Collaborative Testing Services, Inc.

Fasteners & Metals Interlaboratory Testing Program

Summary Report Cycle 119, 3rd Qtr 2017

About the Metals Program About CTS Key to Tables and Graphs

Analysis	Test Group
	Dimensional Tests
101	Dimensional: Outside Diameter of Plain Plug Gage
	Tensile Tests
105	Tensile Strength: Lab-Machined Flat Aluminum
106	Yield Strength: Lab-Machined Flat Aluminum
107	Elongation: Lab-Machined Flat Aluminum
110	Tensile Strength: Pre-Machined Round Steel
111	Yield Strength: Pre-Machined Round Steel
112	Elongation: Pre-Machined Round Steel
113	Reduction of Area: Pre-Machined Round Steel
140	Tensile Strength: Lab-Machined Round Steel
141	Yield Strength: Lab-Machined Round Steel
142	Elongation: Lab-Machined Round Steel
143	Reduction of Area: Lab-Machined Round Steel
	Hardness / Metallography Tests
118	Rockwell Hardness: C & B Scales
119	Rockwell Hardness: B Scale
121	Microhardness: Knoop Indenters (500 gf)
122	Microhardness: Knoop Indenters (200 gf)
123	Microhardness: Vickers Indenters (500 gf)
135	Brinell Hardness
144	Alpha Case Depth
149	Alloy Depletion: Inconel
	Chemical Analyses
170 - 179	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.

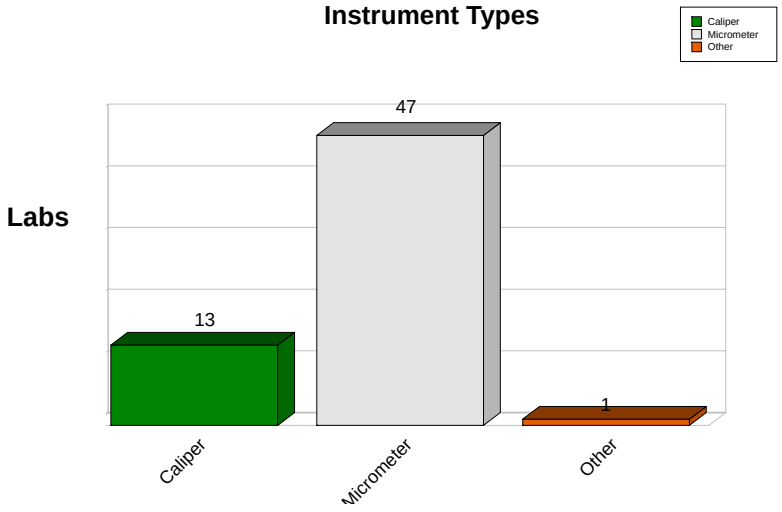
Fasteners and Metals Interlaboratory Testing Program

Analysis 101

Dimensional: Outside Diameter of Plain Plug Gage
ISO GUM

Cycle 119
3rd Qtr 2017

During Cycle 119, CTS conducted the Analysis #101 - Round Dimensional. For this test all participants received two samples I45 and I46 with nominal diameters; 0.5000 in. and 0.4996 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. 61 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 = 0.5000 in.

Xref2 = 0.4996 in.

WebCode	Data Flag (if assigned)	Reference Uncertainty (Uref)	Expanded Uncertainty (Ulab)	Sample I45 Lab Mean (Xlab)	Sample I45 Performance Statistic (En1)	Sample I46 Lab Mean (Xlab)	Sample I46 Performance Statistic (En2)	Instrument
23JTNW		0.00004	0.00150	0.49970	-0.20	0.49900	-0.40	Caliper
2FMCZV		0.00004	0.00050	0.50006	0.12	0.49964	0.08	Micrometer
2K4JNV		0.00004	0.00030	0.50000	0.00	0.49960	0.00	Micrometer
3KXQCF		0.00004	0.92000	0.49900	0.00	0.49840	0.00	Caliper
3PQQLU		0.00004	0.00008	0.49995	-0.53	0.49957	-0.37	Micrometer
4VC8F7		0.00004	0.00010	0.49993	-0.65	0.49951	-0.81	Micrometer
6HJ3Q7		0.00004	0.00210	0.49940	-0.29	0.49900	-0.29	Caliper
6R9RE8		0.00004	0.00020	0.50004	0.20	0.49960	0.00	Micrometer
79PDEN		0.00004	0.00200	0.49999	0.00	0.49959	-0.01	Micrometer
87Z7UR		0.00004	0.00300	0.50000	0.00	0.49950	-0.03	Caliper
AXYQWH		0.00004	0.00010	0.49999	-0.09	0.49960	0.00	Micrometer
BHKLG6		0.00004	0.00027	0.49995	-0.18	0.49953	-0.26	Micrometer
BMUZV8		0.00004	0.00100	0.50000	0.00	0.50000	0.40	Caliper
BPK6NE		0.00004	0.00015	0.50000	0.00	0.49946	-0.90	Micrometer
CDYNYR		0.00004	0.00030	0.49990	-0.33	0.49946	-0.46	Micrometer
CJTFBV		0.00004	0.00016	0.49993	-0.42	0.49954	-0.36	Micrometer
CZYJ4L	X	0.00004	0.00058	0.49950	-0.86	0.49900	-1.03	Caliper
E4QQ8U		0.00004	0.00100	0.49960	-0.40	0.49900	-0.60	Caliper
EAYQXC		0.00004	0.00030	0.49996	-0.13	0.49956	-0.13	Other
F87JQK		0.00004	941.00000	0.49940	0.00	0.49920	0.00	Micrometer
FB2DMZ		0.00004	0.00016	0.50008	0.49	0.49972	0.77	Micrometer
FDQJ8X	X	0.00004	0.00004	0.49990	-1.68	0.49950	-1.68	Micrometer
FFGKBZ		0.00004	0.00050	0.49983	-0.34	0.49948	-0.24	Micrometer
G6U4Y6		0.00004	0.00020	0.49998	-0.10	0.49954	-0.30	Micrometer
G8XWQH		0.00004	0.00174	0.49922	-0.45	0.49900	-0.34	Caliper
GD8VKW		0.00004	0.00030	0.49997	-0.10	0.49951	-0.30	Micrometer
JHRTYP		0.00004	0.00020	0.49989	-0.54	0.49948	-0.59	Micrometer
JPRHCM		0.00004	0.00001	0.50000	0.01	0.49961	0.16	Micrometer
LAA7YK		0.00004	0.00021	0.49998	-0.09	0.49954	-0.28	Micrometer
LEKDBV		0.00004	Not Reported	0.49995		0.49954		Micrometer
LGBFEX		0.00004	0.00015	0.49990	-0.64	0.49950	-0.64	Micrometer
LP3V42		0.00004	0.00020	0.50000	0.00	0.49960	0.00	Micrometer
LRTW86		0.00004	0.00118	0.50000	0.00	0.49961	0.01	Caliper

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

Xref1 = 0.5000 in.

Xref2 = 0.4996 in.

WebCode	Data Flag (if assigned)	Reference Uncertainty (Uref)	Expanded Uncertainty (Ulab)	Sample I45 Lab Mean (Xlab)	Sample I45 Performance Statistic (En1)	Sample I46 Lab Mean (Xlab)	Sample I46 Performance Statistic (En2)	Instrument
M8298N		0.00004	0.00047	0.50000	0.00	0.49957	-0.07	Micrometer
N4W36M		0.00004	0.00179	0.49970	-0.17	0.49910	-0.28	Caliper
N76ER4		0.00004	0.00018	0.49998	-0.11	0.49948	-0.64	Micrometer
NNMFE7	X	0.00004	0.00007	0.50000	0.00	0.49950	-1.24	Micrometer
NTGALT		0.00004	0.00043	0.49998	-0.04	0.49960	0.00	Micrometer
NU8BPV		0.00004	0.00040	0.49991	-0.22	0.49947	-0.32	Micrometer
PBC6UA		0.00004	0.00048	0.50000	0.00	0.49960	0.00	Micrometer
PRD788		0.00004	0.00019	0.49990	-0.52	0.49948	-0.62	Micrometer
QC2UKV		0.00004	0.00020	0.50000	0.00	0.49962	0.10	Micrometer
QP4J89	X	0.00004	0.00005	0.49990	-1.56	0.49950	-1.56	Micrometer
QQL9VV		0.00004	0.00023	0.49998	-0.07	0.49955	-0.21	Micrometer
QYG93M		0.00004	Not Reported	0.49998		0.49959		Micrometer
R392H9		0.00004	830.00000	0.49999	0.00	0.49948	0.00	Micrometer
RCTBTA		0.00004	0.00008	0.49998	-0.26	0.49958	-0.19	Micrometer
RT7HB2		0.00004	0.00198	0.49994	-0.03	0.49952	-0.04	Micrometer
TLHFBM		0.00004	0.00020	0.50000	0.00	0.49960	0.00	Micrometer
TXY4NU		0.00004	0.00260	0.49920	-0.31	0.49910	-0.19	Caliper
UWZFKP		0.00004	0.00118	0.49961	-0.33	0.49921	-0.33	Caliper
V64TAJ		0.00004	0.00007	0.49998	-0.23	0.49962	0.24	Micrometer
VETHXJ		0.00004	0.00019	0.49998	-0.10	0.49957	-0.15	Micrometer
WAFXLJ		0.00004	0.00100	0.50050	0.50	0.49930	-0.30	Caliper
WU4LWJ		0.00004	0.00020	0.49992	-0.39	0.49953	-0.36	Micrometer
XE9JXQ		0.00004	0.00030	0.49994	-0.20	0.49952	-0.26	Micrometer
XP7GKQ		0.00004	0.00050	0.50000	0.00	0.49970	0.20	Micrometer
XXUFX6		0.00004	Not Reported	0.49980		0.49940		Micrometer
Z32HCH		0.00004	0.00016	0.49998	-0.14	0.49950	-0.64	Micrometer
ZAZ63W		0.00004	0.00059	0.50001	0.02	0.49960	0.00	Micrometer
ZJQQZV		0.00004	0.00090	0.49990	-0.11	0.49940	-0.22	Micrometer

Summary Statistics

		Sample I45		Sample I46	
Reference Uncertainty = 0.00004 in.	Reference Diameters:	0.5000	inch	0.4996	inch

Samples I45, I46 : 52100 Steel, 52100 Steel

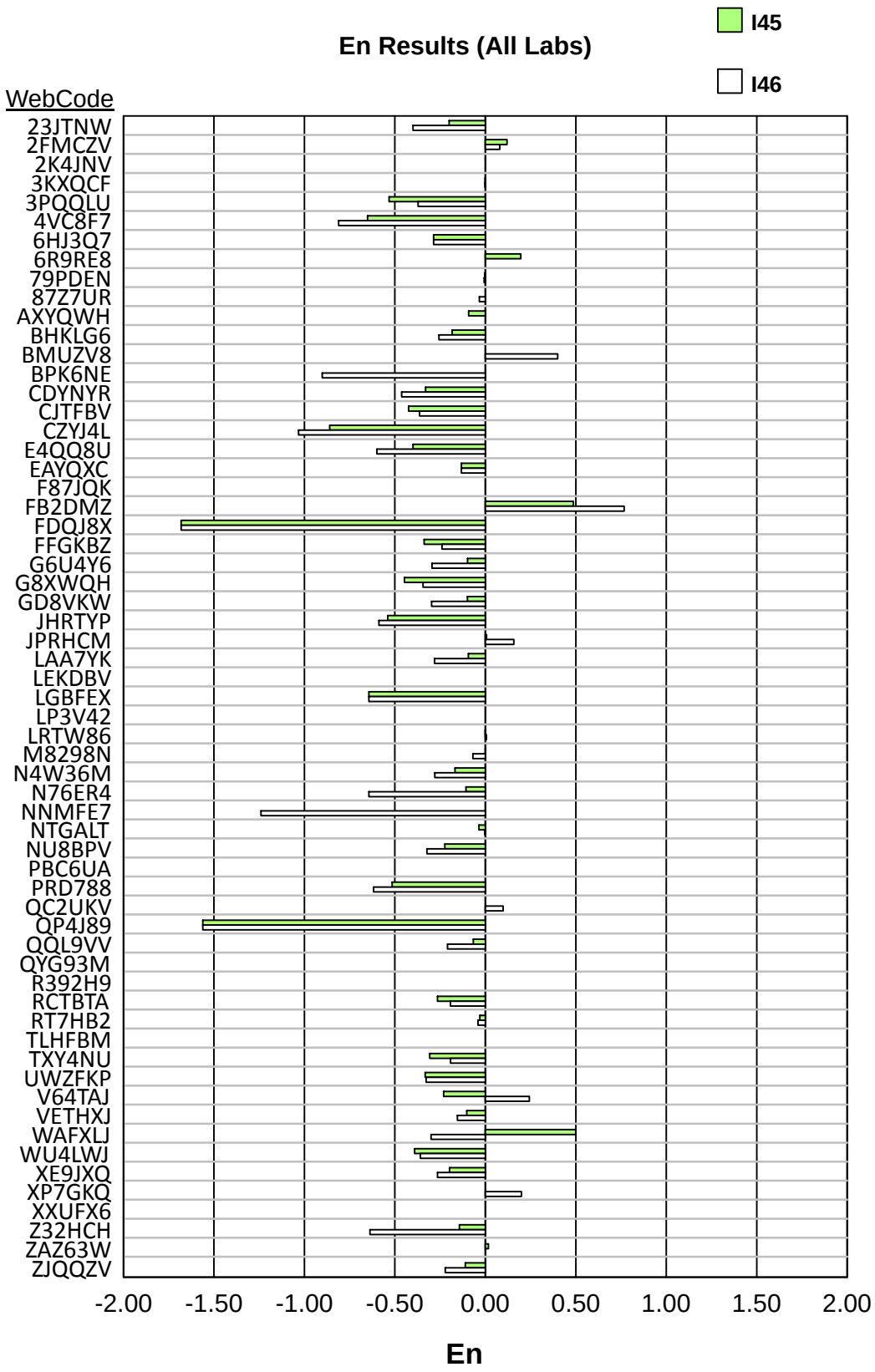
Comments on Assigned Data Flags for Test #101

CZYJ4L (X) - En value for sample I46 was low.

FDQJ8X (X) - En value for both samples was low.

NNMFE7 (X) - En value for sample I46 was low.

QP4J89 (X) - En value for both samples was low.



Fasteners and Metals Interlaboratory Testing Program

Analysis 105

Tensile Strength: Lab-Machined Flat Aluminum
ASTM B557

		Sample R45			Sample R46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2AGQX8	X	46.77	-1.42	-3.57	48.75	0.35	0.87
2UPNLA		48.12	-0.07	-0.18	48.27	-0.13	-0.31
3GXENF		47.99	-0.20	-0.50	48.78	0.38	0.93
3VDM97	X	48.30	0.10	0.26	36.69	-11.70	-28.65
3VDPXB		48.30	0.11	0.27	48.50	0.10	0.25
46HUN7		48.04	-0.15	-0.39	48.54	0.14	0.35
62VRZX		48.20	0.01	0.02	48.00	-0.40	-0.97
6AM6ZX		48.60	0.41	1.02	48.20	-0.20	-0.48
6DMFVX		48.20	0.01	0.02	47.80	-0.60	-1.46
77H49Y		48.00	-0.19	-0.48	48.37	-0.03	-0.07
7RMB2P		49.00	0.81	2.02	48.80	0.40	0.99
8BWW6J	X	46.70	-1.49	-3.75	47.90	-0.50	-1.22
8LT3WW	*	49.40	1.21	3.03	49.40	1.00	2.45
98THY7		48.30	0.11	0.27	48.50	0.10	0.25
9C3L22	X	46.43	-1.76	-4.42	48.74	0.35	0.85
9Z6V4Z		48.00	-0.19	-0.49	48.40	0.00	0.01
AYQRZL		48.50	0.31	0.77	48.80	0.40	0.99
BK6WZF		47.80	-0.39	-0.99	47.90	-0.50	-1.22
BVJWGV		47.43	-0.77	-1.92	48.01	-0.39	-0.95
EAYQXC		48.50	0.31	0.77	48.20	-0.20	-0.48
ELNXFZ		47.90	-0.29	-0.74	47.93	-0.47	-1.14
F7TVEM		47.69	-0.51	-1.28	47.68	-0.72	-1.75
G337BL		48.20	0.01	0.02	47.90	-0.50	-1.22
HRLLP4		48.01	-0.19	-0.47	48.15	-0.24	-0.60
HTUZUN		47.43	-0.77	-1.92	48.30	-0.10	-0.24
JDEZXX	X	49.00	0.81	2.02	51.70	3.30	8.09
JKJT87		47.90	-0.29	-0.74	48.40	0.00	0.01
JPRHCM		48.33	0.13	0.33	48.44	0.05	0.11
JVF63L		47.97	-0.23	-0.57	48.15	-0.25	-0.62
KVFGC9		48.00	-0.19	-0.49	48.10	-0.30	-0.73
LH2JXJ		48.50	0.31	0.77	48.90	0.50	1.23
LWKCHK		48.19	0.00	-0.01	48.46	0.06	0.15
M34YRF		48.53	0.34	0.85	48.47	0.07	0.17
M43WF3	X	46.36	-1.83	-4.60	48.37	-0.03	-0.08
MXDJDU		48.57	0.38	0.94	49.36	0.96	2.36
N4FVXK		48.53	0.34	0.84	48.63	0.23	0.57
ND2CAR		47.90	-0.29	-0.74	48.30	-0.10	-0.24
P4QAKK		48.20	0.01	0.02	48.00	-0.40	-0.97
Q2LY8G		48.10	-0.09	-0.24	48.60	0.20	0.50
QC2UKV		48.10	-0.09	-0.24	48.20	-0.20	-0.48
RCVZ8T	*	49.10	0.91	2.27	49.40	1.00	2.45
RMVPXG		47.90	-0.29	-0.74	48.50	0.10	0.25
TLHFBM		48.30	0.11	0.27	48.40	0.00	0.01
TTZRGN	X	44.46	-3.73	-9.38	49.10	0.70	1.72
U6NBHJ		48.10	-0.09	-0.24	47.90	-0.50	-1.22
V24NC6	M	No Data Reported			40.79	-7.60	-18.62
WKGHNC		48.43	0.23	0.59	48.83	0.44	1.07

WebCode	Data Flag	Sample R45 Lab Mean	Sample R45 Diff. from Grand Mean	Sample R45 CPV	Sample R46 Lab Mean	Sample R46 Diff. from Grand Mean	Sample R46 CPV
YY6HNA		47.72	-0.48	-1.20	48.44	0.05	0.11
ZLHLWP		47.98	-0.21	-0.54	48.39	-0.01	-0.02

Summary Statistics

	Sample R45		Sample R46	
Grand Means	48.19	ksi	48.40	ksi
Stnd Dev Btwn Labs	0.40	ksi	0.41	ksi

Samples R45, R46 : 16G 6061-T6, 14G 6061-T6

Statistics based on 41 of 49 reporting participants

Comments on Assigned Data Flags for Test #105

2AGQX8 (X) - Data for sample R45 are low.

3VDM97 (X) - Data for sample R46 are extremely low.

8BWW6J (X) - Data for sample R45 are low.

9C3L22 (X) - Data for sample R45 are low.

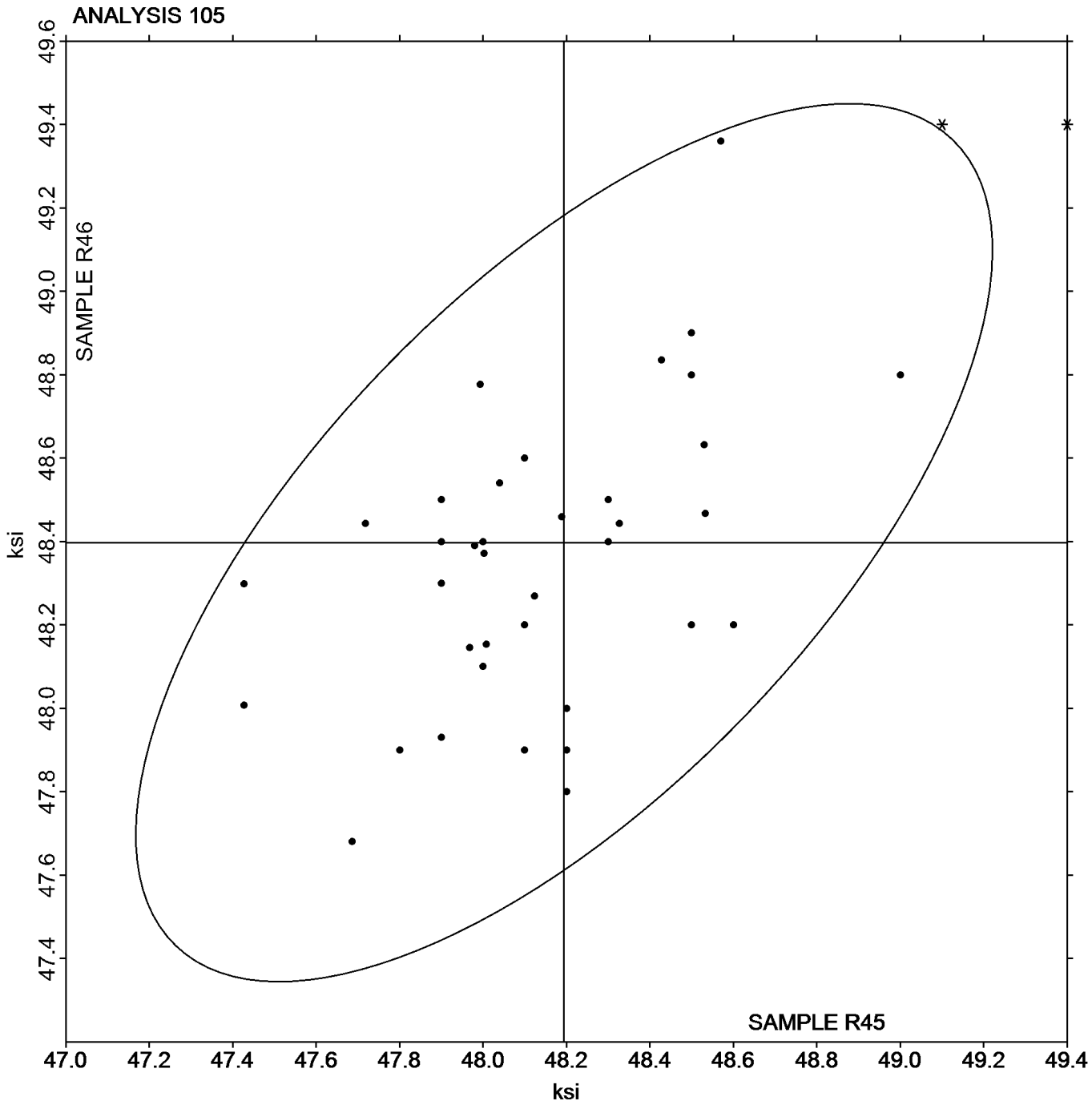
JDEZXX (X) - Data for sample R46 are high.

M43WF3 (X) - Data for sample R45 are low.

TTZRGN (X) - Data for sample R45 are low.

V24NC6 (M) - Participant did not submit data for sample R45. Data for sample R46 are extremely low.

