percent
Stnd Dev Btwn Labs	0.0016	Percent	0.0015	Percent

Samples L85, L86 : AISI 4140, AISI 4140

Statistics based on 120 of 130 reporting participants

Key to Method Codes Reported by Participants

AA	Spectrometry - Atomic Absorption (AAS)	AE	Spectrometry - Atomic Emission (AES)
DR	Spectrometry - Direct Reading OE (DROES)	GD	Spectrometry - Glow Discharge (GDS)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	OE	Spectrometry - Optical Emission (OES)
WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)	XR	X-Ray Fluorescence - ED or WD not specified
XX	Please Indicate Method Used for Current Element		

Comments on Assigned Data Flags for Test #1613

2LZGD9 (M) - Participant did not submit data for sample L86.

8DAL38 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L86.

9N2C3Y (X) - Data for both samples are low. Possible Systematic Error.

C3BMBB (X) - Data for sample L86 are extremely high. Perhaps off by a factor of ten.

DNCYXF (M) - Participant did not submit data for sample L86.

DTBWJ7 (X) - Data for sample L85 are high.

EHGQRL (X) - Data for sample L86 are extremely high. Inconsistent within the determinations of sample L86.

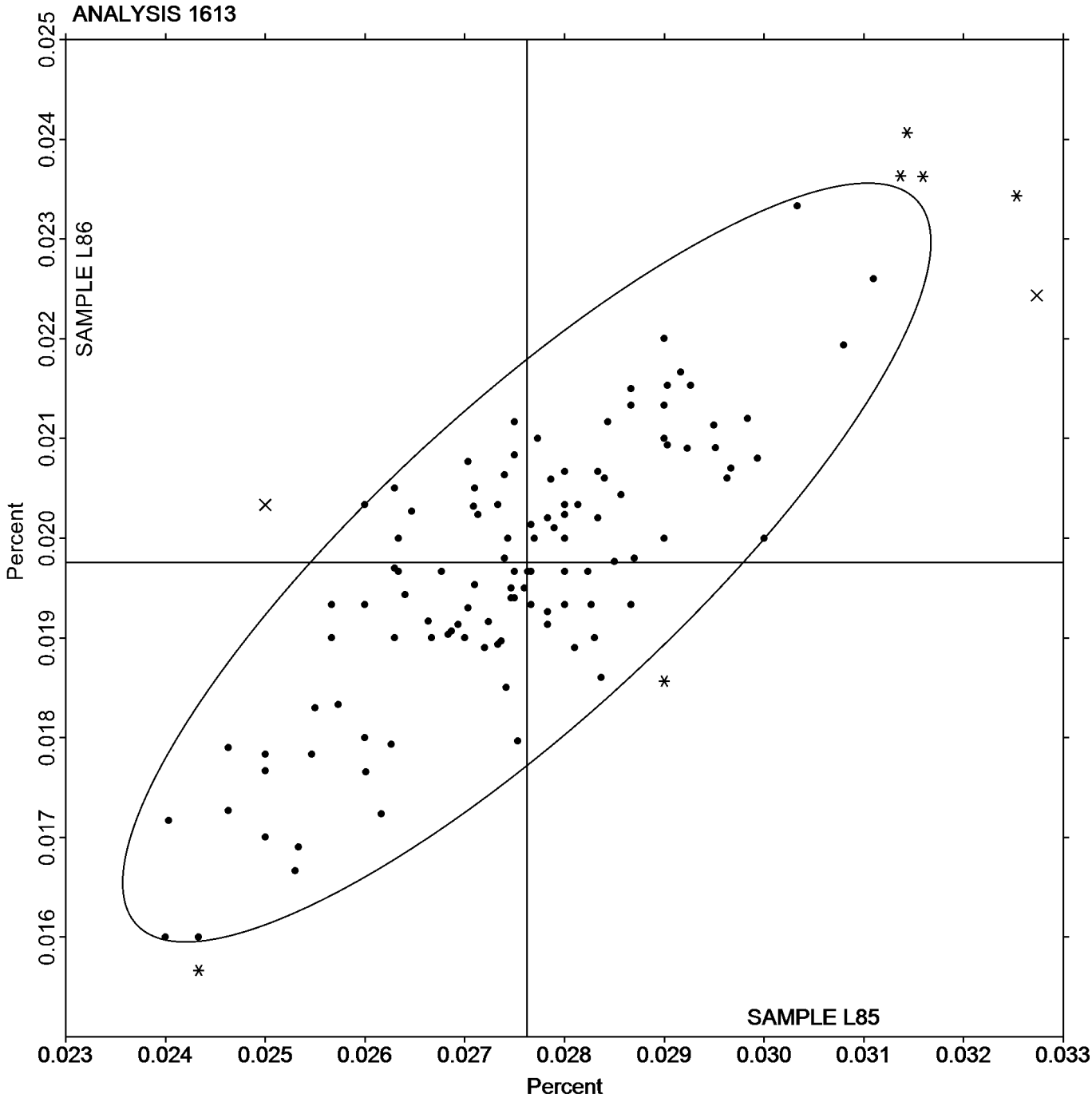
EQVP6X (M) - Participant did not submit data for sample L85.

MF8EGP (X) - Data for sample L85 are high.

RL4KCU (X) - Data for both samples are low. Possible Systematic Error.

SAMPLE L85
0.0276 Percent

SAMPLE L86
0.0198 Percent



-End of Report-