SAMPLE R45	SAMPLE R46
48.19 ksi	48.40 ksi



		Sample R45			Sample R46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2AGQX8		40.02	-1.06	-1.32	40.17	0.05	0.09
2UPNLA		41.52	0.45	0.56	40.16	0.05	0.09
3GXENF		41.42	0.35	0.43	40.12	0.00	0.00
3VDM97	X	41.48	0.41	0.51	30.89	-9.22	-17.44
3VDPXB		41.50	0.43	0.53	40.30	0.18	0.35
46HUN7		41.34	0.27	0.33	39.93	-0.19	-0.35
62VRZX		40.40	-0.67	-0.84	41.10	0.98	1.86
6AM6ZX	*	40.00	-1.07	-1.34	41.50	1.38	2.62
6DMFVX		39.90	-1.17	-1.46	40.90	0.78	1.48
77H49Y	X	39.51	-1.57	-1.95	37.21	-2.91	-5.50
7RMB2P		42.00	0.93	1.15	40.10	-0.02	-0.03
8BWW6J	*	39.40	-1.67	-2.09	39.20	-0.92	-1.73
8LT3WW		42.30	1.23	1.53	40.70	0.58	1.10
98THY7		41.40	0.33	0.41	40.10	-0.02	-0.03
9C3L22		39.88	-1.19	-1.49	40.18	0.06	0.12
9Z6V4Z		40.90	-0.17	-0.22	39.80	-0.32	-0.60
AYQRZL		42.20	1.13	1.40	40.50	0.38	0.73
BK6WZF		41.10	0.03	0.03	39.80	-0.32	-0.60
BVJWGV	X	38.87	-2.20	-2.75	37.57	-2.55	-4.82
EAYQXC		41.70	0.63	0.78	40.10	-0.02	-0.03
ELNXFZ		41.54	0.47	0.58	39.48	-0.64	-1.20
F7TVEM		40.84	-0.24	-0.30	39.12	-1.00	-1.88
G337BL		39.90	-1.17	-1.46	41.10	0.98	1.86
HRLLP4		41.34	0.26	0.33	39.74	-0.38	-0.71
HTUZUN	X	37.86	-3.22	-4.01	37.57	-2.55	-4.82
JDEZXX	X	42.50	1.43	1.78	43.20	3.08	5.83
JKJT87		41.40	0.33	0.41	40.20	0.08	0.16
JPRHCM		41.28	0.20	0.25	40.09	-0.03	-0.05
JVF63L		40.52	-0.55	-0.69	39.28	-0.83	-1.58
KVFGC9		41.10	0.03	0.03	40.00	-0.12	-0.22
LH2JXJ	*	43.20	2.13	2.65	40.40	0.28	0.54
LWKCHK		41.20	0.13	0.16	39.54	-0.58	-1.10
M34YRF		41.23	0.16	0.20	39.53	-0.58	-1.10
M43WF3	X	38.83	-2.25	-2.80	38.63	-1.49	-2.81
MXDJDU		41.19	0.12	0.14	40.67	0.56	1.05
N4FVXK		41.66	0.58	0.72	40.57	0.45	0.85
ND2CAR		41.10	0.03	0.03	39.70	-0.42	-0.79
P4QAKK	*	39.00	-2.07	-2.58	40.90	0.78	1.48
Q2LY8G		41.40	0.33	0.41	39.90	-0.22	-0.41
QC2UKV		40.90	-0.17	-0.22	39.60	-0.52	-0.98
RCVZ8T		41.60	0.53	0.65	40.30	0.18	0.35
RMVPXG		41.20	0.13	0.16	39.80	-0.32	-0.60
TLHFBM		41.00	-0.07	-0.09	40.00	-0.12	-0.22
TTZRGN	X	38.79	-2.28	-2.85	34.85	-5.27	-9.96
U6NBHJ		41.30	0.23	0.28	39.70	-0.42	-0.79
V24NC6	M	No Data Reported			36.53	-3.59	-6.79
WKGHNC		41.70	0.62	0.78	40.49	0.38	0.72

WebCode	Data Flag	Sample R45 Lab Mean	Sample R45 Diff. from Grand Mean	Sample R45 CPV	Sample R46 Lab Mean	Sample R46 Diff. from Grand Mean	Sample R46 CPV
YY6HNA		41.08	0.00	0.00	39.99	-0.13	-0.24
ZLHLWP		40.40	-0.67	-0.84	40.00	-0.12	-0.22

Summary Statistics

	Sample R45		Sample R46	
Grand Means	41.07	ksi	40.12	ksi
Stnd Dev Btwn Labs	0.80	ksi	0.53	ksi

Samples R45, R46 : 16G 6061-T6, 14G 6061-T6

Statistics based on 41 of 49 reporting participants

Comments on Assigned Data Flags for Test #106

3VDM97 (X) - Data for sample R46 are extremely low.

77H49Y (X) - Data for sample R46 are low.

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

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

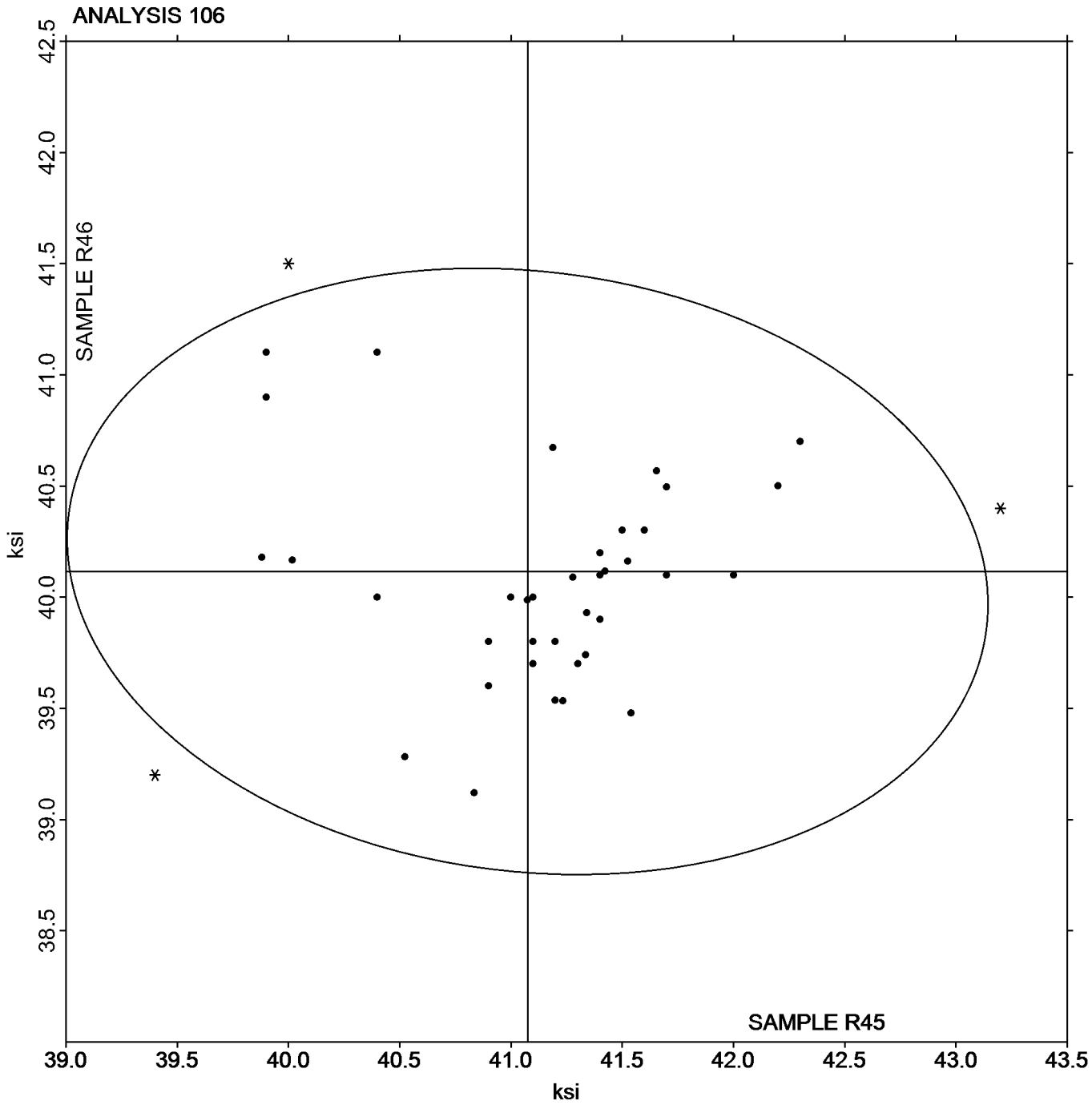
JDEZXX (X) - Data for sample R46 are high.

M43WF3 (X) - Data for both samples are low.

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

V24NC6 (M) - Participant did not submit data for sample R45. Data for sample R46 are low.

SAMPLE R45	SAMPLE R46
41.07 ksi	40.12 ksi



		Sample R45			Sample R46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2AGQX8		14.74	0.21	0.22	16.68	0.79	0.73
2UPNLA		13.45	-1.08	-1.10	15.22	-0.67	-0.62
3GXENF		15.00	0.47	0.48	17.00	1.11	1.02
3VDM97	X	14.30	-0.23	-0.23	10.20	-5.69	-5.26
3VDPXB		14.80	0.27	0.28	15.80	-0.09	-0.08
46HUN7		13.74	-0.79	-0.80	15.43	-0.46	-0.43
62VRZX		15.20	0.67	0.69	14.20	-1.69	-1.56
6AM6ZX		15.30	0.77	0.79	14.10	-1.79	-1.66
6DMFVX		15.20	0.67	0.69	14.00	-1.89	-1.75
77H49Y		15.00	0.47	0.48	17.00	1.11	1.02
7RMB2P		14.00	-0.53	-0.54	15.50	-0.39	-0.36
8BWW6J		16.00	1.47	1.50	18.00	2.11	1.95
8LT3WW		14.00	-0.53	-0.54	17.00	1.11	1.02
98THY7		14.00	-0.53	-0.54	15.50	-0.39	-0.36
9C3L22		14.65	0.12	0.13	16.74	0.85	0.78
9Z6V4Z	*	11.50	-3.03	-3.09	15.00	-0.89	-0.82
AYQRZL		14.00	-0.53	-0.54	15.50	-0.39	-0.36
BK6WZF		14.50	-0.03	-0.03	15.50	-0.39	-0.36
BVJWGV		15.00	0.47	0.48	17.00	1.11	1.02
EAYQXC		14.50	-0.03	-0.03	16.00	0.11	0.10
ELNXFZ		12.50	-2.03	-2.07	16.10	0.21	0.19
F7TVEM		14.80	0.27	0.28	16.50	0.61	0.56
G337BL		15.50	0.97	0.99	14.10	-1.79	-1.66
HRLLP4	X	10.00	-4.53	-4.61	11.00	-4.89	-4.52
HTUZUN		16.00	1.47	1.50	17.00	1.11	1.02
JDEZXX		15.10	0.57	0.58	16.10	0.21	0.19
JKJT87		15.60	1.07	1.09	15.70	-0.19	-0.18
JPRHCM		15.00	0.47	0.48	15.70	-0.19	-0.18
JVF63L		14.29	-0.24	-0.24	16.64	0.74	0.69
KVFGC9		15.00	0.47	0.48	16.00	0.11	0.10
LH2JXJ		12.80	-1.73	-1.76	15.30	-0.59	-0.55
LWKCHK		15.35	0.82	0.84	15.50	-0.39	-0.36
M34YRF		15.50	0.97	0.99	17.70	1.81	1.67
M43WF3		14.40	-0.13	-0.13	16.00	0.11	0.10
MXDJDU		13.90	-0.63	-0.64	16.40	0.51	0.47
N4FVXK		16.10	1.57	1.60	17.50	1.61	1.49
ND2CAR		14.20	-0.33	-0.33	16.40	0.51	0.47
P4QAKK		15.10	0.57	0.58	14.00	-1.89	-1.75
Q2LY8G		13.30	-1.23	-1.25	15.90	0.01	0.01
QC2UKV		15.80	1.27	1.30	18.20	2.31	2.13
RCVZ8T		14.00	-0.53	-0.54	15.00	-0.89	-0.82
RMVPXG		14.00	-0.53	-0.54	17.00	1.11	1.02
TLHFBM		15.00	0.47	0.48	16.00	0.11	0.10
TTZRGN	X	9.770	-4.76	-4.85	10.71	-5.18	-4.79
U6NBHJ		15.20	0.67	0.69	15.30	-0.59	-0.55
V24NC6	M	No Data Reported			1.900	-13.99	-12.93
WKGHNC		12.80	-1.73	-1.76	14.10	-1.79	-1.66

WebCode	Data Flag	Sample R45 Lab Mean	Sample R45 Diff. from Grand Mean	Sample R45 CPV	Sample R46 Lab Mean	Sample R46 Diff. from Grand Mean	Sample R46 CPV
YY6HNA		13.40	-1.13	-1.15	14.60	-1.29	-1.19
ZLHLWP		14.50	-0.03	-0.03	15.22	-0.67	-0.62

Summary Statistics

	Sample R45		Sample R46	
Grand Means	14.53	Percent	15.89	Percent
Stnd Dev Btwn Labs	0.98	Percent	1.08	Percent

Samples R45, R46 : 16G 6061-T6, 14G 6061-T6

Statistics based on 45 of 49 reporting participants

Comments on Assigned Data Flags for Test #107

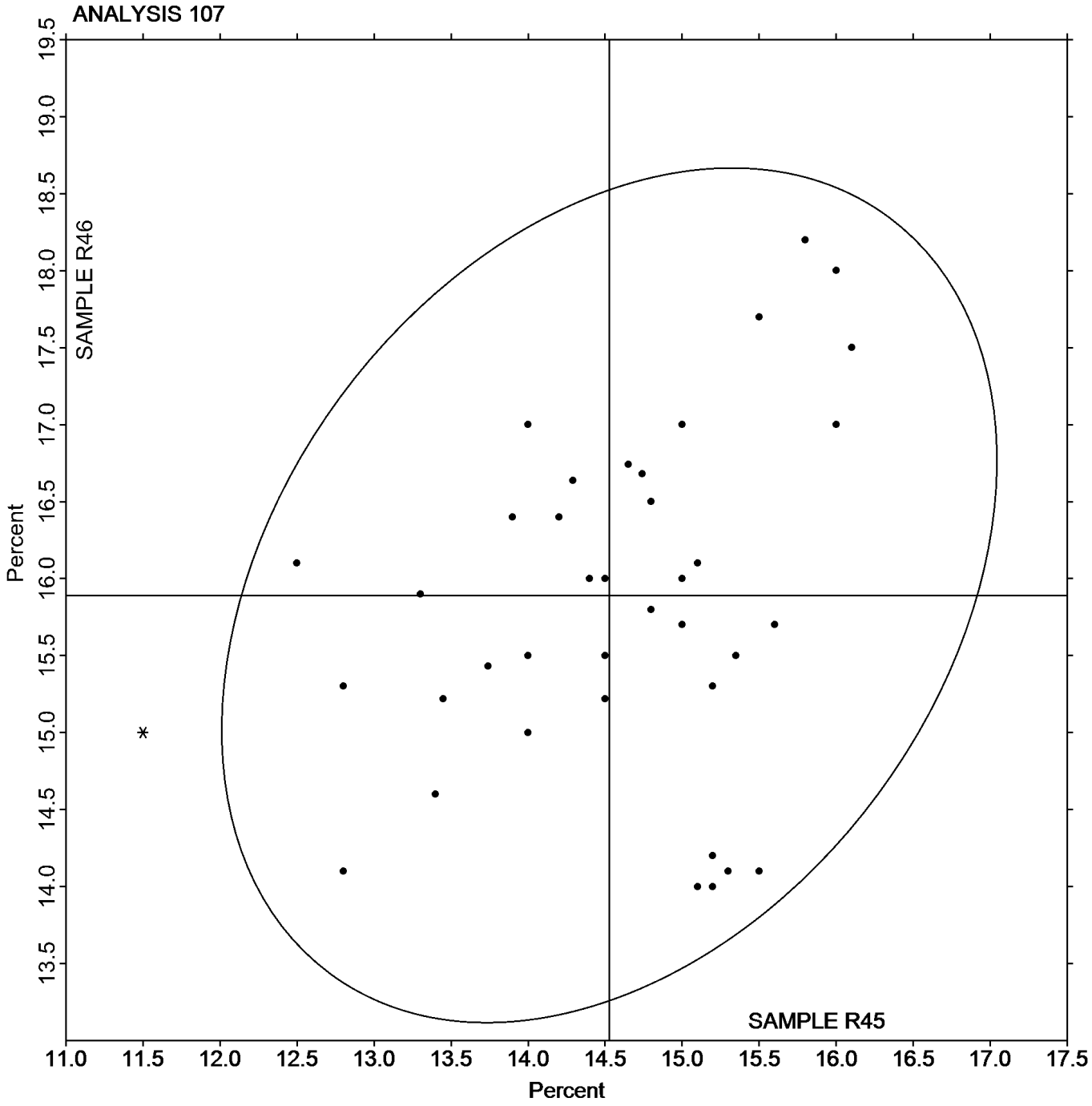
3VDM97 (X) - Data for sample R46 are low.

HRLLP4 (X) - Data for both samples are low.

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

V24NC6 (M) - Participant did not submit data for sample R45. Data for sample R46 are extremely low.

SAMPLE R45	SAMPLE R46
14.53 Percent	15.89 Percent



		Sample A45			Sample A46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
26LYPA		150.12	-1.06	-0.78	149.97	-1.52	-0.95
33DXFA		152.30	1.12	0.82	152.10	0.61	0.39
3HADHP		150.70	-0.48	-0.35	149.68	-1.81	-1.14
3HPEPX		152.73	1.55	1.13	153.45	1.96	1.24
42G2E9		151.40	0.22	0.16	152.10	0.61	0.39
4VC8F7		152.37	1.19	0.88	153.41	1.92	1.21
64J9A7		151.60	0.42	0.31	151.40	-0.09	-0.05
6CBLA6		148.13	-3.05	-2.24	148.07	-3.42	-2.15
7D6R8B		149.30	-1.88	-1.38	151.20	-0.29	-0.18
7Q8DE8		151.30	0.12	0.09	152.20	0.71	0.45
7XA8T9		151.00	-0.18	-0.13	151.00	-0.49	-0.31
8BVX3N		150.40	-0.78	-0.57	150.00	-1.49	-0.94
9AUQYA	X	142.00	-9.18	-6.73	145.80	-5.69	-3.58
9WP8NA		148.90	-2.28	-1.67	151.00	-0.49	-0.31
A3ALY8		152.10	0.92	0.68	153.30	1.81	1.14
AJVDMZ		154.02	2.84	2.08	154.87	3.39	2.13
AR9HH6		151.70	0.52	0.38	152.58	1.09	0.69
AXXWDC		150.70	-0.48	-0.35	150.60	-0.89	-0.56
BHYAFB		147.94	-3.24	-2.37	147.94	-3.55	-2.23
BMUZV8		151.40	0.22	0.16	151.60	0.11	0.07
BVP4R4		152.29	1.11	0.82	153.74	2.25	1.42
CWDX2D		149.39	-1.79	-1.31	147.94	-3.55	-2.23
CWWTLZ		150.30	-0.88	-0.64	152.60	1.11	0.70
DPADGU		150.41	-0.77	-0.57	152.15	0.66	0.41
DZQ2G8		153.00	1.82	1.34	152.90	1.41	0.89
E2JEG6		153.10	1.92	1.41	152.70	1.21	0.76
E63ACX	X	156.70	5.52	4.05	154.30	2.81	1.77
EKTCNU		151.40	0.22	0.16	152.30	0.81	0.51
F4PY66	X	154.90	3.72	2.73	152.50	1.01	0.64
FFGKBZ		151.60	0.42	0.31	151.40	-0.09	-0.05
G8XWQH		151.57	0.39	0.28	150.37	-1.12	-0.70
GBHQP4		151.80	0.62	0.46	150.90	-0.59	-0.37
GQXN38		151.68	0.51	0.37	151.15	-0.34	-0.21
JTRL6V		150.26	-0.92	-0.67	152.44	0.95	0.60
K2LVAY		149.36	-1.82	-1.33	150.10	-1.39	-0.87
KENGFU		152.29	1.11	0.82	152.29	0.80	0.51
KFKXQ7		148.51	-2.67	-1.95	148.47	-3.01	-1.90
KL7VET		151.11	-0.07	-0.05	150.57	-0.91	-0.57
KL9HV8	X	146.49	-4.69	-3.44	146.05	-5.43	-3.42
L2FWTV		151.02	-0.16	-0.12	152.13	0.64	0.40
N3PK7R		149.39	-1.79	-1.31	150.84	-0.65	-0.41
N9P8UK		151.72	0.54	0.40	152.38	0.89	0.56
NBEFYF		151.30	0.12	0.09	152.40	0.91	0.57
ND37XC		151.30	0.12	0.09	151.90	0.41	0.26
NHHELC		150.10	-1.07	-0.79	148.99	-2.50	-1.57
PAK8BW	*	151.48	0.30	0.22	149.02	-2.47	-1.55
Q2HEF8		149.25	-1.93	-1.42	148.96	-2.53	-1.59

WebCode	Data Flag	Sample A45 Lab Mean	Sample A45 Diff. from Grand Mean	Sample A45 CPV	Sample A46 Lab Mean	Sample A46 Diff. from Grand Mean	Sample A46 CPV
RW2GGJ		151.91	0.73	0.53	152.66	1.17	0.74
RW2J7N		150.58	-0.60	-0.44	151.76	0.27	0.17
TR8UAG		150.41	-0.77	-0.57	151.28	-0.21	-0.13
TTZTJ9		152.80	1.62	1.19	152.70	1.21	0.76
UAH86P		152.70	1.52	1.12	153.00	1.51	0.95
UR284M	X	156.93	5.75	4.22	156.06	4.57	2.88
VYZLVF		152.29	1.11	0.82	152.29	0.80	0.51
X86DBN		151.07	-0.11	-0.08	152.26	0.77	0.49
XFW3MH		150.29	-0.89	-0.65	150.35	-1.14	-0.72
YUTPBP		151.00	-0.18	-0.13	151.00	-0.49	-0.31
Z32HCH		152.67	1.49	1.10	152.24	0.75	0.47
ZLHLWP		152.11	0.93	0.68	151.64	0.15	0.10
ZM9VVJ		152.00	0.82	0.60	150.59	-0.89	-0.56
ZPDGMQ		154.61	3.43	2.52	154.90	3.41	2.15
ZQPFJK		151.00	-0.18	-0.13	153.00	1.51	0.95

Summary Statistics

	Sample A45		Sample A46	
Grand Means	151.18	ksi	151.49	ksi
Stnd Dev Btwn Labs	1.36	ksi	1.59	ksi

Samples A45, A46 : AISI 4340 (S), AISI 4340 (L)

Statistics based on 57 of 62 reporting participants

Comments on Assigned Data Flags for Test #110

9AUQYA (X) - Data for both samples are low.

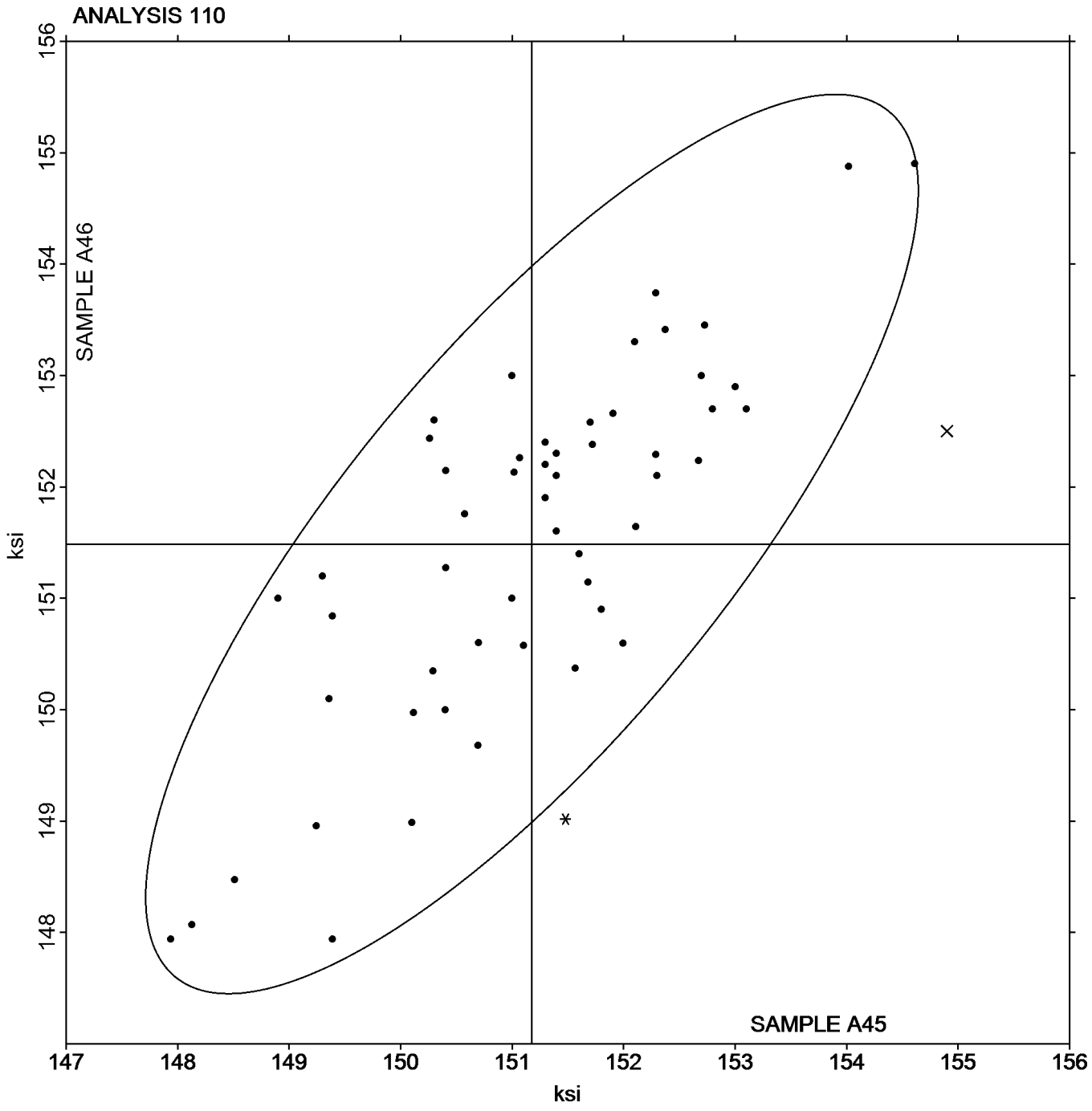
E63ACX (X) - Data for sample A45 are high.

F4PY66 (X) - Data for sample A45 are high.

KL9HV8 (X) - Data for both samples are low.

UR284M (X) - Data for both samples are high.

SAMPLE A45	SAMPLE A46
151.18 ksi	151.49 ksi



		Sample A45			Sample A46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
26LYPA		122.85	-0.24	-0.09	122.67	-0.48	-0.20
33DXFA		123.20	0.11	0.04	122.70	-0.45	-0.19
3HADHP		121.69	-1.40	-0.54	121.25	-1.89	-0.80
3HPEPX		124.01	0.92	0.35	125.02	1.88	0.80
42G2E9		123.10	0.01	0.00	123.00	-0.15	-0.06
4VC8F7		122.01	-1.08	-0.42	124.27	1.12	0.48
64J9A7		123.52	0.43	0.16	119.66	-3.49	-1.48
6CBLA6		118.96	-4.13	-1.58	119.02	-4.13	-1.75
7D6R8B		120.10	-2.99	-1.15	122.10	-1.05	-0.44
7Q8DE8		122.60	-0.49	-0.19	122.50	-0.65	-0.27
7XA8T9		122.00	-1.09	-0.42	125.00	1.85	0.79
8BVX3N		120.20	-2.89	-1.11	120.80	-2.35	-0.99
9AUQYA	*	115.10	-7.99	-3.06	117.90	-5.25	-2.22
9WP8NA		119.50	-3.59	-1.38	121.90	-1.25	-0.53
A3ALY8		124.80	1.71	0.66	125.30	2.15	0.91
AJVDMZ		126.42	3.33	1.28	124.71	1.56	0.66
AR9HH6		122.82	-0.27	-0.10	124.66	1.51	0.64
AXXWDC		122.00	-1.09	-0.42	121.70	-1.45	-0.61
BHYAFB		125.60	2.51	0.96	121.11	-2.04	-0.86
BMUZV8	X	128.80	5.71	2.19	121.30	-1.85	-0.78
BVP4R4		121.54	-1.55	-0.59	123.14	-0.01	0.00
CWDX2D	X	134.16	11.07	4.25	131.26	8.11	3.44
CWWTLZ		122.80	-0.29	-0.11	125.20	2.05	0.87
DPADGU		121.83	-1.26	-0.48	122.41	-0.73	-0.31
DZQ2G8		123.30	0.21	0.08	123.40	0.25	0.11
E2JEG6		124.70	1.61	0.62	124.70	1.55	0.66
E63ACX	*	130.30	7.21	2.77	126.10	2.95	1.25
EKTCNU		122.60	-0.49	-0.19	123.20	0.05	0.02
F4PY66		127.30	4.21	1.62	124.80	1.65	0.70
FFGKBZ		122.30	-0.79	-0.30	121.30	-1.85	-0.78
G8XWQH		121.86	-1.23	-0.47	121.50	-1.65	-0.70
GBHQP4		123.00	-0.09	-0.03	122.70	-0.45	-0.19
GQXN38		122.89	-0.20	-0.08	122.89	-0.26	-0.11
JTRL6V		121.11	-1.98	-0.76	122.27	-0.88	-0.37
K2LVAY		121.69	-1.40	-0.54	122.43	-0.71	-0.30
KENGFU		126.91	3.82	1.47	126.04	2.89	1.23
KFKXQ7		120.59	-2.50	-0.96	120.33	-2.82	-1.19
KL7VET	*	125.58	2.49	0.95	120.21	-2.93	-1.24
KL9HV8		118.21	-4.88	-1.87	118.21	-4.94	-2.09
L2FWTV		122.78	-0.31	-0.12	124.51	1.36	0.58
N3PK7R		121.11	-1.98	-0.76	122.12	-1.02	-0.43
N9P8UK		123.44	0.35	0.14	123.77	0.62	0.26
NBEFYF		122.90	-0.19	-0.07	124.50	1.35	0.57
ND37XC		122.70	-0.39	-0.15	123.10	-0.05	-0.02
NHHELC	*	126.97	3.89	1.49	121.59	-1.55	-0.66
PAK8BW		123.25	0.16	0.06	120.45	-2.69	-1.14
Q2HEF8		121.08	-2.01	-0.77	120.24	-2.91	-1.23

		Sample A45			Sample A46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
RW2GGJ		122.50	-0.59	-0.23	124.32	1.17	0.50
RW2J7N		123.69	0.60	0.23	125.44	2.30	0.97
TR8UAG		121.98	-1.11	-0.43	121.25	-1.89	-0.80
TTZTJ9		123.30	0.21	0.08	122.40	-0.75	-0.32
UAH86P		123.60	0.51	0.20	124.30	1.15	0.49
UR284M	*	130.54	7.45	2.86	129.08	5.94	2.52
VYZLVF	*	126.33	3.24	1.24	129.81	6.66	2.82
X86DBN		122.98	-0.11	-0.04	124.01	0.86	0.37
XFW3MH		128.45	5.36	2.06	128.87	5.72	2.42
YUTPBP		123.00	-0.09	-0.03	123.00	-0.15	-0.06
Z32HCH		121.93	-1.16	-0.44	123.49	0.34	0.15
ZLHLWP		122.90	-0.19	-0.07	123.10	-0.05	-0.02
ZM9VVJ		124.07	0.98	0.38	123.00	-0.15	-0.06
ZPDGMQ		124.88	1.79	0.69	126.33	3.18	1.35
ZQPFJK		122.00	-1.09	-0.42	124.00	0.85	0.36

Summary Statistics

	Sample A45		Sample A46	
Grand Means	123.09	ksi	123.15	ksi
Stnd Dev Btwn Labs	2.61	ksi	2.36	ksi

Samples A45, A46 : AISI 4340 (S), AISI 4340 (L)

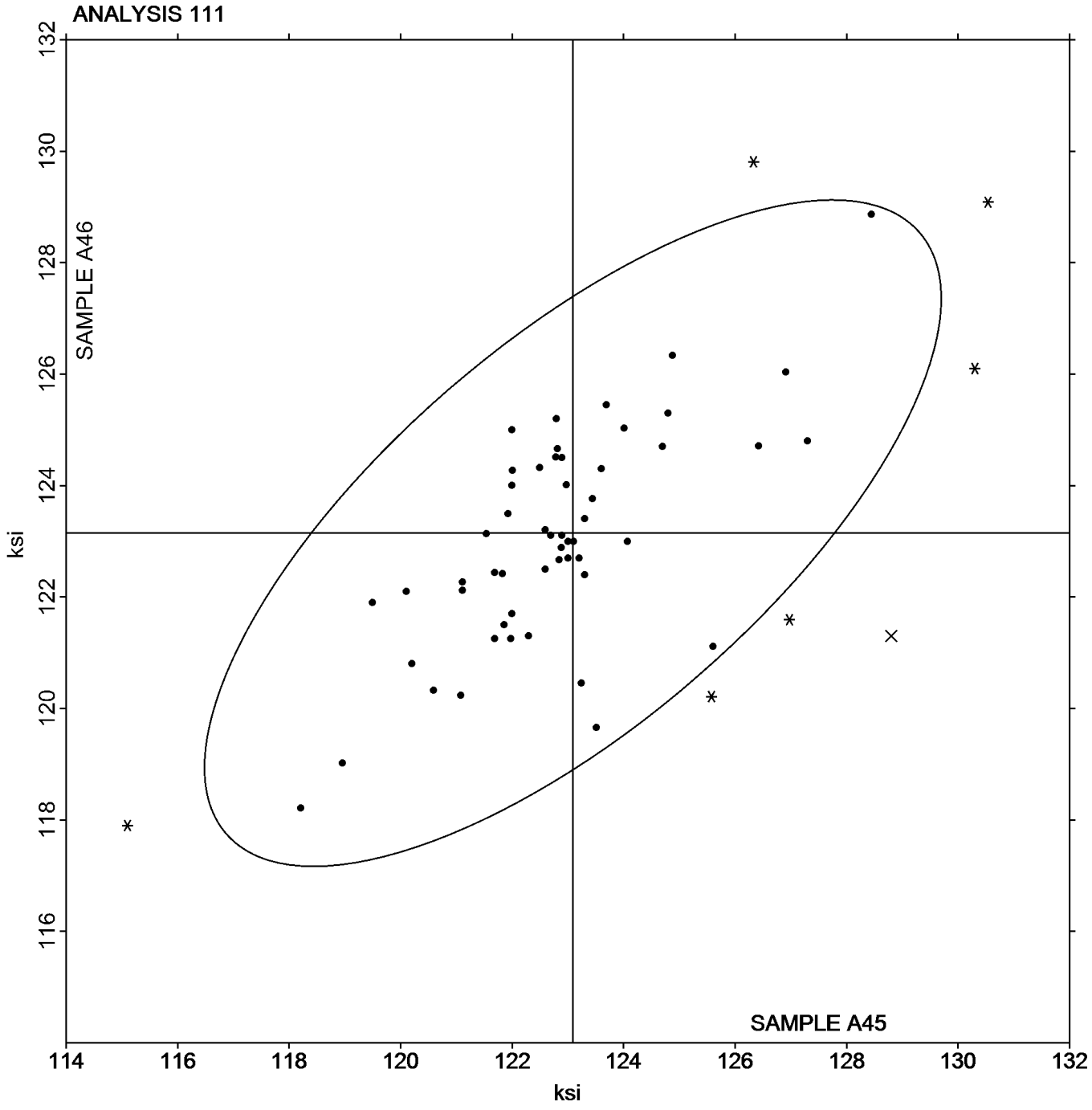
Statistics based on 60 of 62 reporting participants

Comments on Assigned Data Flags for Test #111

BMUZV8 (X) - Inconsistent in testing between samples.

CWDX2D (X) - Data for both samples are high.

SAMPLE A45	SAMPLE A46
123.09 ksi	123.15 ksi



		Sample A45			Sample A46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
26LYPA		15.00	-1.11	-1.69	15.50	0.00	0.00
33DXFA		15.90	-0.21	-0.33	16.50	1.00	1.46
3HADHP		15.71	-0.41	-0.62	15.31	-0.19	-0.27
3HPEPX		15.10	-1.01	-1.54	14.90	-0.60	-0.87
42G2E9		16.00	-0.11	-0.17	15.50	0.00	0.00
4VC8F7		17.09	0.98	1.48	15.36	-0.14	-0.21
64J9A7	X	17.73	1.61	2.45	18.58	3.08	4.50
6CBLA6		16.10	-0.01	-0.02	15.40	-0.10	-0.14
7D6R8B		16.50	0.39	0.59	16.30	0.80	1.17
7Q8DE8		15.90	-0.21	-0.33	16.30	0.80	1.17
7XA8T9		16.00	-0.11	-0.17	15.00	-0.50	-0.73
8BVX3N		16.50	0.39	0.59	15.40	-0.10	-0.14
9AUQYA	*	17.80	1.69	2.56	16.50	1.00	1.46
9WP8NA		15.80	-0.31	-0.48	15.50	0.00	0.00
A3ALY8		15.80	-0.31	-0.48	15.00	-0.50	-0.73
AJVDMZ		15.71	-0.40	-0.61	15.66	0.16	0.24
AR9HH6		17.00	0.89	1.35	16.00	0.50	0.73
AXXWDC		16.30	0.19	0.28	16.00	0.50	0.73
BHYAFB		16.00	-0.11	-0.17	16.20	0.70	1.03
BMUZV8		15.70	-0.41	-0.63	15.20	-0.30	-0.44
BVP4R4		15.80	-0.31	-0.48	16.90	1.40	2.05
CWDX2D		15.68	-0.43	-0.66	14.14	-1.36	-1.98
CWWTLZ		16.28	0.16	0.25	15.28	-0.22	-0.33
DPADGU		16.00	-0.11	-0.17	15.00	-0.50	-0.73
DZQ2G8		15.60	-0.51	-0.78	15.10	-0.40	-0.58
E2JEG6		15.60	-0.51	-0.78	15.30	-0.20	-0.29
E63ACX		16.40	0.29	0.44	16.00	0.50	0.73
EKTCNU		16.60	0.49	0.74	15.72	0.22	0.32
F4PY66		15.60	-0.51	-0.78	15.50	0.00	0.00
FFGKBZ		15.70	-0.41	-0.63	15.30	-0.20	-0.29
G8XWQH		17.21	1.10	1.67	16.01	0.51	0.75
GBHQP4		15.90	-0.21	-0.33	14.80	-0.70	-1.02
GQXN38		16.25	0.14	0.21	15.22	-0.28	-0.41
JTRL6V		16.00	-0.11	-0.17	15.00	-0.50	-0.73
K2LVAY	*	16.20	0.09	0.13	17.40	1.90	2.78
KENGFU		14.80	-1.31	-2.00	14.50	-1.00	-1.46
KFKXQ7		15.50	-0.61	-0.93	15.80	0.30	0.44
KL7VET		15.82	-0.29	-0.45	15.63	0.13	0.19
KL9HV8		16.60	0.49	0.74	15.20	-0.30	-0.44
L2FWTV		16.00	-0.11	-0.17	15.50	0.00	0.00
N3PK7R		16.20	0.09	0.13	15.30	-0.20	-0.29
N9P8UK		16.32	0.21	0.31	15.39	-0.11	-0.16
NBEFYF		15.24	-0.87	-1.33	14.19	-1.31	-1.91
ND37XC		16.10	-0.01	-0.02	14.90	-0.60	-0.87
NHHELC		17.00	0.89	1.35	15.00	-0.50	-0.73
PAK8BW		16.10	-0.01	-0.02	16.65	1.15	1.68
Q2HEF8		16.20	0.09	0.13	15.80	0.30	0.44

		Sample A45			Sample A46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
RW2GGJ		17.50	1.39	2.11	16.92	1.42	2.08
RW2J7N		16.34	0.23	0.34	14.94	-0.56	-0.82
TR8UAG		16.60	0.49	0.74	15.70	0.20	0.30
TTZTJ9		16.20	0.09	0.13	15.60	0.10	0.15
UAH86P		16.50	0.39	0.59	15.70	0.20	0.30
UR284M	X	18.00	1.89	2.87	22.50	7.00	10.23
VYZLVF		15.00	-1.11	-1.69	15.00	-0.50	-0.73
X86DBN		17.05	0.94	1.42	16.35	0.85	1.25
XFW3MH		14.70	-1.41	-2.15	15.22	-0.28	-0.41
YUTPBP		16.50	0.39	0.59	16.00	0.50	0.73
Z32HCH		17.36	1.25	1.90	15.03	-0.47	-0.68
ZLHLWP	*	16.85	0.74	1.12	14.35	-1.15	-1.68
ZM9VVJ	X	17.83	1.72	2.61	14.51	-0.99	-1.44
ZPDGMQ		16.51	0.40	0.60	15.52	0.02	0.03
ZQPFJK		15.00	-1.11	-1.69	14.00	-1.50	-2.19

Summary Statistics

	Sample A45		Sample A46	
Grand Means	16.11	Percent	15.50	Percent
Stnd Dev Btwn Labs	0.66	Percent	0.68	Percent

Samples A45, A46 : AISI 4340 (S), AISI 4340 (L)

Statistics based on 59 of 62 reporting participants

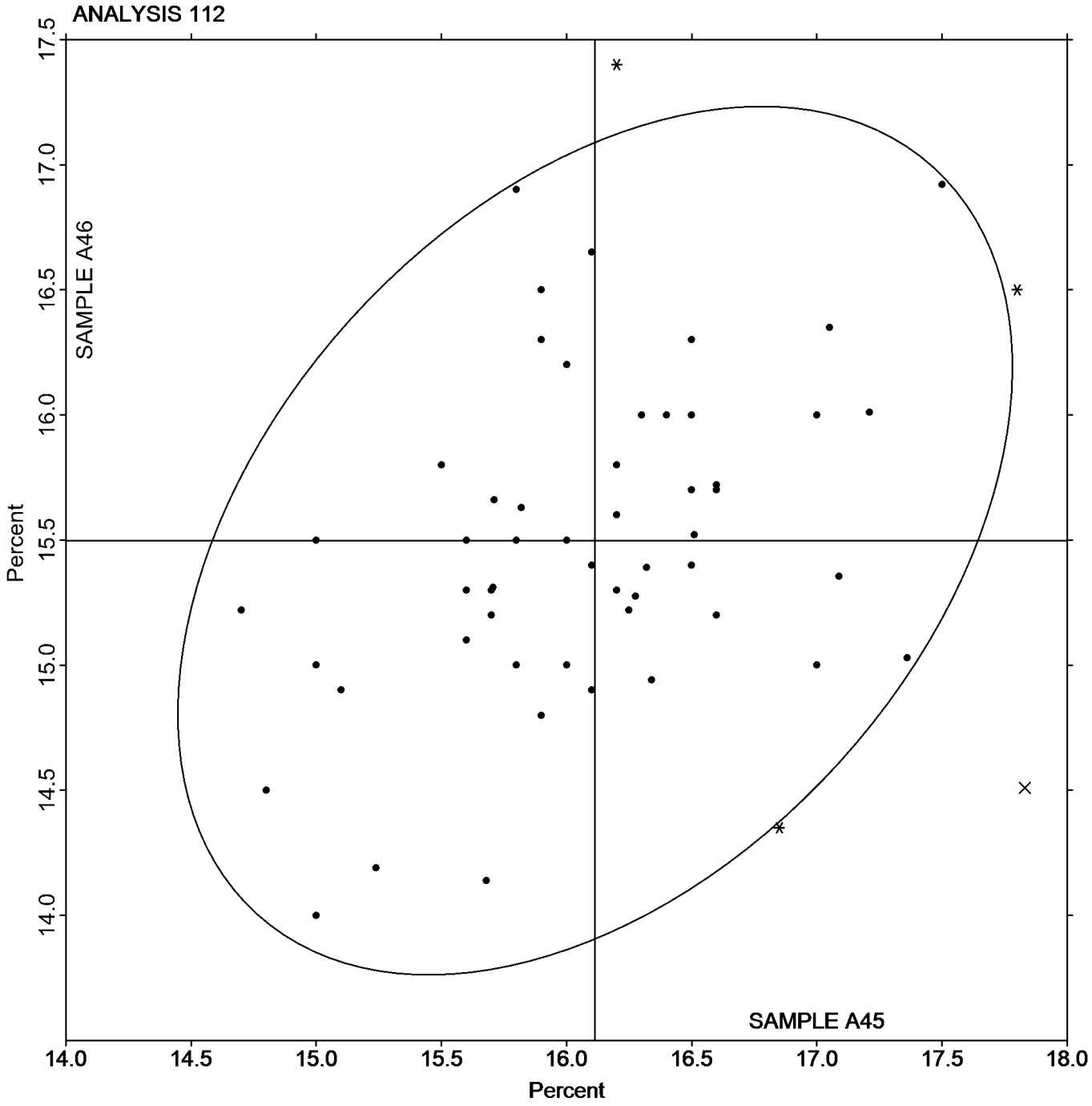
Comments on Assigned Data Flags for Test #112

64J9A7 (X) - Data for sample A46 are high.

UR284M (X) - Data for sample A45 are high. Data for sample A46 are extremely high.

ZM9VVJ (X) - Inconsistent in testing between samples.

SAMPLE A45	SAMPLE A46
16.11 Percent	15.50 Percent



		Sample A45			Sample A46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
26LYPA		47.50	-2.34	-1.25	47.50	1.68	0.98
33DXFA		47.40	-2.44	-1.30	47.20	1.38	0.80
3HADHP		49.00	-0.84	-0.45	46.00	0.18	0.10
3HPEPX		48.00	-1.84	-0.98	45.00	-0.82	-0.48
42G2E9		51.50	1.66	0.88	46.50	0.68	0.40
4VC8F7		50.92	1.08	0.57	45.10	-0.73	-0.43
64J9A7		50.86	1.02	0.54	45.24	-0.58	-0.34
6CBLA6		49.90	0.06	0.03	49.00	3.18	1.86
7D6R8B		51.10	1.26	0.67	47.00	1.18	0.69
7Q8DE8		48.90	-0.94	-0.50	45.50	-0.32	-0.19
8BVX3N		49.30	-0.54	-0.29	45.70	-0.12	-0.07
9AUQYA		51.19	1.35	0.72	46.63	0.81	0.47
9WP8NA	*	43.90	-5.94	-3.16	43.30	-2.52	-1.48
A3ALY8		48.30	-1.54	-0.82	44.70	-1.12	-0.66
AJVDMZ		49.20	-0.64	-0.34	43.74	-2.08	-1.22
AR9HH6		51.00	1.16	0.62	46.00	0.18	0.10
AXXWDC		51.10	1.26	0.67	46.60	0.78	0.45
BHYAFB	X	28.20	-21.64	-11.51	27.10	-18.72	-10.95
BMUZV8		50.20	0.36	0.19	45.10	-0.72	-0.42
BVP4R4		51.90	2.06	1.09	46.60	0.78	0.45
CWDX2D	*	45.59	-4.25	-2.26	41.97	-3.85	-2.25
CWWTLZ		49.99	0.15	0.08	43.99	-1.84	-1.07
DPADGU	*	45.00	-4.84	-2.58	45.00	-0.82	-0.48
DZQ2G8		47.40	-2.44	-1.30	45.50	-0.32	-0.19
E2JEG6		49.30	-0.54	-0.29	46.30	0.48	0.28
E63ACX		50.10	0.26	0.14	44.00	-1.82	-1.07
EKTCNU		49.20	-0.64	-0.34	44.90	-0.92	-0.54
F4PY66		51.70	1.86	0.99	47.20	1.38	0.80
FFGKBZ		48.80	-1.04	-0.55	46.30	0.48	0.28
G8XWQH		49.72	-0.12	-0.07	43.99	-1.83	-1.07
GBHQP4		47.30	-2.54	-1.35	44.90	-0.92	-0.54
GQXN38		50.60	0.76	0.40	45.40	-0.42	-0.25
JTRL6V		48.00	-1.84	-0.98	46.00	0.18	0.10
K2LVAY		51.50	1.66	0.88	45.10	-0.72	-0.42
KENGFU		51.80	1.96	1.04	43.90	-1.92	-1.13
KFKXQ7		48.30	-1.54	-0.82	47.10	1.28	0.75
KL7VET		50.91	1.07	0.57	47.30	1.48	0.86
KL9HV8		52.00	2.16	1.15	47.00	1.18	0.69
L2FWTV		49.50	-0.34	-0.18	46.50	0.68	0.40
N3PK7R		51.30	1.46	0.78	46.60	0.78	0.45
N9P8UK		52.77	2.93	1.56	45.57	-0.25	-0.15
NBEFYF		49.51	-0.33	-0.18	45.30	-0.52	-0.31
ND37XC		51.00	1.16	0.62	44.90	-0.92	-0.54
NHHELC		51.00	1.16	0.62	44.00	-1.82	-1.07
PAK8BW		48.37	-1.48	-0.78	48.37	2.54	1.49
Q2HEF8		51.40	1.56	0.83	48.90	3.08	1.80
RW2GGJ		49.78	-0.06	-0.03	45.91	0.09	0.05

WebCode	Data Flag	Sample A45 Lab Mean	Sample A45 Diff. from Grand Mean	Sample A45 CPV	Sample A46 Lab Mean	Sample A46 Diff. from Grand Mean	Sample A46 CPV
RW2J7N		48.16	-1.68	-0.89	42.72	-3.10	-1.82
TR8UAG		50.80	0.96	0.51	47.10	1.28	0.75
TTZTJ9		51.90	2.06	1.09	47.50	1.68	0.98
UAH86P		48.20	-1.64	-0.87	43.30	-2.52	-1.48
UR284M	X	44.00	-5.84	-3.11	49.00	3.18	1.86
VYZLVF		52.00	2.16	1.15	47.00	1.18	0.69
X86DBN		49.71	-0.13	-0.07	47.55	1.73	1.01
XFW3MH		51.05	1.21	0.64	46.52	0.70	0.41
YUTPBP		52.00	2.16	1.15	49.20	3.38	1.97
Z32HCH		50.77	0.93	0.49	47.75	1.93	1.13
ZLHLWP	*	49.27	-0.57	-0.30	40.73	-5.09	-2.98
ZM9VVJ		51.49	1.65	0.88	46.19	0.37	0.21
ZPDGMQ		53.35	3.51	1.87	48.78	2.96	1.73
ZQPFJK		49.00	-0.84	-0.45	45.00	-0.82	-0.48

Summary Statistics

	Sample A45		Sample A46	
Grand Means	49.84	Percent	45.82	Percent
Stnd Dev Btwn Labs	1.88	Percent	1.71	Percent

Samples A45, A46 : AISI 4340 (S), AISI 4340 (L)

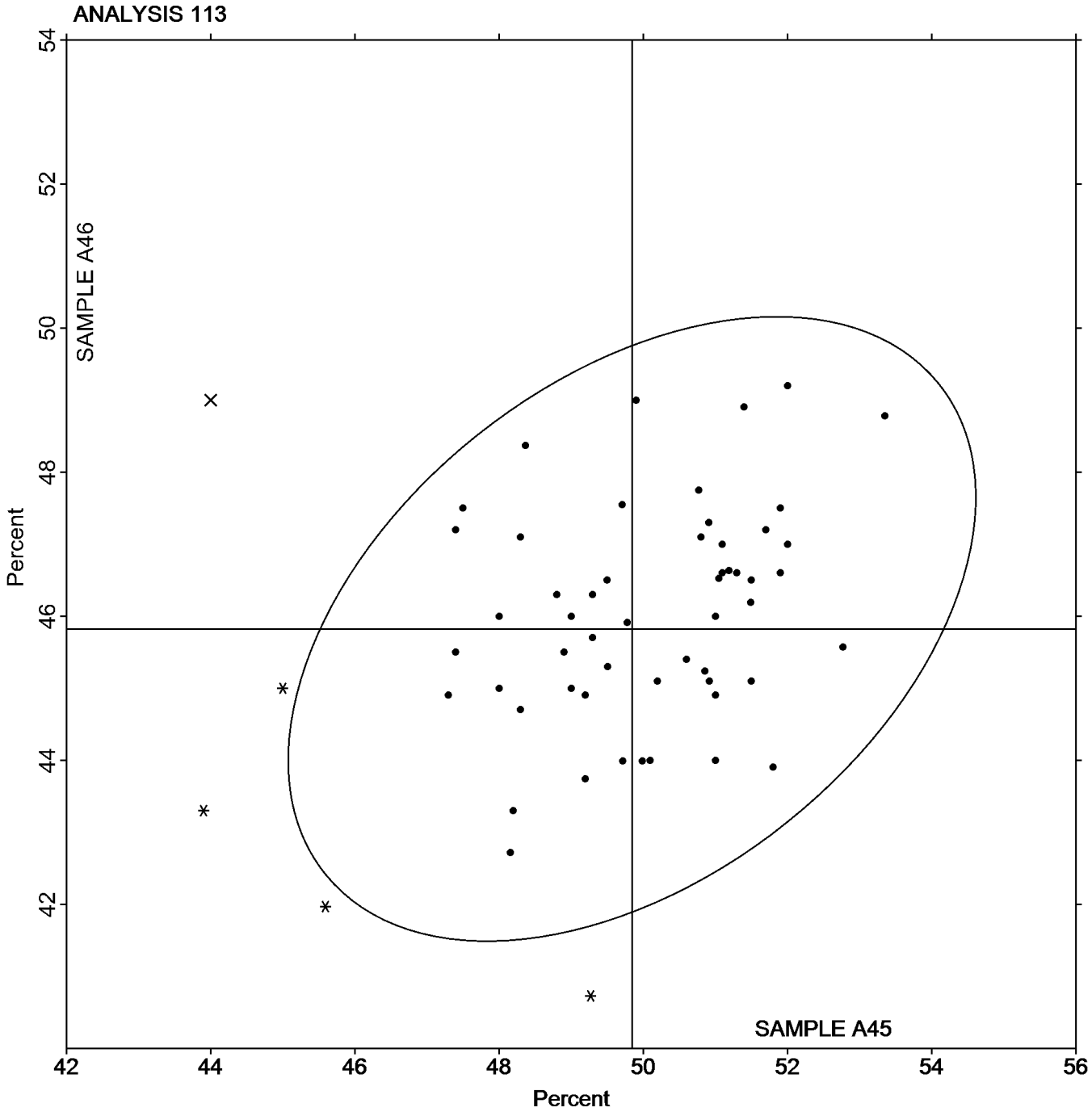
Statistics based on 59 of 61 reporting participants

Comments on Assigned Data Flags for Test #113

BHYAFB (X) - Data for both samples are extremely low.

UR284M (X) - Data for sample A45 are low.

SAMPLE A45	SAMPLE A46
49.84 Percent	45.82 Percent



		Sample N45			Sample N46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2AFTMC		94.44	0.72	1.52	99.64	0.33	0.77
2FMCZV		93.00	-0.72	-1.50	99.00	-0.31	-0.71
2J6MY9		94.04	0.32	0.68	100.02	0.71	1.65
2UMWUT		92.92	-0.80	-1.66	98.38	-0.93	-2.15
366YJC		93.42	-0.30	-0.62	99.06	-0.25	-0.57
3GXENF		92.80	-0.92	-1.91	98.40	-0.91	-2.10
3RD76P		93.50	-0.22	-0.45	99.24	-0.07	-0.16
4PJ3NM		93.68	-0.04	-0.07	99.44	0.13	0.31
6HJ3Q7		94.52	0.80	1.68	99.84	0.53	1.23
6MAEL3		93.91	0.20	0.41	98.92	-0.38	-0.89
6T3E3J		94.18	0.46	0.97	99.38	0.07	0.17
6ZHXKX		93.80	0.08	0.18	99.06	-0.25	-0.57
77H49Y		92.80	-0.92	-1.91	99.00	-0.31	-0.71
7HYJJE		93.30	-0.42	-0.87	98.90	-0.41	-0.94
7PY6E8		93.48	-0.24	-0.49	99.00	-0.31	-0.71
7RMB2P		94.06	0.34	0.72	99.76	0.45	1.05
7RZ84A		93.58	-0.14	-0.28	99.18	-0.13	-0.30
7X7M2Y		93.92	0.20	0.43	100.02	0.71	1.65
87Z7UR		93.78	0.06	0.14	99.38	0.07	0.17
88QFQ2		94.27	0.56	1.17	99.75	0.44	1.02
8RZBH8		94.13	0.42	0.88	99.52	0.21	0.49
8VHP2K		94.30	0.58	1.22	99.46	0.15	0.35
92J7YY		94.12	0.40	0.85	99.70	0.39	0.91
9WTRFJ		93.70	-0.02	-0.03	99.12	-0.19	-0.43
A2E8HV		93.66	-0.06	-0.12	99.56	0.25	0.58
A3ALY8		93.68	-0.04	-0.07	98.78	-0.53	-1.22
AAA3JZ	X	92.02	-1.70	-3.54	98.82	-0.49	-1.13
AGRH4W		93.98	0.26	0.55	99.68	0.37	0.86
AWPMFZ		93.82	0.10	0.22	99.50	0.19	0.45
AXXWDC	*	92.34	-1.38	-2.88	98.62	-0.69	-1.59
B6D3FN	X	95.08	1.36	2.85	102.42	3.11	7.21
B76Y3X		93.68	-0.04	-0.07	100.02	0.71	1.65
B8JHR2		93.66	-0.06	-0.12	99.26	-0.05	-0.11
B9BJTH		92.70	-1.02	-2.12	98.40	-0.91	-2.10
BBHX9A		93.70	-0.02	-0.03	99.26	-0.05	-0.11
BHKLG6		93.68	-0.04	-0.07	99.26	-0.05	-0.11
BMUZV8		93.24	-0.48	-0.99	99.02	-0.29	-0.67
CWWTLZ		94.22	0.50	1.06	99.88	0.57	1.33
CXB6AX	X	92.90	-0.82	-1.70	99.84	0.53	1.23
CZFWAB		93.50	-0.22	-0.45	98.86	-0.45	-1.04
CZYJ4L		93.58	-0.14	-0.28	99.60	0.29	0.68
D8DPH6		93.20	-0.52	-1.08	99.12	-0.19	-0.43
DGFA9Q		94.04	0.32	0.68	99.40	0.09	0.21
DMMJU2		93.64	-0.08	-0.16	99.26	-0.05	-0.11
DZPADK	X	94.36	0.64	1.35	22.10	-77.21	-178.82
DZQ2G8		93.52	-0.20	-0.41	98.82	-0.49	-1.13
E3C96N		93.68	-0.04	-0.07	99.62	0.31	0.72

		Sample N45			Sample N46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
E63ACX		93.54	-0.18	-0.37	99.40	0.09	0.21
EAYQXC		93.68	-0.04	-0.07	99.32	0.01	0.03
ELNXFZ		93.76	0.04	0.09	99.48	0.17	0.40
FKDBLT		93.82	0.10	0.22	99.16	-0.15	-0.34
FXXQRD		94.36	0.64	1.35	99.82	0.51	1.19
G8JEYK		94.14	0.42	0.89	99.32	0.01	0.03
GBHQP4		93.84	0.12	0.26	99.46	0.15	0.35
GFR3M6		93.48	-0.24	-0.49	99.04	-0.27	-0.62
GJEJ34		93.22	-0.50	-1.04	99.44	0.13	0.31
GL6MVB		93.68	-0.04	-0.07	99.46	0.15	0.35
GMBDKT	*	94.88	1.16	2.44	100.20	0.89	2.07
HD4R9W		94.00	0.28	0.60	99.60	0.29	0.68
HXRDY2		94.10	0.38	0.80	99.00	-0.31	-0.71
JDEZXX		94.24	0.52	1.10	99.68	0.37	0.86
JF3LJ8		94.02	0.30	0.64	99.52	0.21	0.49
JPRHCM		93.78	0.06	0.14	99.86	0.55	1.28
JVF63L		93.78	0.06	0.14	99.38	0.07	0.17
KAF7FM		94.08	0.36	0.76	100.24	0.93	2.16
KFKXQ7		94.14	0.42	0.89	99.34	0.03	0.08
KL9JTC		93.60	-0.12	-0.24	99.00	-0.31	-0.71
KMHN2T		93.48	-0.24	-0.49	99.06	-0.25	-0.57
KNDBP7	*	92.58	-1.14	-2.37	99.14	-0.17	-0.39
KUZVXR		93.88	0.16	0.34	99.84	0.53	1.23
KVFGC9		94.18	0.46	0.97	99.68	0.37	0.86
LEKDBV		93.22	-0.50	-1.04	99.56	0.25	0.58
LFZGB4		93.84	0.12	0.26	98.94	-0.37	-0.85
LP3V42		93.18	-0.54	-1.12	99.00	-0.31	-0.71
LQUYJG		94.36	0.64	1.35	99.24	-0.07	-0.16
LWKCHK		94.50	0.78	1.64	100.20	0.89	2.07
LZ2TQ2		93.68	-0.04	-0.07	99.20	-0.11	-0.25
MG7KYC		94.14	0.42	0.89	98.92	-0.39	-0.90
MKMQX8		93.90	0.18	0.39	99.46	0.15	0.35
MXDJDU		93.64	-0.08	-0.16	99.16	-0.15	-0.34
N76ER4		93.90	0.18	0.39	99.32	0.01	0.03
N9P8UK		94.44	0.72	1.52	100.20	0.89	2.07
NBEFYF		93.96	0.24	0.51	99.30	-0.01	-0.02
NEU3F7		93.32	-0.40	-0.83	99.10	-0.21	-0.48
NFRCHA	*	93.48	-0.24	-0.49	98.24	-1.07	-2.47
NHHKTK		93.82	0.10	0.22	98.98	-0.33	-0.76
NMP6Q3	*	93.46	-0.26	-0.53	99.96	0.65	1.51
NV4P6N		94.34	0.62	1.31	99.96	0.65	1.51
NX48WN		93.44	-0.28	-0.58	99.74	0.43	1.00
NYJJQZ		93.76	0.04	0.09	99.38	0.07	0.17
P4AY7L		93.64	-0.08	-0.16	99.80	0.49	1.14
PF7ZPG		93.89	0.17	0.36	99.15	-0.15	-0.36
PMP98L		94.08	0.36	0.76	99.60	0.29	0.68
QP4J89		94.60	0.88	1.85	99.37	0.06	0.14

		Sample N45			Sample N46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
QVUTJR		93.80	0.08	0.18	99.38	0.07	0.17
QWPHQG		94.36	0.64	1.35	99.30	-0.01	-0.02
RGQVYE		93.08	-0.64	-1.33	98.34	-0.97	-2.24
RKD797		94.12	0.40	0.85	99.36	0.05	0.12
RT7HB2		93.40	-0.32	-0.66	99.26	-0.05	-0.11
RVUYKA		93.50	-0.22	-0.45	99.00	-0.31	-0.71
TCCJFJ		93.52	-0.20	-0.41	99.22	-0.09	-0.20
TR8UAG	X	95.34	1.62	3.40	100.20	0.89	2.07
TXY4NU		93.06	-0.66	-1.37	98.60	-0.71	-1.64
U6QYUJ	*	92.38	-1.34	-2.79	98.46	-0.85	-1.96
UAH86P		93.46	-0.26	-0.53	98.96	-0.35	-0.80
UHVZQ9		94.38	0.66	1.39	99.52	0.21	0.49
UNL987		93.70	-0.02	-0.03	99.58	0.27	0.63
VBANYX	*	92.32	-1.40	-2.92	98.30	-1.01	-2.33
VGWEC8		94.02	0.30	0.64	99.30	-0.01	-0.02
VVE9LC		93.18	-0.54	-1.12	99.30	-0.01	-0.02
W7FNHG		93.00	-0.72	-1.50	98.96	-0.35	-0.80
WE8AC9		93.70	-0.02	-0.03	99.12	-0.19	-0.43
WFLVXG		93.80	0.08	0.18	99.72	0.41	0.96
WGXMRJ		92.84	-0.88	-1.83	98.54	-0.77	-1.78
WKC4FG		93.74	0.02	0.05	99.28	-0.03	-0.06
WKGHNC		93.66	-0.06	-0.12	98.70	-0.61	-1.41
X86DBN		93.82	0.10	0.22	99.30	-0.01	-0.02
YD4NFJ		94.08	0.36	0.75	100.14	0.83	1.92
YPGJYP		94.04	0.32	0.68	99.74	0.43	1.00
YQV7BC		93.60	-0.12	-0.24	99.20	-0.11	-0.25
YY6HNA		94.18	0.46	0.97	99.22	-0.09	-0.20
Z8X8LP		93.98	0.26	0.55	99.42	0.11	0.26
ZAZ63W		93.46	-0.26	-0.53	98.96	-0.35	-0.80
ZQPFJK		93.90	0.18	0.39	99.10	-0.21	-0.48

Summary Statistics

	Sample N45		Sample N46	
Grand Means	93.72	HRB	99.31	HRB
Stnd Dev Btwn Labs	0.48	HRB	0.43	HRB

Samples N45, N46 : Steel, Steel

Statistics based on 119 of 124 reporting participants

Comments on Assigned Data Flags for Test #118

AAA3JZ (X) - Data for sample N45 are low. Inconsistent within the determinations of sample N45.

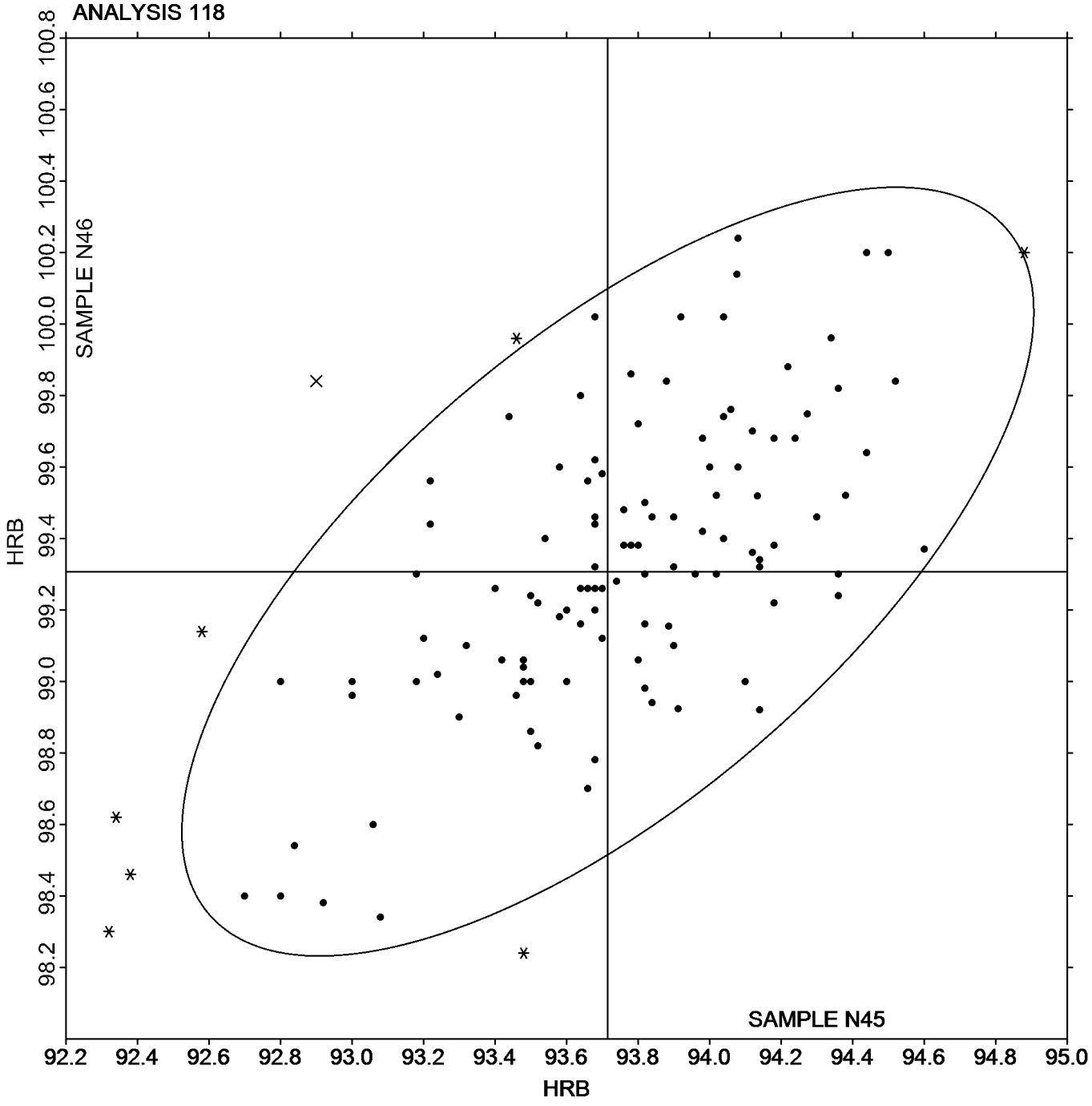
B6D3FN (X) - Data for both samples are high. Inconsistent within the determinations of sample N45.

CXB6AX (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample N45.

DZPADK (X) - Extreme data for sample N46.

TR8UAG (X) - Data for sample N45 are high.

SAMPLE N45	SAMPLE N46
93.72 HRB	99.31 HRB



		Sample N45			Sample N46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
26LYPA	X	90.70	-2.74	-4.84	96.40	-2.57	-4.76
2AGQX8		93.60	0.16	0.28	99.14	0.17	0.31
2PVUN9	X	93.30	-0.14	-0.25	97.56	-1.41	-2.61
2Q8N7U		94.12	0.68	1.20	99.52	0.55	1.01
33DXFA		93.34	-0.10	-0.18	98.72	-0.25	-0.47
3HADHP	*	92.12	-1.32	-2.33	97.46	-1.51	-2.80
3JGJ6D		93.30	-0.14	-0.25	98.20	-0.77	-1.43
42G2E9		92.52	-0.92	-1.62	98.16	-0.81	-1.50
6DP66A		92.92	-0.52	-0.92	98.30	-0.67	-1.24
6V6D7A		93.58	0.14	0.25	98.68	-0.29	-0.54
797BW3	X	94.22	0.78	1.38	94.27	-4.70	-8.71
7FB7PM		93.04	-0.40	-0.71	98.78	-0.19	-0.36
7QRWJE		93.62	0.18	0.32	99.50	0.53	0.98
7TEC38		92.70	-0.74	-1.31	98.80	-0.17	-0.32
7UPC2M		93.94	0.50	0.88	99.80	0.83	1.53
7XA8T9		93.30	-0.14	-0.25	98.76	-0.21	-0.39
8LT3WW		93.00	-0.44	-0.78	99.00	0.03	0.05
8ZTNH8		94.08	0.64	1.13	99.32	0.35	0.64
92J7YY		93.66	0.22	0.39	98.76	-0.21	-0.39
9ATTTK		93.64	0.20	0.35	99.04	0.07	0.13
9C3L22		93.80	0.36	0.64	99.16	0.19	0.35
9FHB6B		94.60	1.16	2.05	99.76	0.79	1.46
9MGUE7		93.04	-0.40	-0.71	98.62	-0.35	-0.65
9RCKRJ		93.80	0.36	0.64	98.84	-0.13	-0.24
9U2T9K	*	94.69	1.25	2.20	100.37	1.40	2.59
9WP6Y6		94.34	0.90	1.59	99.76	0.79	1.46
A4MEUA		93.32	-0.12	-0.21	98.98	0.01	0.01
A6YBYD		93.74	0.30	0.53	99.16	0.19	0.35
AJ3FJZ		92.72	-0.72	-1.27	98.64	-0.33	-0.61
B8JJLK		93.42	-0.02	-0.03	98.66	-0.31	-0.58
C27YDD		92.28	-1.16	-2.05	97.72	-1.25	-2.32
CKLBUX		93.38	-0.06	-0.11	98.74	-0.23	-0.43
DE9YA2		93.56	0.12	0.21	98.96	-0.01	-0.02
DLCUDA		92.50	-0.94	-1.66	98.44	-0.53	-0.99
DNZAV4		92.62	-0.82	-1.45	98.66	-0.31	-0.58
DZVJAR		93.08	-0.36	-0.64	98.78	-0.19	-0.36
E2JEG6		93.00	-0.44	-0.78	98.92	-0.05	-0.10
E89PUA		93.10	-0.34	-0.60	99.38	0.41	0.76
ECY6AV		93.84	0.40	0.71	99.32	0.35	0.64
F4PY66		93.12	-0.32	-0.56	99.04	0.07	0.13
F6ZW7F		94.44	1.00	1.77	99.86	0.89	1.64
FCXPGV		94.50	1.06	1.87	99.58	0.61	1.13
FDQJ8X	X	91.18	-2.26	-3.99	97.86	-1.11	-2.06
FFVB7D		94.26	0.82	1.45	99.68	0.71	1.31
FMDLDL	*	92.18	-1.26	-2.22	98.40	-0.58	-1.07
FRB3UM		93.36	-0.08	-0.14	98.78	-0.19	-0.36
G2DMQM		93.18	-0.26	-0.46	99.08	0.11	0.20

		Sample N45			Sample N46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
GABCJX		93.32	-0.12	-0.21	98.70	-0.27	-0.50
GQXN38		93.14	-0.30	-0.53	98.60	-0.37	-0.69
GV3UD4		93.66	0.22	0.39	98.82	-0.15	-0.29
GWM97M		94.34	0.90	1.59	99.72	0.75	1.38
H97CN4		93.10	-0.34	-0.60	98.50	-0.47	-0.87
HUTXHC		93.28	-0.16	-0.28	98.48	-0.49	-0.91
JAZE64		93.44	0.00	0.00	98.48	-0.49	-0.91
JJLQ3P		93.52	0.08	0.14	98.68	-0.29	-0.54
JXMCH7		93.08	-0.36	-0.64	98.72	-0.25	-0.47
KAF7FM	*	94.08	0.64	1.13	100.24	1.27	2.35
KGTA88		93.76	0.32	0.57	99.14	0.17	0.31
LGBFEX		93.20	-0.24	-0.42	99.10	0.13	0.24
LHLJP2		93.36	-0.08	-0.14	98.90	-0.07	-0.13
LRTW86		93.22	-0.22	-0.39	98.70	-0.27	-0.50
LXK7G3	X	89.42	-4.02	-7.10	94.46	-4.51	-8.35
M6T2ZP		93.48	0.04	0.07	99.18	0.21	0.38
MN48ZW		93.64	0.20	0.35	99.08	0.11	0.20
NBEFYF		93.58	0.14	0.25	98.80	-0.17	-0.32
NBWNNB		93.08	-0.36	-0.64	98.44	-0.53	-0.99
ND37XC		92.48	-0.96	-1.69	98.30	-0.67	-1.24
NU8BPV		93.60	0.16	0.28	99.20	0.23	0.42
P3XE2H		93.64	0.20	0.35	98.74	-0.23	-0.43
PH96XV		93.84	0.40	0.71	99.06	0.09	0.16
PHDHLR		93.38	-0.06	-0.11	99.38	0.41	0.76
PZQYQ7		93.70	0.26	0.46	99.76	0.79	1.46
R8NA78		94.14	0.70	1.24	99.80	0.83	1.53
RB42WZ		93.84	0.40	0.71	99.60	0.63	1.16
RJWAF7		93.44	0.00	0.00	99.06	0.09	0.16
RL7ZXA		93.95	0.51	0.90	99.38	0.41	0.76
RW2GGJ		92.58	-0.86	-1.52	98.30	-0.67	-1.24
TBHVXN		93.32	-0.12	-0.21	98.90	-0.07	-0.13
TTZTJ9		92.62	-0.82	-1.45	98.50	-0.47	-0.87
TV83FC		93.90	0.46	0.81	98.96	-0.01	-0.02
UEFR39		94.30	0.86	1.52	99.70	0.73	1.35
UFR8WA		93.82	0.38	0.67	99.62	0.65	1.20
UG7PPT		92.94	-0.50	-0.88	98.04	-0.93	-1.73
V24NC6		94.44	1.00	1.77	99.68	0.71	1.31
WDVQ3P		92.84	-0.60	-1.06	98.74	-0.23	-0.43
YUTPBP		93.20	-0.24	-0.42	98.48	-0.49	-0.91
ZA4UYU		93.56	0.12	0.21	99.52	0.55	1.01
ZRJZHQ		93.34	-0.10	-0.18	98.46	-0.51	-0.95

Summary Statistics

	Sample N45		Sample N46	
Grand Means	93.44	HRB	98.97	HRB
Stnd Dev Btwn Labs	0.57	HRB	0.54	HRB

Samples N45, N46 : Steel, Steel

Statistics based on 83 of 88 reporting participants

Comments on Assigned Data Flags for Test #119

26LYPA (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.

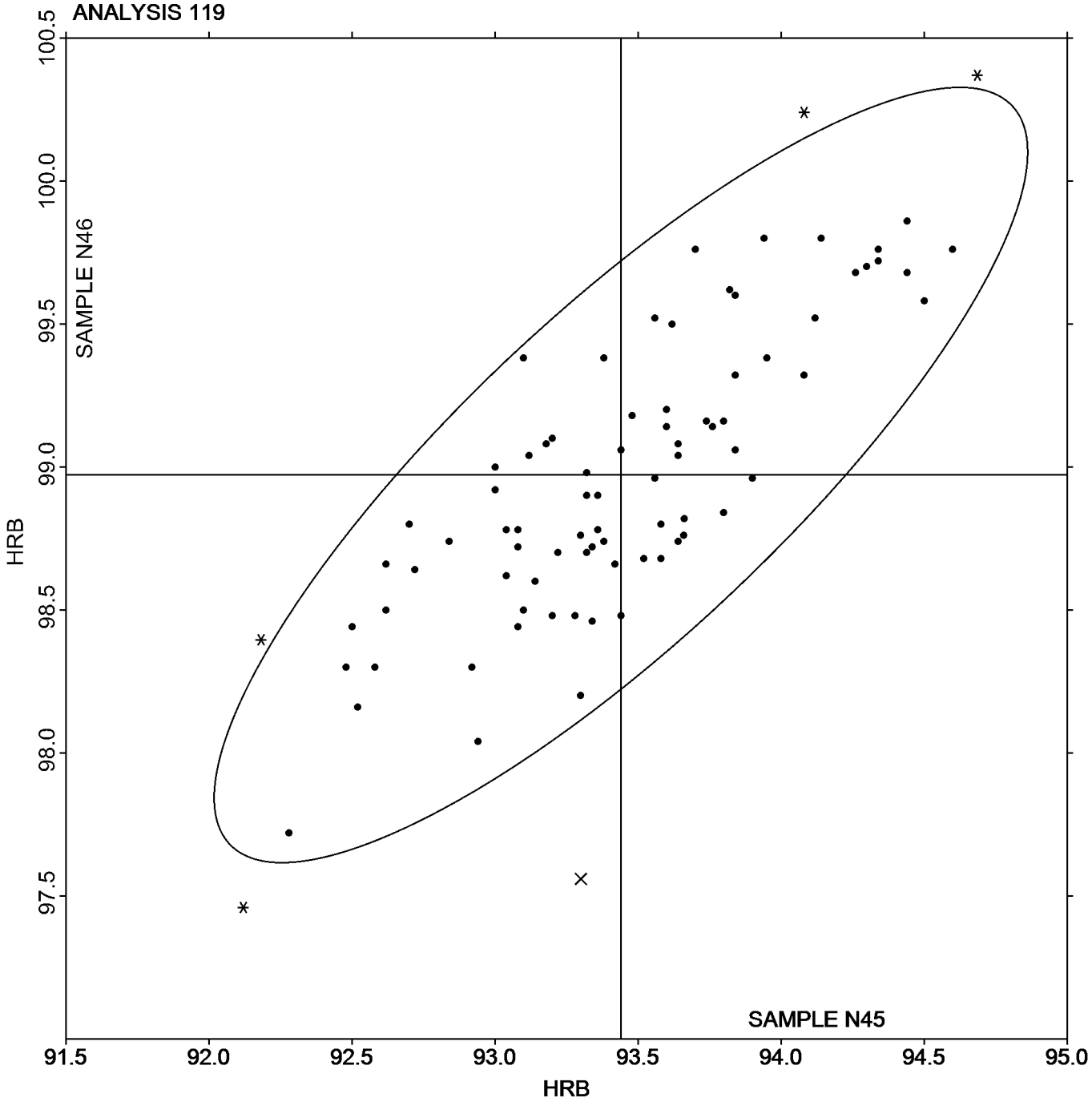
2PVUN9 (X) - Inconsistent in testing between samples.

797BW3 (X) - Data for sample N46 are low.

FDQJ8X (X) - Data for sample N45 are low. Inconsistent within the determinations of sample N45.

LXK7G3 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.

SAMPLE N45	SAMPLE N46
93.44 HRB	98.97 HRB



		Sample S45			Sample S46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2UMWUT		410.60	-5.92	-0.48	455.20	-7.33	-0.67
33DXFA		426.40	9.88	0.80	467.20	4.67	0.43
3GXENF		425.00	8.48	0.68	474.60	12.07	1.11
3HADHP		416.22	-0.30	-0.02	456.62	-5.91	-0.54
3JGJ6D		421.26	4.74	0.38	476.76	14.23	1.31
3TP69J		398.80	-17.72	-1.43	440.80	-21.73	-2.00
42G2E9		395.00	-21.52	-1.73	462.60	0.07	0.01
49YA36		412.20	-4.32	-0.35	470.20	7.67	0.71
6HJ3Q7		441.20	24.68	1.99	469.40	6.87	0.63
6LFNNN		426.80	10.28	0.83	480.60	18.07	1.66
6MAEL3		412.16	-4.36	-0.35	452.60	-9.93	-0.91
6T3E3J		413.20	-3.32	-0.27	463.60	1.07	0.10
733E8B		418.60	2.08	0.17	471.20	8.67	0.80
77H49Y		419.40	2.88	0.23	458.20	-4.33	-0.40
797BW3		414.80	-1.72	-0.14	450.60	-11.93	-1.10
7BY427		417.20	0.68	0.05	476.20	13.67	1.26
7JQPWX		430.80	14.28	1.15	472.00	9.47	0.87
7Q8DE8	X	447.80	31.28	2.52	461.60	-0.93	-0.09
7QRWJE		436.60	20.08	1.62	468.60	6.07	0.56
7RMB2P		423.00	6.48	0.52	483.20	20.67	1.90
864WP3		415.92	-0.60	-0.05	467.99	5.46	0.50
88QFQ2		414.80	-1.72	-0.14	472.60	10.07	0.93
8BTCDA	X	439.60	23.08	1.86	509.60	47.07	4.33
8BVX3N		415.00	-1.52	-0.12	461.20	-1.33	-0.12
8RZBH8		434.40	17.88	1.44	461.60	-0.93	-0.09
8ZTNH8		410.36	-6.16	-0.50	463.84	1.31	0.12
9CXFB4		426.58	10.06	0.81	459.96	-2.57	-0.24
9FHB6B		436.19	19.67	1.58	481.43	18.91	1.74
9MGUE7		414.80	-1.72	-0.14	453.60	-8.93	-0.82
9NAN6A		423.20	6.68	0.54	466.60	4.07	0.37
A3ALY8		405.60	-10.92	-0.88	449.80	-12.73	-1.17
AJ3FJZ		419.94	3.42	0.28	466.88	4.35	0.40
ARB9J8		418.88	2.36	0.19	456.92	-5.61	-0.52
AUKWC7		409.40	-7.12	-0.57	464.80	2.27	0.21
BB3EK7		419.70	3.18	0.26	464.60	2.07	0.19
BD6DT6	X	460.40	43.88	3.53	403.20	-59.33	-5.46
BEHRET		425.40	8.88	0.71	473.80	11.27	1.04
BHLJQZ		410.00	-6.52	-0.52	459.60	-2.93	-0.27
BPK6NE		423.00	6.48	0.52	451.80	-10.73	-0.99
BWHWW9		415.20	-1.32	-0.11	452.60	-9.93	-0.91
CCTZN9		410.80	-5.72	-0.46	455.40	-7.13	-0.66
CLCJYR		428.60	12.08	0.97	470.00	7.47	0.69
CV3ZUN		413.20	-3.32	-0.27	456.40	-6.13	-0.56
CWWTLZ	*	449.46	32.94	2.65	482.72	20.19	1.86
CXB6AX		431.00	14.48	1.17	484.60	22.07	2.03
CZYJ4L		437.96	21.44	1.73	466.04	3.51	0.32
D8DPH6		405.60	-10.92	-0.88	451.20	-11.33	-1.04

		Sample S45			Sample S46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
DNZAV4		410.20	-6.32	-0.51	448.40	-14.13	-1.30
DZVJAR		435.00	18.48	1.49	459.20	-3.33	-0.31
E638WE		407.10	-9.42	-0.76	453.32	-9.21	-0.85
E63ACX	*	443.68	27.16	2.19	465.84	3.31	0.30
EAYQXC		387.00	-29.52	-2.38	445.40	-17.13	-1.58
EQL8WU		430.60	14.08	1.13	472.40	9.87	0.91
EVFBLR		408.80	-7.72	-0.62	459.40	-3.13	-0.29
F83X7D		409.40	-7.12	-0.57	462.00	-0.53	-0.05
F9XM7Z		416.80	0.28	0.02	474.20	11.67	1.07
FB2DMZ		417.60	1.08	0.09	459.00	-3.53	-0.32
FJHM84		398.40	-18.12	-1.46	453.60	-8.93	-0.82
G6U4Y6		406.86	-9.66	-0.78	456.72	-5.81	-0.53
G8JEYK		407.80	-8.72	-0.70	456.60	-5.93	-0.55
GBHQP4		389.80	-26.72	-2.15	438.40	-24.13	-2.22
GH3QF4	X	471.00	54.48	4.38	403.20	-59.33	-5.46
GL6MVB		405.40	-11.12	-0.89	449.80	-12.73	-1.17
JDEZXX		418.00	1.48	0.12	457.20	-5.33	-0.49
JJLQ3P		404.80	-11.72	-0.94	460.60	-1.93	-0.18
KL9JTC		422.80	6.28	0.51	470.20	7.67	0.71
LH2JXJ		408.80	-7.72	-0.62	453.20	-9.33	-0.86
LP3V42		425.00	8.48	0.68	477.60	15.07	1.39
MG7KYC		406.60	-9.92	-0.80	456.60	-5.93	-0.55
MJTW83		411.06	-5.46	-0.44	461.76	-0.77	-0.07
MKMQX8		416.80	0.28	0.02	462.60	0.07	0.01
MXDJDU		408.80	-7.72	-0.62	454.00	-8.53	-0.78
NBEFYF	*	445.00	28.48	2.29	492.20	29.67	2.73
NEU3F7		405.10	-11.42	-0.92	460.48	-2.05	-0.19
NFRCHA		429.00	12.48	1.00	461.60	-0.93	-0.09
PNWP4W	*	441.00	24.48	1.97	496.20	33.67	3.10
PZQYQ7	X	389.20	-27.32	-2.20	424.80	-37.73	-3.47
Q9LLWV		401.20	-15.32	-1.23	453.00	-9.53	-0.88
QC2UKV		421.80	5.28	0.43	467.80	5.27	0.49
R798ZY		413.20	-3.32	-0.27	462.40	-0.13	-0.01
R9XHZF		416.20	-0.32	-0.03	473.20	10.67	0.98
RCVZ8T		387.60	-28.92	-2.33	446.40	-16.13	-1.48
RGQVYE		414.76	-1.76	-0.14	453.46	-9.07	-0.83
RW2J7N	X	437.60	21.08	1.70	502.60	40.07	3.69
THXEGM		406.51	-10.00	-0.80	470.06	7.54	0.69
TLHFBM		408.48	-8.04	-0.65	463.38	0.85	0.08
U6NBHJ		423.40	6.88	0.55	454.20	-8.33	-0.77
UJU3JJ		423.60	7.08	0.57	474.00	11.47	1.06
UM92GJ		401.80	-14.72	-1.18	455.00	-7.53	-0.69
UNJMKE		401.98	-14.54	-1.17	451.08	-11.45	-1.05
UNL987		409.14	-7.38	-0.59	455.06	-7.47	-0.69
VGWEC8		418.36	1.84	0.15	468.26	5.73	0.53
VVE2T7		412.20	-4.32	-0.35	456.28	-6.25	-0.57
WGXMRJ		407.40	-9.12	-0.73	454.60	-7.93	-0.73

WebCode	Data Flag	Sample S45 Lab Mean	Sample S45 Diff. from Grand Mean	Sample S45 CPV	Sample S46 Lab Mean	Sample S46 Diff. from Grand Mean	Sample S46 CPV
X86DBN		406.70	-9.82	-0.79	446.74	-15.79	-1.45
YPGJYP		429.40	12.88	1.04	469.00	6.47	0.60
Z7N3BM	X	549.26	132.74	10.68	625.02	162.50	14.95
ZA4UYU		404.60	-11.92	-0.96	449.20	-13.33	-1.23
ZLHLWP		419.80	3.28	0.26	464.60	2.07	0.19

Summary Statistics

	Sample S45		Sample S46	
Grand Means	416.52	HK 500 gf	462.53	HK 500 gf
Stnd Dev Btwn Labs	12.43	HK 500 gf	10.87	HK 500 gf

Samples S45, S46 : Steel, Steel

Statistics based on 92 of 99 reporting participants

Comments on Assigned Data Flags for Test #121

7Q8DE8 (X) - Inconsistent in testing between samples.

8BTCDA (X) - Data for sample S46 are high.

BD6DT6 (X) - Data for sample S45 are high and data for sample S46 are low.

GH3QF4 (X) - Data appear to be transposed between samples. Inconsistent within the determinations of both samples.

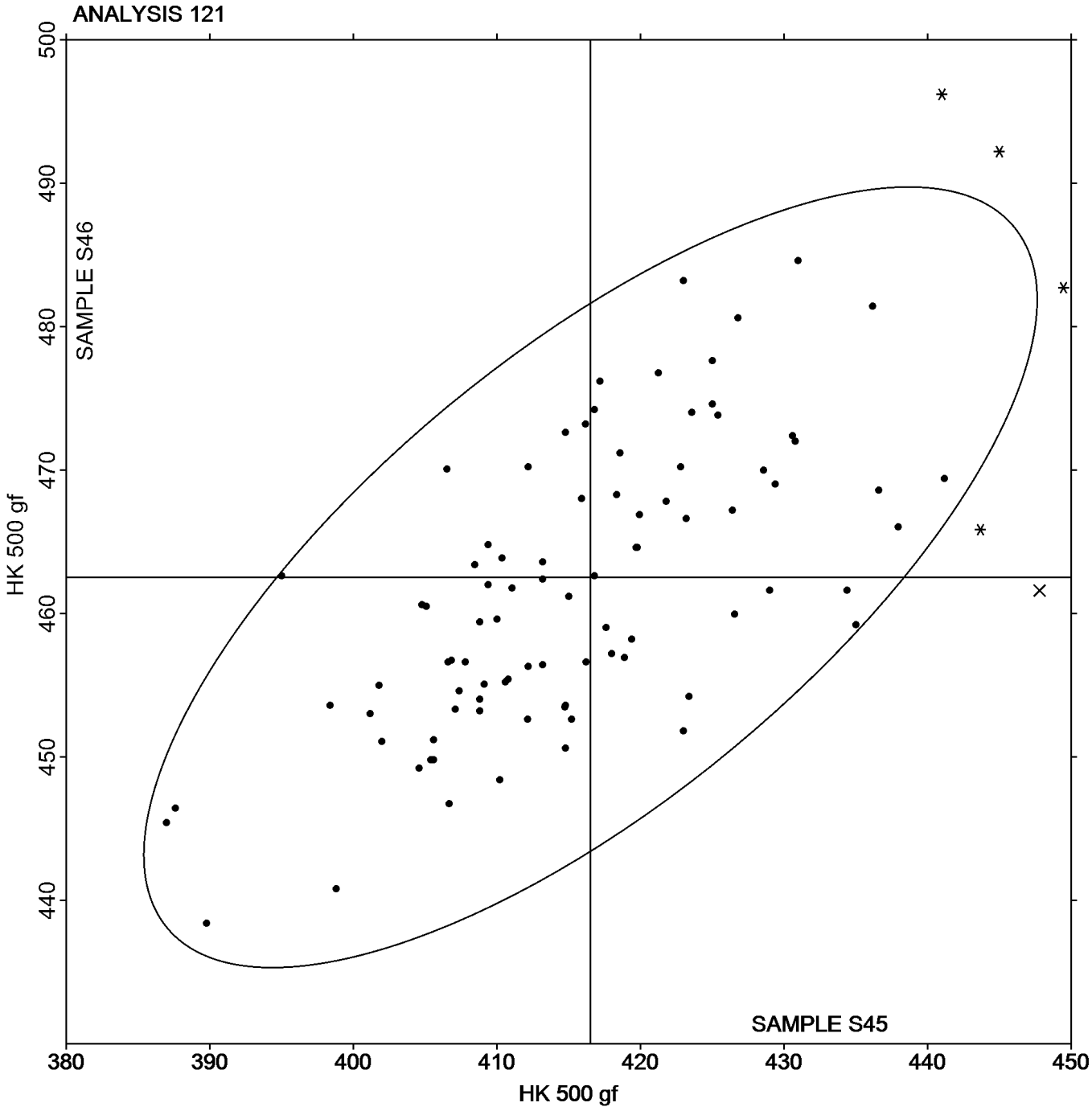
PZQYQ7 (X) - Data for sample S46 are low.

RW2J7N (X) - Data for sample S46 are high.

Z7N3BM (X) - Data for both samples are extremely high.

SAMPLE S45
416.52 HK 500 gf

SAMPLE S46
462.53 HK 500 gf



		Sample S45			Sample S46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
33DXFA		434.20	8.25	0.54	478.00	3.54	0.25
3GXENF		425.40	-0.55	-0.04	476.00	1.54	0.11
3HADHP		433.76	7.81	0.51	474.82	0.36	0.03
3JGJ6D		420.82	-5.13	-0.34	476.02	1.56	0.11
3TP69J	*	384.00	-41.95	-2.76	434.00	-40.46	-2.84
49YA36		423.80	-2.15	-0.14	475.60	1.14	0.08
6HJ3Q7		456.00	30.05	1.98	492.20	17.74	1.25
6LFNNN		420.40	-5.55	-0.37	493.40	18.94	1.33
6T3E3J		425.20	-0.75	-0.05	477.60	3.14	0.22
733E8B		418.80	-7.15	-0.47	469.40	-5.06	-0.36
797BW3		422.80	-3.15	-0.21	476.80	2.34	0.16
7BY427		428.00	2.05	0.13	486.80	12.34	0.87
7JQPWX		428.20	2.25	0.15	482.00	7.54	0.53
7Q8DE8	*	462.40	36.45	2.40	482.00	7.54	0.53
7QRWJE		454.00	28.05	1.85	483.60	9.14	0.64
7RMB2P		428.20	2.25	0.15	483.20	8.74	0.61
864WP3		448.77	22.82	1.50	494.24	19.78	1.39
88QFQ2		428.80	2.85	0.19	476.00	1.54	0.11
8BVX3N		426.00	0.05	0.00	469.20	-5.26	-0.37
8RZBH8		439.60	13.65	0.90	475.60	1.14	0.08
8ZTNH8		425.50	-0.45	-0.03	463.48	-10.98	-0.77
9CXFB4		444.86	18.91	1.24	490.10	15.64	1.10
9FHB6B		437.31	11.36	0.75	473.32	-1.14	-0.08
9NAN6A		431.20	5.25	0.35	485.80	11.34	0.80
A3ALY8		408.60	-17.35	-1.14	471.20	-3.26	-0.23
AJ3FJZ		427.88	1.93	0.13	476.26	1.80	0.13
BD6DT6	X	489.80	63.85	4.20	425.40	-49.06	-3.44
BEHRET		402.00	-23.95	-1.58	454.40	-20.06	-1.41
CCTZN9		413.40	-12.55	-0.83	461.60	-12.86	-0.90
CLCJYR		426.40	0.45	0.03	483.80	9.34	0.66
CWWTLZ		463.38	37.43	2.46	499.16	24.70	1.73
CXB6AX		444.40	18.45	1.21	489.00	14.54	1.02
CZYJ4L	X	468.48	42.53	2.80	541.74	67.28	4.72
E638WE		407.78	-18.17	-1.20	464.92	-9.54	-0.67
E63ACX		445.70	19.75	1.30	468.42	-6.04	-0.42
EAYQXC		392.80	-33.15	-2.18	462.00	-12.46	-0.87
F83X7D		410.20	-15.75	-1.04	464.80	-9.66	-0.68
F9XM7Z		447.00	21.05	1.39	486.40	11.94	0.84
FB2DMZ		415.40	-10.55	-0.69	473.80	-0.66	-0.05
G6U4Y6		403.30	-22.65	-1.49	462.56	-11.90	-0.84
G8JEYK		423.00	-2.95	-0.19	482.00	7.54	0.53
GBHQP4		412.00	-13.95	-0.92	453.00	-21.46	-1.51
GH3QF4		435.20	9.25	0.61	458.40	-16.06	-1.13
GL6MVB		430.20	4.25	0.28	479.40	4.94	0.35
JDEZXX		416.00	-9.95	-0.66	456.20	-18.26	-1.28
JJLQ3P		403.40	-22.55	-1.48	461.20	-13.26	-0.93
KL9JTC		422.60	-3.35	-0.22	482.00	7.54	0.53

		Sample S45			Sample S46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
LH2JXJ		418.20	-7.75	-0.51	467.20	-7.26	-0.51
LP3V42	*	429.80	3.85	0.25	505.40	30.94	2.17
MG7KYC		419.00	-6.95	-0.46	465.80	-8.66	-0.61
MJTW83		417.98	-7.97	-0.52	468.04	-6.42	-0.45
MKMQX8		421.40	-4.55	-0.30	476.00	1.54	0.11
MXDJDU		420.40	-5.55	-0.37	468.60	-5.86	-0.41
NBEFYF		420.60	-5.35	-0.35	448.60	-25.86	-1.81
NEU3F7		418.18	-7.77	-0.51	457.90	-16.56	-1.16
NFRCHA		434.40	8.45	0.56	474.00	-0.46	-0.03
PNWP4W	*	448.40	22.45	1.48	512.60	38.14	2.68
PZQYQ7		414.40	-11.55	-0.76	466.00	-8.46	-0.59
QC2UKV		429.80	3.85	0.25	476.60	2.14	0.15
RW2J7N		447.60	21.65	1.43	504.80	30.34	2.13
THXEGM		413.65	-12.30	-0.81	466.83	-7.63	-0.54
TLHFBM		428.00	2.05	0.13	476.32	1.86	0.13
U6NBHJ		421.40	-4.55	-0.30	471.60	-2.86	-0.20
UM92GJ		415.60	-10.35	-0.68	487.00	12.54	0.88
UNL987		420.16	-5.79	-0.38	465.12	-9.34	-0.66
VVE2T7		411.56	-14.39	-0.95	457.02	-17.44	-1.22
WGXMRJ		431.40	5.45	0.36	478.80	4.34	0.30
X86DBN		409.72	-16.23	-1.07	441.12	-33.34	-2.34
YPGJYP		440.00	14.05	0.92	478.80	4.34	0.30
Z7N3BM	X	438.55	12.60	0.83	527.24	52.78	3.70
ZA4UYU		432.20	6.25	0.41	490.20	15.74	1.10
ZLHLWP		428.00	2.05	0.13	473.60	-0.86	-0.06

Summary Statistics

	Sample S45		Sample S46	
Grand Means	425.95	HK 200 gf	474.46	HK 200 gf
Stnd Dev Btwn Labs	15.19	HK 200 gf	14.25	HK 200 gf

Samples S45, S46 : Steel, Steel

Statistics based on 69 of 72 reporting participants

Comments on Assigned Data Flags for Test #122

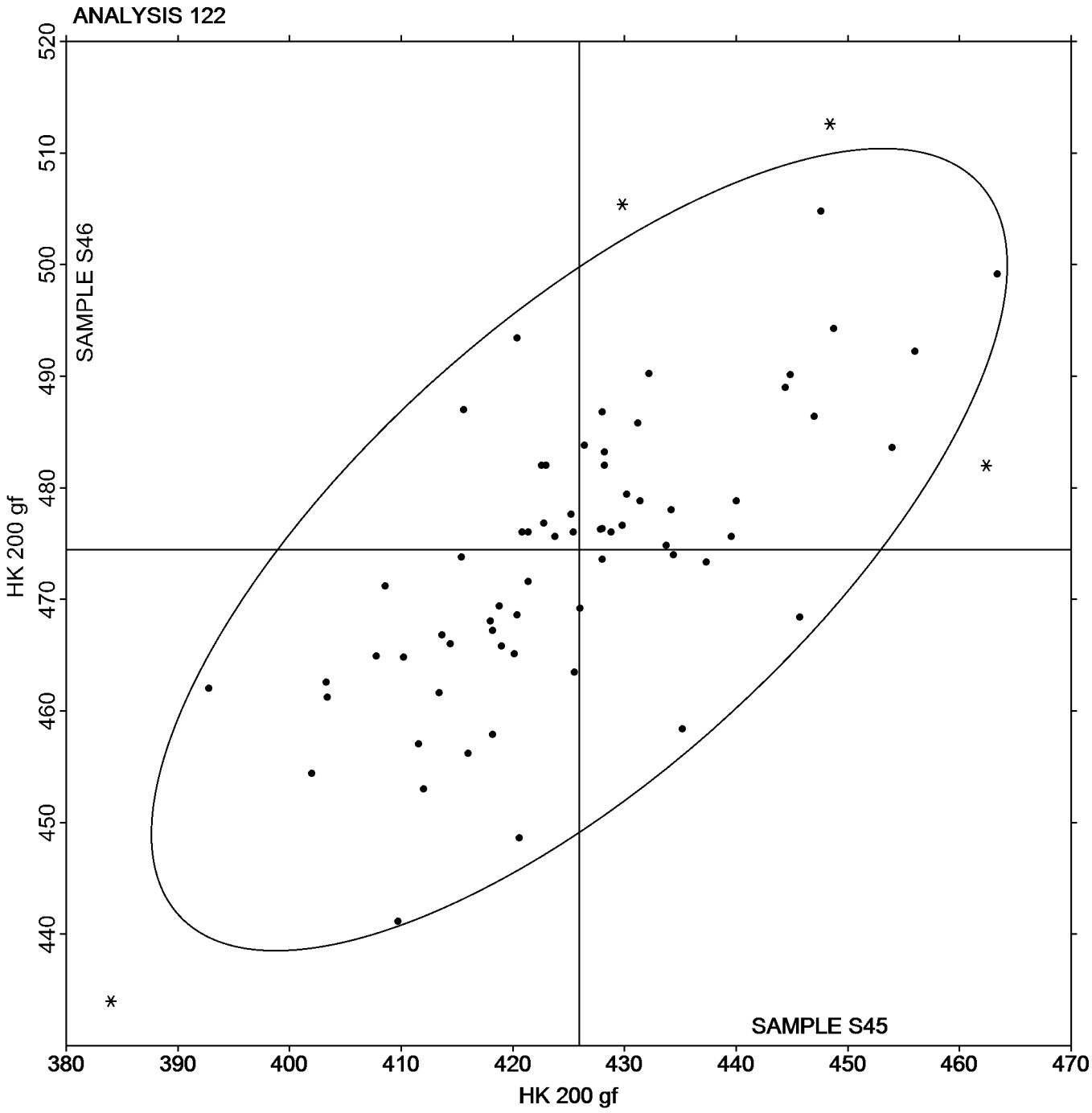
BD6DT6 (X) - Data for sample S45 are high and data for sample S46 are low.

CZYJ4L (X) - Data for both samples are high.

Z7N3BM (X) - Data for sample S46 are high.

SAMPLE S45
425.95 HK 200 gf

SAMPLE S46
474.46 HK 200 gf



		Sample S45			Sample S46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2FMCZV		395.60	-0.89	-0.08	446.80	1.63	0.13
2PVUN9		383.80	-12.69	-1.08	419.80	-25.37	-2.07
2UMWUT		386.00	-10.49	-0.89	438.00	-7.17	-0.58
33DXFA		391.00	-5.49	-0.47	430.00	-15.17	-1.23
366YJC		406.20	9.71	0.82	445.80	0.63	0.05
3GXENF		394.60	-1.89	-0.16	453.40	8.23	0.67
3HADHP		402.22	5.73	0.49	441.58	-3.59	-0.29
3JGJ6D		410.76	14.27	1.21	455.37	10.20	0.83
3KWT2K		409.80	13.31	1.13	471.60	26.43	2.15
3PQQLU		393.66	-2.83	-0.24	453.02	7.85	0.64
3TP69J		377.40	-19.09	-1.62	420.20	-24.97	-2.03
42G2E9		392.40	-4.09	-0.35	453.00	7.83	0.64
49YA36		395.40	-1.09	-0.09	449.00	3.83	0.31
6CBLA6		392.60	-3.89	-0.33	444.00	-1.17	-0.09
6H3NJW		391.80	-4.69	-0.40	437.20	-7.97	-0.65
6HJ3Q7		406.40	9.91	0.84	452.40	7.23	0.59
6L3YMW		383.20	-13.29	-1.13	437.80	-7.37	-0.60
6LFNNN		399.40	2.91	0.25	451.40	6.23	0.51
6LFR8D		424.60	28.11	2.39	471.20	26.03	2.12
6T3E3J		386.00	-10.49	-0.89	448.60	3.43	0.28
733E8B		400.00	3.51	0.30	451.40	6.23	0.51
77H49Y		395.80	-0.69	-0.06	450.60	5.43	0.44
797BW3		387.20	-9.29	-0.79	441.20	-3.97	-0.32
7HYJJE		405.80	9.31	0.79	455.20	10.03	0.82
7Q8DE8	*	387.60	-8.89	-0.76	414.40	-30.77	-2.51
7QRWJE		418.60	22.11	1.88	452.60	7.43	0.61
7RMB2P		399.00	2.51	0.21	462.20	17.03	1.39
7X7M2Y		403.20	6.71	0.57	453.80	8.63	0.70
864WP3		396.01	-0.48	-0.04	459.09	13.92	1.13
88QFQ2		405.80	9.31	0.79	461.00	15.83	1.29
8BTCDA	*	413.80	17.31	1.47	476.80	31.63	2.58
8BVX3N		391.60	-4.89	-0.42	443.00	-2.17	-0.18
8RZBH8	*	415.40	18.91	1.61	441.40	-3.77	-0.31
8VHP2K		387.00	-9.49	-0.81	436.80	-8.37	-0.68
8ZTNH8		378.20	-18.29	-1.55	444.80	-0.37	-0.03
92J7YY	*	413.80	17.31	1.47	479.20	34.03	2.77
9CXFB4		387.40	-9.09	-0.77	430.00	-15.17	-1.23
9E92GJ		410.00	13.51	1.15	462.00	16.83	1.37
9FHB6B		420.61	24.12	2.05	452.77	7.60	0.62
9MGUE7		399.60	3.11	0.26	435.20	-9.97	-0.81
9Q64TD		394.80	-1.69	-0.14	448.00	2.83	0.23
9RCKRJ		396.60	0.11	0.01	443.60	-1.57	-0.13
A2E8HV		404.20	7.71	0.65	467.80	22.63	1.84
A3ALY8		382.40	-14.09	-1.20	432.60	-12.57	-1.02
AL86T9		377.40	-19.09	-1.62	419.40	-25.77	-2.10
B8JHR2		399.80	3.31	0.28	450.40	5.23	0.43
BB3EK7		401.62	5.13	0.44	449.66	4.49	0.37

		Sample S45			Sample S46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
BD6DT6	X	428.40	31.91	2.71	373.80	-71.37	-5.81
BEHRET		379.60	-16.89	-1.43	440.00	-5.17	-0.42
BHLJQZ		382.00	-14.49	-1.23	441.20	-3.97	-0.32
BQRPXM	*	425.40	28.91	2.46	462.60	17.43	1.42
C27YDD		394.60	-1.89	-0.16	443.80	-1.37	-0.11
C3JEV8		396.56	0.07	0.01	464.56	19.39	1.58
CCTZN9		394.40	-2.09	-0.18	436.60	-8.57	-0.70
CLCJYR		420.60	24.11	2.05	474.20	29.03	2.36
CV3ZUN		389.20	-7.29	-0.62	445.60	0.43	0.04
CWWTLZ		407.52	11.03	0.94	446.50	1.33	0.11
CXB6AX		415.80	19.31	1.64	466.60	21.43	1.75
D8DPH6		386.40	-10.09	-0.86	437.20	-7.97	-0.65
DCPURJ		389.82	-6.67	-0.57	435.10	-10.07	-0.82
E638WE		379.22	-17.27	-1.47	434.58	-10.59	-0.86
E63ACX		409.52	13.03	1.11	439.42	-5.75	-0.47
EAYQXC		378.20	-18.29	-1.55	434.80	-10.37	-0.84
EKWU37		408.20	11.71	0.99	456.80	11.63	0.95
EQL8WU	X	353.00	-43.49	-3.69	350.20	-94.97	-7.73
F83X7D		388.20	-8.29	-0.70	439.60	-5.57	-0.45
F87JQK		395.60	-0.89	-0.08	446.00	0.83	0.07
FB2DMZ		380.00	-16.49	-1.40	428.20	-16.97	-1.38
FDQJ8X	*	401.80	5.31	0.45	426.80	-18.37	-1.50
FJHM84		388.60	-7.89	-0.67	442.00	-3.17	-0.26
G4FMQK		409.00	12.51	1.06	469.80	24.63	2.01
G8HGTV	*	428.40	31.91	2.71	467.60	22.43	1.83
G8JEYK		397.40	0.91	0.08	435.00	-10.17	-0.83
G8XWQH		405.40	8.91	0.76	443.80	-1.37	-0.11
GBHQP4		376.60	-19.89	-1.69	423.60	-21.57	-1.76
GGNJR2		412.40	15.91	1.35	455.20	10.03	0.82
GL6MVB		394.80	-1.69	-0.14	435.00	-10.17	-0.83
H6TN2X		399.00	2.51	0.21	449.00	3.83	0.31
HQRUTB	*	369.60	-26.89	-2.28	434.40	-10.77	-0.88
JDEZXX		384.80	-11.69	-0.99	443.60	-1.57	-0.13
JF3LJ8		402.00	5.51	0.47	445.80	0.63	0.05
JJLQ3P		398.80	2.31	0.20	452.00	6.83	0.56
JTC6B2		372.08	-24.41	-2.07	437.68	-7.49	-0.61
K2LVAY		375.08	-21.41	-1.82	423.46	-21.71	-1.77
KL9JTC		391.80	-4.69	-0.40	439.00	-6.17	-0.50
KMHN2T		394.94	-1.55	-0.13	432.08	-13.09	-1.07
KVFGC9		397.00	0.51	0.04	441.60	-3.57	-0.29
LAA7YK		403.12	6.63	0.56	449.00	3.83	0.31
LH2JXJ		384.00	-12.49	-1.06	436.20	-8.97	-0.73
LN9B6W		393.80	-2.69	-0.23	428.60	-16.57	-1.35
LP3V42	X	347.00	-49.49	-4.20	422.00	-23.17	-1.89
LQUYJG		398.82	2.33	0.20	448.60	3.43	0.28
LRTW86		411.80	15.31	1.30	461.00	15.83	1.29
M8298N		395.60	-0.89	-0.08	451.66	6.49	0.53

		Sample S45			Sample S46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
MG7KYC		380.40	-16.09	-1.37	439.60	-5.57	-0.45
MJTW83		394.74	-1.75	-0.15	445.34	0.17	0.01
MKMQX8		399.40	2.91	0.25	452.00	6.83	0.56
MXDJDU		379.80	-16.69	-1.42	435.40	-9.77	-0.80
NBEFYF		399.00	2.51	0.21	440.80	-4.37	-0.36
NEU3F7		382.80	-13.69	-1.16	428.32	-16.85	-1.37
NFRCHA		397.00	0.51	0.04	434.80	-10.37	-0.84
NMD7WU	X	240.68	-155.81	-13.23	270.40	-174.77	-14.23
NMP6Q3		402.60	6.11	0.52	454.60	9.43	0.77
NNMFE7		395.40	-1.09	-0.09	448.00	2.83	0.23
NU8BPV		390.00	-6.49	-0.55	443.00	-2.17	-0.18
PAK8BW		411.80	15.31	1.30	447.92	2.75	0.22
PNYAV7		382.40	-14.09	-1.20	428.62	-16.55	-1.35
PRD788		396.00	-0.49	-0.04	446.80	1.63	0.13
PYG2DN		400.00	3.51	0.30	440.60	-4.57	-0.37
PZQYQ7		384.60	-11.89	-1.01	430.80	-14.37	-1.17
Q7E4YZ		394.00	-2.49	-0.21	445.40	0.23	0.02
QDEMYB		386.26	-10.23	-0.87	434.94	-10.23	-0.83
QHPEQW		397.00	0.51	0.04	447.80	2.63	0.21
QJYLPJ		410.00	13.51	1.15	448.60	3.43	0.28
QJZHZE		410.10	13.61	1.16	452.04	6.87	0.56
QQL9VV		407.80	11.31	0.96	453.20	8.03	0.65
QYG93M		406.96	10.47	0.89	455.02	9.85	0.80
R8NA78		396.20	-0.29	-0.02	432.20	-12.97	-1.06
R9XHZF		396.80	0.31	0.03	456.40	11.23	0.91
RCTBTA		385.00	-11.49	-0.98	438.20	-6.97	-0.57
RRQG7D		417.60	21.11	1.79	466.40	21.23	1.73
RW2J7N		401.20	4.71	0.40	457.80	12.63	1.03
T4H47R		414.10	17.61	1.50	448.10	2.93	0.24
T8YRAQ		390.22	-6.27	-0.53	442.16	-3.01	-0.24
TEG8TN		394.20	-2.29	-0.19	440.40	-4.77	-0.39
THXEGM		395.75	-0.74	-0.06	449.48	4.32	0.35
TLHFBM		390.56	-5.93	-0.50	442.68	-2.49	-0.20
TTZTJ9		415.20	18.71	1.59	447.00	1.83	0.15
U6NBHJ		400.20	3.71	0.32	432.80	-12.37	-1.01
UM92GJ	*	377.80	-18.69	-1.59	451.60	6.43	0.52
UNJMKE		386.14	-10.35	-0.88	438.30	-6.87	-0.56
UNL987		378.12	-18.37	-1.56	424.48	-20.69	-1.68
VVE9LC		395.80	-0.69	-0.06	450.40	5.23	0.43
WFLVXG		387.00	-9.49	-0.81	433.40	-11.77	-0.96
WGXMRJ		388.80	-7.69	-0.65	452.40	7.23	0.59
WU4LWJ		395.00	-1.49	-0.13	448.60	3.43	0.28
XARBAR		396.00	-0.49	-0.04	449.40	4.23	0.34
XCHE4K		395.60	-0.89	-0.08	426.80	-18.37	-1.50
Y9UBUE		408.98	12.49	1.06	455.22	10.05	0.82
YPGJYP		406.60	10.11	0.86	448.20	3.03	0.25
Z7N3BM		400.46	3.97	0.34	459.43	14.26	1.16

WebCode	Data Flag	Sample S45 Lab Mean	Sample S45 Diff. from Grand Mean	Sample S45 CPV	Sample S46 Lab Mean	Sample S46 Diff. from Grand Mean	Sample S46 CPV
ZA4UYU		387.60	-8.89	-0.76	433.00	-12.17	-0.99
ZBR9GC		391.80	-4.69	-0.40	433.60	-11.57	-0.94
ZJQQZV		402.64	6.15	0.52	435.32	-9.85	-0.80
ZLHLWP		398.20	1.71	0.15	440.00	-5.17	-0.42

Summary Statistics

	Sample S45		Sample S46	
Grand Means	396.49	HV 500 gf	445.17	HV 500 gf
Stnd Dev Btwn Labs	11.77	HV 500 gf	12.28	HV 500 gf

Samples S45, S46 : Steel, Steel

Statistics based on 141 of 145 reporting participants

Comments on Assigned Data Flags for Test #123

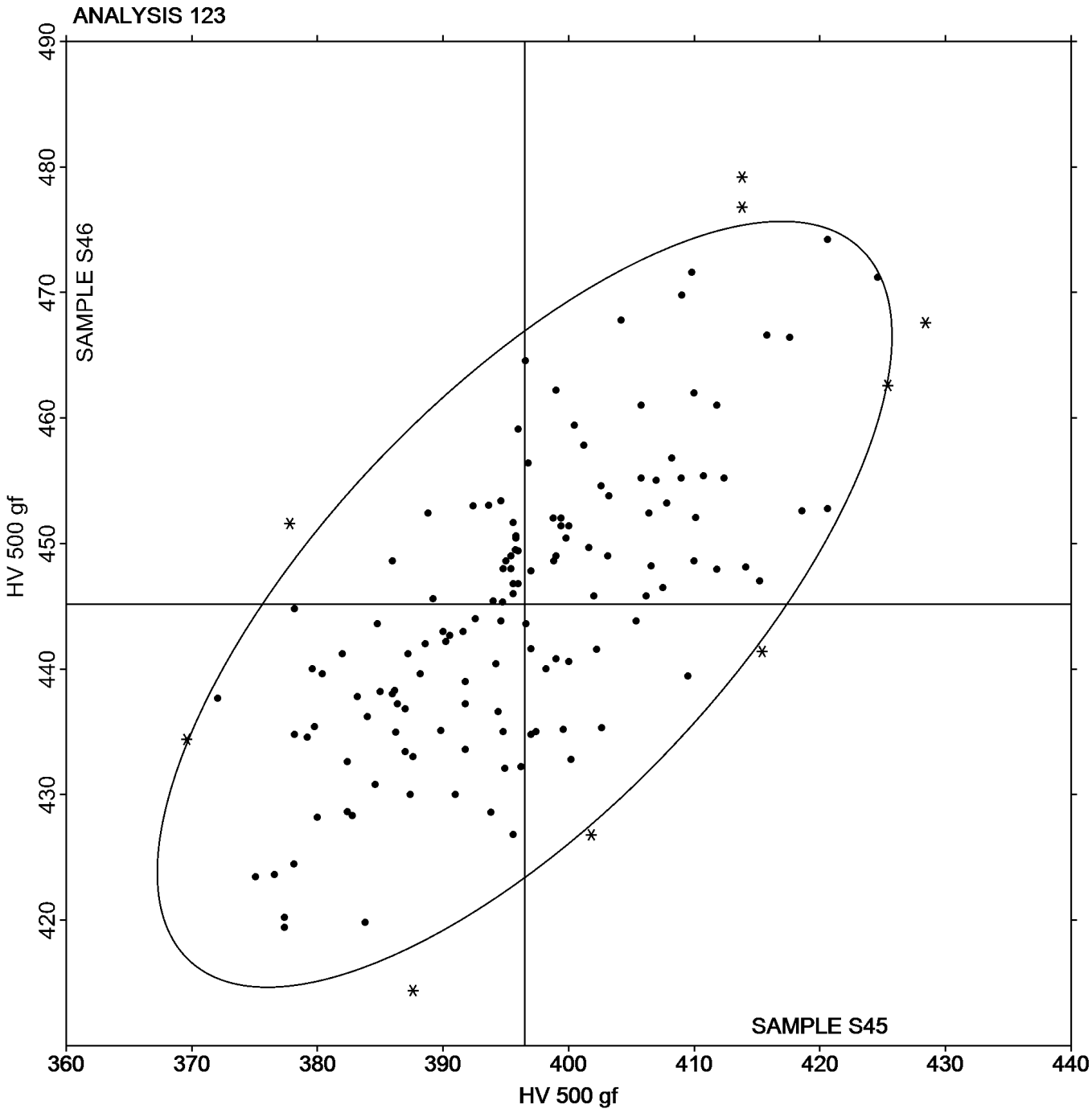
BD6DT6 (X) - Data for sample S46 are low.

EQL8WU (X) - Data for both samples are low. Inconsistent within the determinations of both samples.

LP3V42 (X) - Data for sample S45 are low.

NMD7WU (X) - Data for both samples are extremely low.

SAMPLE S45	SAMPLE S46
396.49 HV 500 gf	445.17 HV 500 gf



		Sample D45			Sample D46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
28A92W		294.00	-0.49	-0.09	319.60	-1.57	-0.28
2AFTMC		293.00	-1.49	-0.26	321.00	-0.17	-0.03
2FMCZV		289.00	-5.49	-0.96	317.60	-3.57	-0.64
2JLU8B		297.00	2.51	0.44	324.79	3.62	0.65
2PDXZF		295.00	0.51	0.09	322.40	1.23	0.22
2PVUN9		289.00	-5.49	-0.96	310.20	-10.97	-1.97
2UMWUT	X	253.60	-40.89	-7.15	279.20	-41.97	-7.54
33DXFA		284.20	-10.29	-1.80	311.00	-10.17	-1.83
3FXJPW		298.20	3.71	0.65	320.00	-1.17	-0.21
3GXENF		284.00	-10.49	-1.83	317.00	-4.17	-0.75
3JGJ6D	*	305.40	10.91	1.91	335.20	14.03	2.52
3PQWNW		295.00	0.51	0.09	322.60	1.43	0.26
3VDM97	X	268.80	-25.69	-4.49	295.60	-25.57	-4.59
42G2E9		290.20	-4.29	-0.75	323.00	1.83	0.33
4PJ3NM		289.40	-5.09	-0.89	317.00	-4.17	-0.75
64J9A7		298.00	3.51	0.61	324.20	3.03	0.54
6CBLA6		288.00	-6.49	-1.14	318.40	-2.77	-0.50
6EJYTT		293.00	-1.49	-0.26	321.00	-0.17	-0.03
6HJ3Q7		293.20	-1.29	-0.23	324.20	3.03	0.54
6MU33C		299.20	4.71	0.82	329.40	8.23	1.48
6RM3HT		297.00	2.51	0.44	320.00	-1.17	-0.21
6T3E3J		293.20	-1.29	-0.23	322.00	0.83	0.15
77H49Y		304.00	9.51	1.66	331.20	10.03	1.80
79CMHD		298.20	3.71	0.65	320.20	-0.97	-0.17
7HYJJE		298.80	4.31	0.75	321.00	-0.17	-0.03
7NNXFL		293.20	-1.29	-0.23	321.00	-0.17	-0.03
7QRWJE		299.40	4.91	0.86	323.40	2.23	0.40
7RMB2P		285.20	-9.29	-1.62	317.80	-3.37	-0.61
7UPC2M		295.40	0.91	0.16	318.40	-2.77	-0.50
7VKYMD		293.00	-1.49	-0.26	317.80	-3.37	-0.61
7ZV7NH		294.20	-0.29	-0.05	325.00	3.83	0.69
827DM6		301.00	6.51	1.14	328.60	7.43	1.33
88QFQ2		299.40	4.91	0.86	319.40	-1.77	-0.32
8GGWJB		303.40	8.91	1.56	330.80	9.63	1.73
8PNVQR		297.20	2.71	0.47	323.60	2.43	0.44
8RZBH8		297.60	3.11	0.54	326.00	4.83	0.87
9AUQYA		301.40	6.91	1.21	327.80	6.63	1.19
9FHB6B		303.40	8.91	1.56	327.60	6.43	1.15
9L9M3R		293.20	-1.29	-0.23	319.40	-1.77	-0.32
9MGUE7		293.00	-1.49	-0.26	321.00	-0.17	-0.03
9QKQUF	*	307.80	13.31	2.33	337.40	16.23	2.91
9RCKRJ		290.20	-4.29	-0.75	315.80	-5.37	-0.96
9U2T9K		302.00	7.51	1.31	321.00	-0.17	-0.03
9WP6Y6	*	307.06	12.57	2.20	335.94	14.77	2.65
9WTRFJ	X	301.20	6.71	1.17	309.20	-11.97	-2.15
AJYXCN		302.00	7.51	1.31	330.80	9.63	1.73
AWPMFZ		294.80	0.31	0.05	321.00	-0.17	-0.03

		Sample D45			Sample D46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
B44QZ9		298.40	3.91	0.68	321.00	-0.17	-0.03
B8JHR2		294.60	0.11	0.02	317.40	-3.77	-0.68
BHLJQZ		288.20	-6.29	-1.10	314.20	-6.97	-1.25
BQRPXM		284.20	-10.29	-1.80	319.00	-2.17	-0.39
CFNW6M		293.80	-0.69	-0.12	326.00	4.83	0.87
CKLBUX		290.20	-4.29	-0.75	321.40	0.23	0.04
CNKR3K		294.47	-0.02	0.00	319.83	-1.34	-0.24
CTDT7K		295.80	1.31	0.23	321.80	0.63	0.11
CXB6AX		294.30	-0.19	-0.03	323.84	2.67	0.48
CZFWAB		300.60	6.11	1.07	329.20	8.03	1.44
DNZAV4		293.00	-1.49	-0.26	321.00	-0.17	-0.03
DZPADK		293.00	-1.49	-0.26	321.00	-0.17	-0.03
E63ACX		288.00	-6.49	-1.14	323.00	1.83	0.33
EAYQXC		292.20	-2.29	-0.40	315.60	-5.57	-1.00
ECY6AV	X	281.20	-13.29	-2.32	302.00	-19.17	-3.44
EKWU37		295.00	0.51	0.09	314.60	-6.57	-1.18
F6ZW7F		284.20	-10.29	-1.80	308.60	-12.57	-2.26
FFVB7D		290.70	-3.79	-0.66	317.10	-4.07	-0.73
FKDBLT		293.00	-1.49	-0.26	321.00	-0.17	-0.03
G4FMQK		297.62	3.13	0.55	325.50	4.33	0.78
G8JEYK	X	184.10	-110.39	-19.30	199.50	-121.67	-21.85
GBHQP4		285.00	-9.49	-1.66	311.00	-10.17	-1.83
GD82QK		299.80	5.31	0.93	327.80	6.63	1.19
GQCET3		295.74	1.25	0.22	319.04	-2.13	-0.38
HC8DT7		303.60	9.11	1.59	324.20	3.03	0.54
HQRUTB		285.00	-9.49	-1.66	311.00	-10.17	-1.83
JJLQ3P		287.20	-7.29	-1.28	318.60	-2.57	-0.46
JPRHCM		296.18	1.69	0.29	320.90	-0.27	-0.05
JVF63L	X	297.21	2.71	0.47	311.69	-9.48	-1.70
JXMCH7		298.40	3.91	0.68	320.00	-1.17	-0.21
KFKXQ7		293.00	-1.49	-0.26	326.40	5.23	0.94
KL9JTC		285.00	-9.49	-1.66	313.20	-7.97	-1.43
KVFGC9		289.60	-4.89	-0.86	321.00	-0.17	-0.03
KW8KRN		296.20	1.71	0.30	323.40	2.23	0.40
L2FWTV		299.00	4.51	0.79	324.00	2.83	0.51
LFCHQB		294.20	-0.29	-0.05	324.20	3.03	0.54
LJZPED	*	285.00	-9.49	-1.66	321.00	-0.17	-0.03
LL2VUJ		296.20	1.71	0.30	323.80	2.63	0.47
LP3V42		297.20	2.71	0.47	320.40	-0.77	-0.14
LRTW86		292.80	-1.69	-0.30	320.00	-1.17	-0.21
MG7KYC		293.00	-1.49	-0.26	320.40	-0.77	-0.14
MHG64E		295.20	0.71	0.12	322.80	1.63	0.29
MKMQX8		292.00	-2.49	-0.44	316.60	-4.57	-0.82
MR64UK		302.00	7.51	1.31	321.00	-0.17	-0.03
MXDJDU		285.00	-9.49	-1.66	311.00	-10.17	-1.83
NBEFYF		292.80	-1.69	-0.30	320.40	-0.77	-0.14
NBWNNB	X	319.00	24.51	4.28	275.40	-45.77	-8.22

Fasteners and Metals Interlaboratory Testing Program

Analysis 135

Brinell Hardness
ASTM E10

Cycle 119
3rd Qtr 2017

		Sample D45			Sample D46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
NHHKTK		296.20	1.71	0.30	321.40	0.23	0.04
NJBB47		288.00	-6.49	-1.14	314.60	-6.57	-1.18
NN6ACA		296.20	1.71	0.30	322.80	1.63	0.29
PXN33W		307.80	13.31	2.33	334.00	12.83	2.30
QBRN6L		300.80	6.31	1.10	329.20	8.03	1.44
R3P4CP		301.80	7.31	1.28	325.40	4.23	0.76
R9XHZF		296.80	2.31	0.40	323.40	2.23	0.40
RB42WZ		288.80	-5.69	-1.00	312.20	-8.97	-1.61
RCVZ8T		285.00	-9.49	-1.66	311.00	-10.17	-1.83
RGAGR6	X	289.00	-5.49	-0.96	301.00	-20.17	-3.62
RLNBJ9		300.20	5.71	1.00	327.00	5.83	1.05
RVUYKA		293.20	-1.29	-0.23	322.60	1.43	0.26
RW2GGJ		302.00	7.51	1.31	325.00	3.83	0.69
RY74WA		302.00	7.51	1.31	321.00	-0.17	-0.03
TLHFBM		296.60	2.11	0.37	321.00	-0.17	-0.03
TR8UAG		291.20	-3.29	-0.58	318.00	-3.17	-0.57
TV2XRM		293.40	-1.09	-0.19	321.60	0.43	0.08
UAH86P		285.80	-8.69	-1.52	320.00	-1.17	-0.21
VETJUQ		292.50	-1.99	-0.35	320.25	-0.92	-0.17
VYZLVF		294.20	-0.29	-0.05	313.00	-8.17	-1.47
W7FNHG	X	285.00	-9.49	-1.66	302.00	-19.17	-3.44
WE98M6		296.00	1.51	0.26	322.80	1.63	0.29
WGXMRJ		285.00	-9.49	-1.66	319.00	-2.17	-0.39
WTRPKE		291.40	-3.09	-0.54	321.00	-0.17	-0.03
WU4LWJ		287.40	-7.09	-1.24	311.60	-9.57	-1.72
WWRZC9		296.60	2.11	0.37	325.60	4.43	0.80
WZNHUU		292.60	-1.89	-0.33	318.20	-2.97	-0.53
XG9P8H		302.00	7.51	1.31	321.00	-0.17	-0.03
XXUFX6		300.00	5.51	0.96	325.00	3.83	0.69
YLJ6GE	*	284.60	-9.89	-1.73	305.20	-15.97	-2.87
YPGJYP		303.20	8.71	1.52	329.20	8.03	1.44
YR7T6K	X	305.60	11.11	1.94	349.20	28.03	5.03
YUTPBP		294.80	0.31	0.05	315.40	-5.77	-1.04
Z3L394		293.80	-0.69	-0.12	318.20	-2.97	-0.53
Z8X8LP		286.60	-7.89	-1.38	319.00	-2.17	-0.39
ZV29TX		292.60	-1.89	-0.33	320.20	-0.97	-0.17

Summary Statistics

	Sample D45		Sample D46	
Grand Means	294.49	HBW	321.17	HBW
Stnd Dev Btwn Labs	5.72	HBW	5.57	HBW

Samples D45, D46 : Steel, Steel

Statistics based on 120 of 130 reporting participants

Samples D45, D46 are hardness test blocks made from steel. The blocks are heat treated to hardness levels specified by CTS.

Comments on Assigned Data Flags for Test #135

2UMWUT (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample D46.

3VDM97 (X) - Data for both samples are low. Possible Systematic Error.

9WTRFJ (X) - Inconsistent in testing between samples.

ECY6AV (X) - Data for sample D46 are low.

G8JEYK (X) - Data for both samples are extremely low. Possible Systematic Error.

JVF63L (X) - Inconsistent in testing between samples.

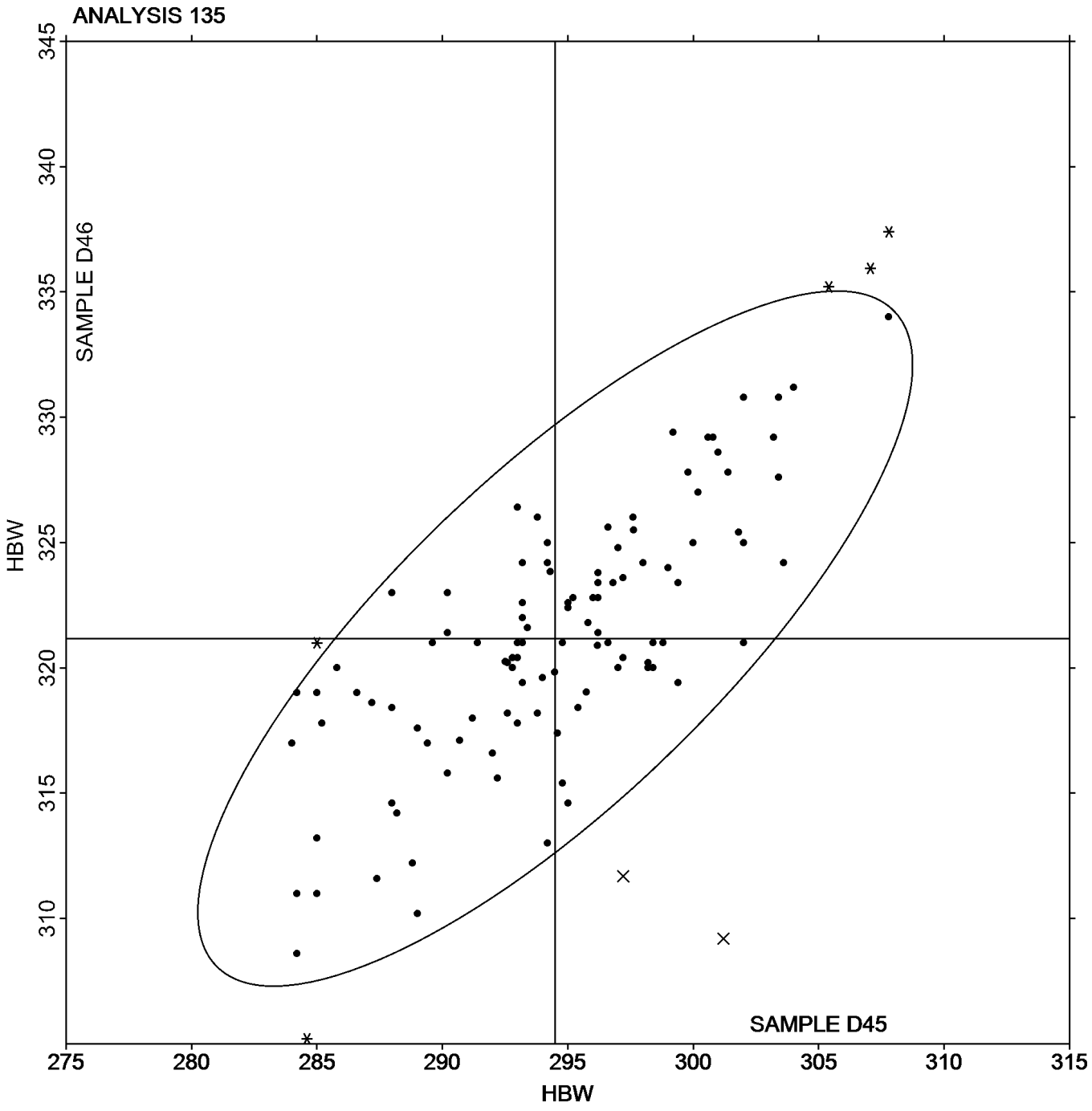
NBWNNB (X) - Data for sample D45 are high and data for sample D46 are low. Inconsistent in testing between samples. Inconsistent within the determinations of sample D45.

RGAGR6 (X) - Data for sample D46 are low.

W7FNHG (X) - Data for sample D46 are low.

YR7T6K (X) - Data for sample D46 are high. Inconsistent within the determinations of both samples.

SAMPLE D45	SAMPLE D46
294.49 HBW	321.17 HBW



		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2AFTMC		151.00	-0.15	-0.08	151.00	0.12	0.06
2FMCZV		151.50	0.35	0.18	152.90	2.02	1.06
2J6MY9		148.70	-2.45	-1.28	147.40	-3.48	-1.82
2J9W27		150.64	-0.51	-0.27	152.32	1.44	0.75
2Q44EK	X	155.54	4.39	2.28	157.26	6.38	3.34
2RK4U4		150.10	-1.05	-0.55	149.40	-1.48	-0.78
2UMWUT		150.26	-0.89	-0.46	150.99	0.10	0.05
3GXENF		150.70	-0.46	-0.24	149.94	-0.94	-0.49
3HADHP		149.68	-1.47	-0.77	150.55	-0.33	-0.17
3JGJ6D	X	154.10	2.95	1.53	150.11	-0.77	-0.41
3VXFZG		152.19	1.04	0.54	151.77	0.88	0.46
3ZBYE6		151.90	0.75	0.39	150.70	-0.18	-0.10
46HUN7	X	148.74	-2.41	-1.26	153.68	2.80	1.46
6343W2		149.60	-1.55	-0.81	149.40	-1.48	-0.78
64MMWR		150.90	-0.25	-0.13	152.80	1.92	1.00
6HJ3Q7		151.90	0.75	0.39	149.90	-0.98	-0.52
6MAEL3		151.01	-0.14	-0.07	151.08	0.20	0.10
6T3E3J		149.50	-1.65	-0.86	148.60	-2.28	-1.20
78YZZY		155.00	3.85	2.00	154.00	3.12	1.63
7HYJJE		149.10	-2.05	-1.07	150.40	-0.48	-0.25
7NNXFL		149.83	-1.33	-0.69	149.68	-1.20	-0.63
7RMB2P		149.00	-2.15	-1.12	150.00	-0.88	-0.46
7UPC2M		148.40	-2.75	-1.43	148.00	-2.88	-1.51
7ZV7NH		151.90	0.75	0.39	152.70	1.82	0.95
864WP3		151.03	-0.12	-0.06	150.72	-0.16	-0.08
88C2CC		152.20	1.05	0.55	150.87	-0.01	-0.01
8ZBRVY		152.00	0.85	0.44	151.33	0.44	0.23
9FHB6B	X	143.46	-7.70	-4.01	154.15	3.26	1.71
9QKQUF		149.80	-1.35	-0.70	150.40	-0.48	-0.25
9RCKRJ		153.54	2.39	1.24	153.38	2.49	1.31
9U2T9K		148.71	-2.44	-1.27	147.86	-3.02	-1.58
A2E8HV		153.10	1.95	1.01	151.40	0.52	0.27
A4MEUA		154.80	3.65	1.90	154.00	3.12	1.63
AYQRZL		150.00	-1.15	-0.60	151.00	0.12	0.06
BFX7WA		151.75	0.60	0.31	152.54	1.65	0.87
BY7AQY		150.70	-0.45	-0.24	149.60	-1.28	-0.67
CKLBUX		151.23	0.08	0.04	149.93	-0.96	-0.50
DHBRF7		155.00	3.85	2.00	154.00	3.12	1.63
DKEJJT		151.57	0.41	0.21	151.57	0.68	0.36
DMMJU2		150.00	-1.15	-0.60	151.00	0.12	0.06
DZQ2G8		152.60	1.45	0.75	151.80	0.92	0.48
E2JEG6		151.00	-0.15	-0.08	151.20	0.32	0.17
E92JKD		154.39	3.24	1.69	152.63	1.75	0.92
EAYQXC		147.90	-3.25	-1.69	146.40	-4.48	-2.35
ECY6AV		151.57	0.42	0.22	150.72	-0.16	-0.09
EKTCNU		149.50	-1.65	-0.86	150.00	-0.88	-0.46
F6ZW7F		151.71	0.56	0.29	150.99	0.10	0.05

		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
FKDBLT		150.60	-0.55	-0.29	150.10	-0.78	-0.41
G2DMQM		150.30	-0.85	-0.44	150.60	-0.28	-0.15
G4FMQK		154.32	3.17	1.65	154.90	4.02	2.10
G8HGTV		152.00	0.85	0.44	151.42	0.54	0.28
GMBDKT	X	146.80	-4.35	-2.26	151.20	0.32	0.17
GV3UD4	*	149.00	-2.16	-1.12	146.58	-4.30	-2.25
HC8DT7		149.50	-1.65	-0.86	149.90	-0.98	-0.52
HWFD4R		149.50	-1.65	-0.86	148.60	-2.28	-1.20
JPRHCM		151.64	0.49	0.25	151.17	0.29	0.15
JVF63L		147.41	-3.74	-1.95	147.27	-3.61	-1.89
JXMCH7		147.70	-3.45	-1.80	148.00	-2.88	-1.51
KFKXQ7		151.39	0.24	0.12	151.31	0.42	0.22
KUZVXR	*	150.53	-0.62	-0.32	153.01	2.13	1.11
KVFGC9		147.90	-3.25	-1.69	146.70	-4.18	-2.19
KYWQCK		152.92	1.77	0.92	152.60	1.72	0.90
L39WNK		152.15	0.99	0.52	150.55	-0.33	-0.17
LH2JXJ		149.90	-1.25	-0.65	149.60	-1.28	-0.67
LL2VUJ	*	157.08	5.93	3.08	155.77	4.89	2.56
LP3V42		149.50	-1.65	-0.86	149.00	-1.88	-0.99
LRTW86		148.08	-3.07	-1.60	148.66	-2.22	-1.16
LWKCHK		155.09	3.94	2.05	155.18	4.30	2.25
M6VVEN		149.39	-1.76	-0.92	147.79	-3.09	-1.62
MPHJPG		150.52	-0.63	-0.33	151.61	0.73	0.38
MXDJDU		152.02	0.87	0.45	152.52	1.64	0.86
N4W36M		153.20	2.05	1.07	153.40	2.52	1.32
NBEFYF		149.10	-2.05	-1.07	148.60	-2.28	-1.20
ND37XC		151.00	-0.15	-0.08	151.00	0.12	0.06
NEU3F7		153.60	2.45	1.27	152.30	1.42	0.74
NHHKTK		153.70	2.55	1.33	152.80	1.92	1.00
NMD7WU		153.30	2.15	1.12	152.50	1.62	0.85
NYJJQZ		150.10	-1.05	-0.55	150.40	-0.48	-0.25
P4AY7L		152.10	0.95	0.49	150.60	-0.28	-0.15
PMP98L	*	152.69	1.54	0.80	149.88	-1.00	-0.53
PYX9KR		149.08	-2.07	-1.08	149.11	-1.77	-0.93
PZQYQ7		153.70	2.55	1.33	153.80	2.92	1.53
Q9LLWV	X	149.00	-2.15	-1.12	146.00	-4.88	-2.56
QNYRAG		149.60	-1.55	-0.81	149.70	-1.18	-0.62
QYCYZP		150.07	-1.08	-0.56	151.51	0.63	0.33
R3P4CP		151.22	0.07	0.04	151.43	0.55	0.29
RB42WZ		147.90	-3.25	-1.69	148.30	-2.58	-1.35
RCVZ8T		152.10	0.95	0.49	151.70	0.82	0.43
RJWAF7		153.30	2.15	1.12	152.30	1.42	0.74
RVUYKA		148.08	-3.07	-1.60	148.66	-2.22	-1.16
RZ7YT8		152.60	1.45	0.75	152.60	1.72	0.90
TDMCGD		150.50	-0.65	-0.34	150.00	-0.88	-0.46
TLHFBM		151.00	-0.15	-0.08	150.00	-0.88	-0.46
TZH3QH		151.40	0.25	0.13	150.50	-0.38	-0.20

		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
U78VMH	X	146.63	-4.52	-2.35	149.39	-1.49	-0.78
UAH86P		152.10	0.95	0.49	153.50	2.62	1.37
UHVZQ9		150.30	-0.85	-0.44	149.70	-1.18	-0.62
VETJUQ		149.30	-1.85	-0.96	149.90	-0.98	-0.52
VJNEB4		152.17	1.02	0.53	152.51	1.63	0.85
W7FNHG		151.40	0.25	0.13	151.50	0.62	0.32
WEMLYK		150.40	-0.75	-0.39	150.70	-0.18	-0.10
WFLVXG		150.40	-0.75	-0.39	151.10	0.22	0.11
WGXMRJ		152.30	1.15	0.60	151.90	1.02	0.53
WZNHUU		154.03	2.88	1.50	152.73	1.84	0.96
XZKG6D		150.20	-0.95	-0.50	149.60	-1.28	-0.67
Y9UBUE	X	148.89	-2.26	-1.18	152.41	1.52	0.80
YPGJYP		149.30	-1.85	-0.96	148.60	-2.28	-1.20
Z3L394		153.44	2.29	1.19	153.16	2.28	1.19
Z7N3BM	*	153.74	2.59	1.35	150.84	-0.04	-0.02
Z8X8LP	X	142.70	-8.45	-4.40	143.20	-7.68	-4.02
ZA4UYU		153.80	2.65	1.38	153.60	2.72	1.42

Summary Statistics

	Sample P45		Sample P46	
Grand Means	151.15	ksi	150.88	ksi
Stnd Dev Btwn Labs	1.92	ksi	1.91	ksi

Samples P45, P46 : AISI 4340 (E), AISI 4340 (F)

Statistics based on 102 of 111 reporting participants

Comments on Assigned Data Flags for Test #140

2Q44EK (X) - Data for sample P46 are high.

3JGJ6D (X) - Inconsistent in testing between samples.

46HUN7 (X) - Inconsistent in testing between samples.

9FHB6B (X) - Data for sample P45 are low.

GMBDKT (X) - Inconsistent in testing between samples.

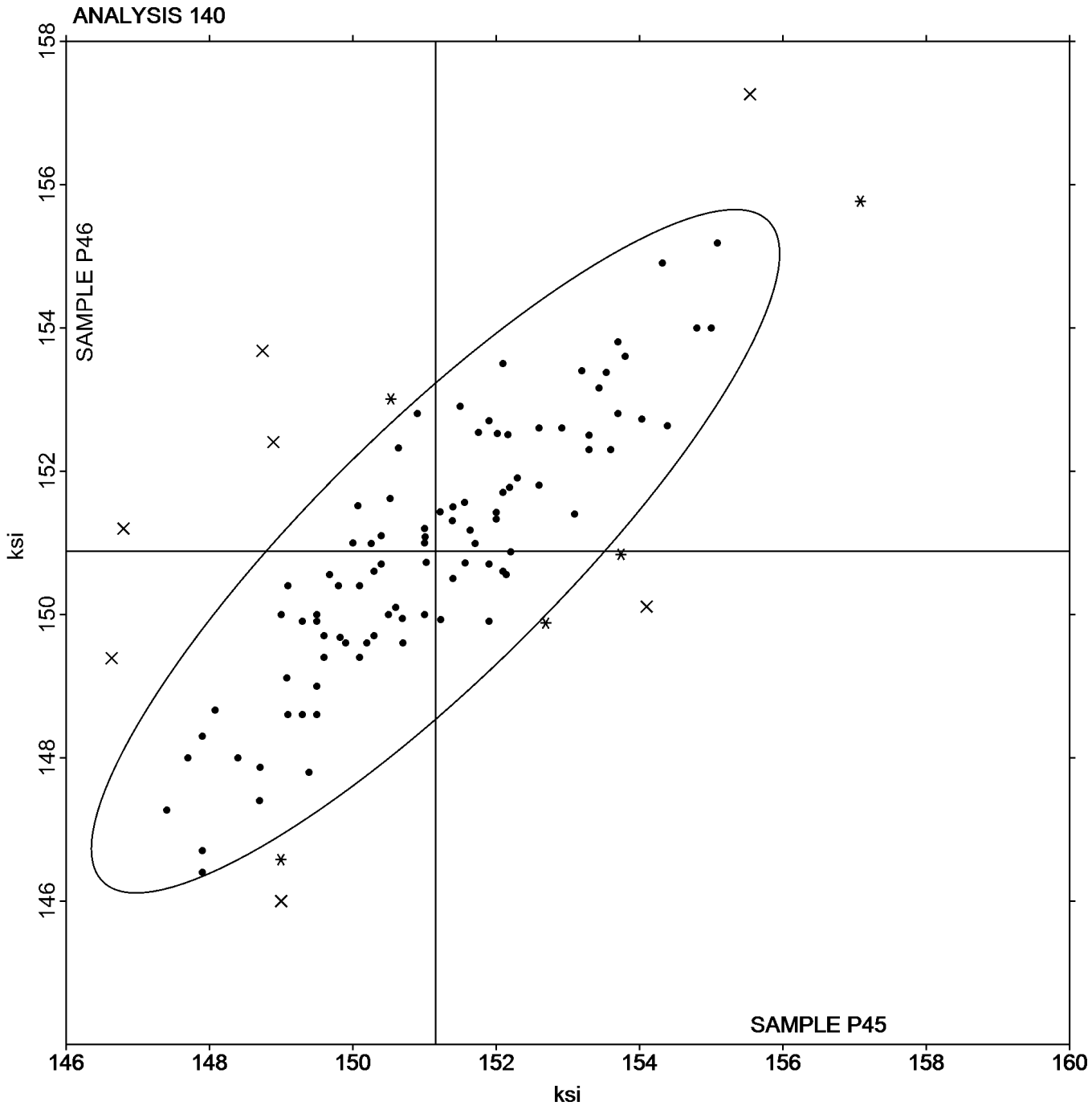
Q9LLWV (X) - Inconsistent in testing between samples.

U78VMH (X) - Inconsistent in testing between samples.

Y9UBUE (X) - Inconsistent in testing between samples.

Z8X8LP (X) - Data for both samples are low. Possible Systematic Error.

SAMPLE P45	SAMPLE P46
151.15 ksi	150.88 ksi



		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2AFTMC		122.00	-0.23	-0.13	122.00	0.26	0.15
2FMCZV		124.30	2.07	1.13	124.90	3.16	1.81
2J6MY9		120.10	-2.13	-1.16	118.30	-3.44	-1.97
2J9W27		121.21	-1.02	-0.56	121.06	-0.68	-0.39
2Q44EK		125.82	3.59	1.96	124.95	3.21	1.83
2RK4U4		121.10	-1.13	-0.62	121.20	-0.54	-0.31
2UMWUT		121.83	-0.40	-0.22	122.70	0.96	0.55
3GXENF		122.53	0.30	0.16	121.57	-0.17	-0.10
3HADHP		121.40	-0.83	-0.46	122.27	0.53	0.30
3JGJ6D	X	132.77	10.54	5.76	127.78	6.04	3.45
3VXFZG		123.66	1.43	0.78	121.04	-0.70	-0.40
3ZBYE6		123.00	0.77	0.42	121.90	0.16	0.09
46HUN7	X	119.72	-2.51	-1.37	123.64	1.90	1.09
6343W2		120.90	-1.33	-0.73	120.80	-0.94	-0.54
64MMWR		124.30	2.07	1.13	123.10	1.36	0.78
6HJ3Q7		119.90	-2.33	-1.27	120.70	-1.04	-0.59
6MAEL3		123.41	1.18	0.64	122.77	1.03	0.59
6T3E3J		122.60	0.37	0.20	120.70	-1.04	-0.59
78YZZY	X	130.00	7.77	4.24	126.00	4.26	2.43
7HYJJE	*	124.30	2.07	1.13	126.20	4.46	2.55
7NNXFL		121.69	-0.54	-0.30	121.98	0.24	0.14
7RMB2P		121.00	-1.23	-0.67	121.00	-0.74	-0.42
7UPC2M		119.70	-2.53	-1.38	119.90	-1.84	-1.05
7ZV7NH		122.20	-0.03	-0.02	123.00	1.26	0.72
864WP3		120.48	-1.75	-0.95	120.12	-1.62	-0.92
88C2CC		123.38	1.15	0.63	120.41	-1.33	-0.76
8ZBRVY		122.83	0.59	0.32	120.92	-0.82	-0.47
9FHB6B	X	117.48	-4.75	-2.59	124.73	2.99	1.71
9QKQUF		122.20	-0.03	-0.02	122.40	0.66	0.38
9RCKRJ		123.52	1.28	0.70	123.70	1.96	1.12
9U2T9K		120.92	-1.31	-0.71	119.69	-2.05	-1.17
A2E8HV		123.30	1.07	0.58	121.50	-0.24	-0.14
A4MEUA	*	126.80	4.57	2.50	123.60	1.86	1.06
AYQRZL		122.00	-0.23	-0.13	123.00	1.26	0.72
BFX7WA		122.70	0.47	0.26	122.54	0.80	0.46
BY7AQY		121.70	-0.53	-0.29	121.00	-0.74	-0.42
CKLBUX		121.09	-1.14	-0.62	119.63	-2.11	-1.21
DHBRF7	*	127.50	5.27	2.88	126.70	4.96	2.83
DKEJJT	X	147.94	25.71	14.04	139.96	18.22	10.41
DMMJU2		122.00	-0.23	-0.13	121.00	-0.74	-0.42
DZQ2G8		124.50	2.27	1.24	123.60	1.86	1.06
E2JEG6		123.20	0.97	0.53	122.50	0.76	0.43
E92JKD	*	127.62	5.39	2.94	124.70	2.96	1.69
EAYQXC		119.90	-2.33	-1.27	118.50	-3.24	-1.85
ECY6AV		122.45	0.22	0.12	121.57	-0.17	-0.10
EKTCNU		121.30	-0.93	-0.51	121.30	-0.44	-0.25
F6ZW7F		122.99	0.76	0.42	121.25	-0.49	-0.28

		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
FKDBLT		122.00	-0.23	-0.13	121.00	-0.74	-0.42
G2DMQM		121.30	-0.93	-0.51	121.50	-0.24	-0.14
G4FMQK	X	121.83	-0.40	-0.22	125.60	3.86	2.21
G8HGTV	X	129.66	7.43	4.06	131.55	9.81	5.61
GMBDKT	X	122.13	-0.10	-0.06	126.20	4.46	2.55
GV3UD4		122.30	0.07	0.04	119.47	-2.27	-1.30
HC8DT7		121.90	-0.33	-0.18	122.20	0.46	0.26
HWFD4R		120.90	-1.33	-0.73	120.20	-1.54	-0.88
JPRHCM		122.05	-0.18	-0.10	120.99	-0.75	-0.43
JVF63L		117.66	-4.57	-2.50	118.41	-3.33	-1.90
JXMCH7		118.40	-3.83	-2.09	120.50	-1.24	-0.71
KFKXQ7		123.18	0.95	0.52	122.61	0.87	0.49
KUZVXR	*	121.57	-0.66	-0.36	124.83	3.09	1.77
KVFGC9		119.50	-2.73	-1.49	119.00	-2.74	-1.57
KYWQCK		124.13	1.89	1.03	123.60	1.86	1.06
L39WNK		124.15	1.92	1.05	122.56	0.82	0.47
LH2JXJ		122.10	-0.13	-0.07	121.00	-0.74	-0.42
LL2VUJ	X	128.78	6.55	3.58	126.60	4.86	2.78
LP3V42		121.90	-0.33	-0.18	120.90	-0.84	-0.48
LRTW86		120.82	-1.41	-0.77	121.98	0.24	0.14
LWKCHK		124.00	1.77	0.97	122.34	0.60	0.34
M6VVEN		121.11	-1.12	-0.61	119.51	-2.23	-1.27
MPHJPG	*	121.38	-0.85	-0.47	124.57	2.83	1.62
MXDJDU		122.80	0.57	0.31	123.29	1.55	0.89
N4W36M		124.10	1.87	1.02	124.00	2.26	1.29
NBEFYF		121.80	-0.43	-0.24	121.00	-0.74	-0.42
ND37XC		123.20	0.97	0.53	122.30	0.56	0.32
NEU3F7	X	144.90	22.67	12.38	145.50	23.76	13.58
NHHKTK		125.90	3.67	2.00	125.30	3.56	2.03
NMD7WU		122.40	0.17	0.09	120.50	-1.24	-0.71
NYJJQZ		120.70	-1.53	-0.84	120.90	-0.84	-0.48
P4AY7L	X	144.70	22.47	12.27	141.90	20.16	11.52
PMP98L		121.79	-0.44	-0.24	119.12	-2.62	-1.50
PYX9KR		121.27	-0.96	-0.52	121.07	-0.67	-0.38
PZQYQ7		123.80	1.57	0.86	123.50	1.76	1.01
Q9LLWV		121.00	-1.23	-0.67	120.00	-1.74	-0.99
QNYRAG		121.20	-1.03	-0.56	121.00	-0.74	-0.42
QYCYZP		120.87	-1.36	-0.74	122.39	0.65	0.37
R3P4CP		122.37	0.14	0.07	121.80	0.06	0.03
RB42WZ	*	118.40	-3.83	-2.09	120.80	-0.94	-0.54
RCVZ8T		122.80	0.57	0.31	121.60	-0.14	-0.08
RJWAF7	X	124.30	2.07	1.13	118.30	-3.44	-1.97
RVUYKA		120.82	-1.41	-0.77	121.83	0.09	0.05
TDMCGD		121.90	-0.33	-0.18	121.20	-0.54	-0.31
TLHFBM		122.00	-0.23	-0.13	122.00	0.26	0.15
TZH3QH		122.80	0.57	0.31	121.70	-0.04	-0.02
U78VMH	X	63.09	-59.14	-32.30	61.35	-60.39	-34.50

		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
UAH86P		123.30	1.07	0.58	124.10	2.36	1.35
UHVZQ9		120.60	-1.63	-0.89	120.00	-1.74	-0.99
VETJUQ		120.50	-1.73	-0.95	121.30	-0.44	-0.25
VJNEB4		123.77	1.54	0.84	123.86	2.12	1.21
W7FNHG		123.40	1.17	0.64	122.70	0.96	0.55
WEMLYK	X	127.80	5.57	3.04	128.20	6.46	3.69
WFLVXG		122.00	-0.23	-0.13	122.00	0.26	0.15
WGXMRJ		119.50	-2.73	-1.49	117.60	-4.14	-2.37
WZNHUU	*	125.89	3.66	2.00	121.83	0.09	0.05
XZKG6D		119.60	-2.63	-1.44	119.20	-2.54	-1.45
Y9UBUE	X	131.10	8.86	4.84	134.91	13.17	7.52
YPGJYP		120.40	-1.83	-1.00	119.50	-2.24	-1.28
Z3L394		124.01	1.78	0.97	123.17	1.43	0.82
Z8X8LP	X	113.40	-8.83	-4.82	111.20	-10.54	-6.02
ZA4UYU		122.90	0.67	0.37	122.40	0.66	0.38

Summary Statistics

	Sample P45		Sample P46	
Grand Means	122.23	ksi	121.74	ksi
Stnd Dev Btwn Labs	1.83	ksi	1.75	ksi

Samples P45, P46 : AISI 4340 (E), AISI 4340 (F)

Statistics based on 93 of 109 reporting participants

Comments on Assigned Data Flags for Test #141

3JGJ6D (X) - Data for both samples are high. Possible Systematic Error.

46HUN7 (X) - Inconsistent in testing between samples.

78YZZY (X) - Data for sample P45 are high.

9FHB6B (X) - Inconsistent in testing between samples.

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

G4FMQK (X) - Inconsistent in testing between samples.

G8HGTV (X) - Data for both samples are high. Possible Systematic Error.

GMBDKT (X) - Inconsistent in testing between samples.

LL2VUJ (X) - Data for both samples are high. Possible Systematic Error.

NEU3F7 (X) - Data for both samples are extremely high. Possible Systematic Error.

P4AY7L (X) - Data for both samples are extremely high. Possible Systematic Error.

RJWAF7 (X) - Inconsistent in testing between samples.

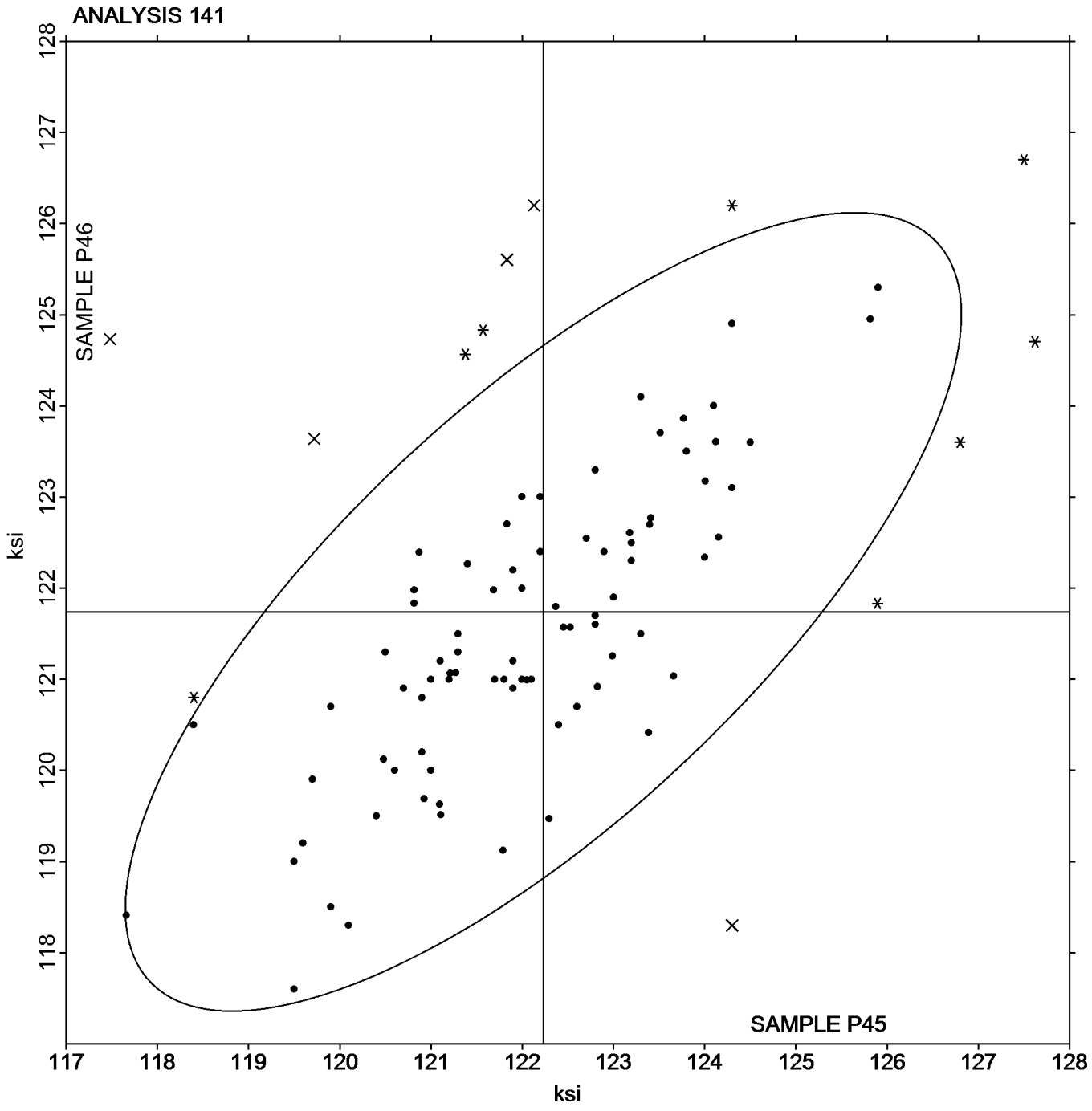
U78VMH (X) - Data for both samples are extremely low. Possible Systematic Error.

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

Y9UBUE (X) - Data for both samples are high. Possible Systematic Error.

Z8X8LP (X) - Data for both samples are low. Possible Systematic Error.

SAMPLE P45	SAMPLE P46
122.23 ksi	121.74 ksi



		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2AFTMC		18.40	1.46	1.27	16.90	0.92	0.69
2FMCZV		16.80	-0.14	-0.12	15.30	-0.68	-0.51
2J6MY9	*	20.00	3.06	2.67	20.00	4.02	2.99
2J9W27		15.80	-1.14	-0.99	15.00	-0.98	-0.73
2Q44EK		17.17	0.23	0.20	15.05	-0.93	-0.69
2RK4U4		19.00	2.06	1.80	18.00	2.02	1.50
2UMWUT		16.30	-0.64	-0.56	16.80	0.82	0.61
3GXENF		18.00	1.06	0.92	17.00	1.02	0.76
3HADHP		15.92	-1.02	-0.89	14.70	-1.28	-0.96
3JGJ6D		18.00	1.06	0.92	16.50	0.52	0.39
3VXFZG		17.30	0.36	0.32	14.50	-1.48	-1.10
3ZBYE6		16.50	-0.44	-0.38	14.50	-1.48	-1.10
46HUN7		16.34	-0.60	-0.52	14.92	-1.06	-0.79
6343W2		16.50	-0.44	-0.38	15.50	-0.48	-0.36
64MMWR		16.50	-0.44	-0.38	15.00	-0.98	-0.73
6HJ3Q7		15.80	-1.14	-0.99	13.60	-2.38	-1.77
6MAEL3		17.40	0.46	0.40	15.65	-0.33	-0.25
6T3E3J		17.38	0.44	0.39	16.08	0.10	0.07
78YZZY		16.00	-0.94	-0.82	14.00	-1.98	-1.47
7HYJJE		17.00	0.06	0.05	16.00	0.02	0.02
7NNXFL		15.40	-1.54	-1.34	14.60	-1.38	-1.03
7RMB2P		16.50	-0.44	-0.38	16.00	0.02	0.02
7UPC2M		16.90	-0.04	-0.03	16.60	0.62	0.46
7ZV7NH		17.10	0.16	0.14	16.40	0.42	0.31
864WP3		15.05	-1.89	-1.64	15.30	-0.68	-0.51
88C2CC		17.00	0.06	0.05	16.30	0.32	0.24
8ZBRVY		16.00	-0.94	-0.82	15.00	-0.98	-0.73
9FHB6B	X	5.910	-11.03	-9.60	5.400	-10.58	-7.88
9QKQUF		17.83	0.89	0.78	14.98	-1.00	-0.74
9RCKRJ		17.80	0.86	0.75	16.60	0.62	0.46
9U2T9K		18.00	1.06	0.92	18.00	2.02	1.50
A2E8HV		15.60	-1.34	-1.16	14.70	-1.28	-0.95
A4MEUA		16.10	-0.84	-0.73	14.90	-1.08	-0.80
AYQRZL		16.50	-0.44	-0.38	16.50	0.52	0.39
BFX7WA		17.40	0.46	0.40	15.40	-0.58	-0.43
BY7AQY		16.50	-0.44	-0.38	15.50	-0.48	-0.36
CKLBUX		15.80	-1.14	-0.99	15.40	-0.58	-0.43
DHBRF7		15.90	-1.04	-0.90	15.10	-0.88	-0.66
DKEJJT		16.00	-0.94	-0.82	15.00	-0.98	-0.73
DMMJU2		16.30	-0.64	-0.56	15.00	-0.98	-0.73
DZQ2G8		16.30	-0.64	-0.56	14.80	-1.18	-0.88
E2JEG6		18.40	1.46	1.27	17.00	1.02	0.76
E92JKD		17.30	0.36	0.32	16.90	0.92	0.69
EAYQXC		16.50	-0.44	-0.38	14.50	-1.48	-1.10
ECY6AV		18.50	1.56	1.36	17.00	1.02	0.76
EKTCNU		18.38	1.44	1.26	17.30	1.32	0.98
F6ZW7F		18.00	1.06	0.92	16.50	0.52	0.39

		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
FKDBLT		17.50	0.56	0.49	17.00	1.02	0.76
G2DMQM		17.50	0.56	0.49	17.50	1.52	1.13
G4FMQK	X	17.80	0.86	0.75	13.60	-2.38	-1.77
G8HGTV		16.00	-0.94	-0.82	15.00	-0.98	-0.73
GMBDKT		16.70	-0.24	-0.21	15.00	-0.98	-0.73
GV3UD4	*	14.42	-2.52	-2.19	12.60	-3.38	-2.52
HC8DT7		17.15	0.21	0.18	16.48	0.50	0.37
HWFD4R		16.50	-0.44	-0.38	15.50	-0.48	-0.36
JPRHCM		16.80	-0.14	-0.12	16.20	0.22	0.16
JVF63L		16.40	-0.54	-0.47	15.40	-0.58	-0.43
JXMCH7		16.90	-0.04	-0.03	14.80	-1.18	-0.88
KFKXQ7		16.60	-0.34	-0.29	16.40	0.42	0.31
KUZVXR		15.20	-1.74	-1.51	14.50	-1.48	-1.10
KVFGC9		17.00	0.06	0.05	15.30	-0.68	-0.51
KYWQCK		17.00	0.06	0.05	14.00	-1.98	-1.47
L39WNK		15.10	-1.84	-1.60	14.50	-1.48	-1.10
LH2JXJ		16.70	-0.24	-0.21	16.40	0.42	0.31
LL2VUJ		17.50	0.56	0.49	15.40	-0.58	-0.43
LP3V42		16.10	-0.84	-0.73	15.80	-0.18	-0.13
LRTW86		19.00	2.06	1.80	18.40	2.42	1.80
LWKCHK		16.60	-0.34	-0.29	16.80	0.82	0.61
M6VVEN	*	17.80	0.86	0.75	19.20	3.22	2.40
MPHJPG		15.00	-1.94	-1.69	15.00	-0.98	-0.73
MXDJDU		16.80	-0.14	-0.12	15.00	-0.98	-0.73
N4W36M		16.60	-0.34	-0.29	16.10	0.12	0.09
NBEFYF	*	14.09	-2.85	-2.48	14.19	-1.79	-1.33
ND37XC		15.30	-1.64	-1.43	15.80	-0.18	-0.13
NEU3F7		16.60	-0.34	-0.29	17.20	1.22	0.91
NHHKTK		17.70	0.76	0.66	17.30	1.32	0.98
NMD7WU		17.20	0.26	0.23	16.90	0.92	0.69
NYJJQZ		16.00	-0.94	-0.82	15.50	-0.48	-0.36
P4AY7L		15.80	-1.14	-0.99	16.90	0.92	0.69
PMP98L		16.40	-0.54	-0.47	16.90	0.92	0.69
PYX9KR		17.00	0.06	0.05	16.00	0.02	0.02
PZQYQ7		17.00	0.06	0.05	18.00	2.02	1.50
Q9LLWV		18.60	1.66	1.45	17.10	1.12	0.83
QNYRAG		16.00	-0.94	-0.82	15.00	-0.98	-0.73
QYCYZP		17.84	0.90	0.79	17.22	1.24	0.92
R3P4CP		18.05	1.11	0.97	15.30	-0.68	-0.51
RB42WZ		15.50	-1.44	-1.25	15.90	-0.08	-0.06
RCVZ8T		17.00	0.06	0.05	15.50	-0.48	-0.36
RJWAF7		16.50	-0.44	-0.38	15.80	-0.18	-0.13
RVUYKA		19.00	2.06	1.80	18.40	2.42	1.80
RZ7YT8		15.90	-1.04	-0.90	15.90	-0.08	-0.06
TDMCGD		16.00	-0.94	-0.82	15.00	-0.98	-0.73
TLHFBM		18.00	1.06	0.92	15.00	-0.98	-0.73
TZH3QH	*	19.80	2.86	2.49	19.40	3.42	2.55

Fasteners and Metals Interlaboratory Testing Program

Analysis 142

Elongation: Lab-Machined Round Steel
ASTM E8

		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
U78VMH		14.40	-2.54	-2.21	13.40	-2.58	-1.92
UAH86P	*	17.90	0.96	0.84	14.50	-1.48	-1.10
UHVZQ9		16.50	-0.44	-0.38	16.50	0.52	0.39
VETJUQ		16.80	-0.14	-0.12	15.70	-0.28	-0.21
VJNEB4		17.50	0.56	0.49	16.00	0.02	0.02
W7FNHG		18.00	1.06	0.92	16.00	0.02	0.02
WEMLYK		17.40	0.46	0.40	17.70	1.72	1.28
WFLVXG		17.00	0.06	0.05	15.00	-0.98	-0.73
WGXMRJ		16.70	-0.24	-0.21	14.60	-1.38	-1.03
WZNHUU		18.00	1.06	0.92	19.00	3.02	2.25
XZKG6D	X	10.50	-6.44	-5.60	20.00	4.02	2.99
Y9UBUE		17.00	0.06	0.05	15.30	-0.68	-0.51
YPGJYP		17.05	0.11	0.10	16.35	0.37	0.28
Z3L394		17.60	0.66	0.58	17.40	1.42	1.06
Z7N3BM	*	20.00	3.06	2.67	19.00	3.02	2.25
Z8X8LP		19.10	2.16	1.88	16.60	0.62	0.46
ZA4UYU		19.00	2.06	1.80	18.00	2.02	1.50

Summary Statistics

	Sample P45		Sample P46	
Grand Means	16.94	Percent	15.98	Percent
Stnd Dev Btwn Labs	1.15	Percent	1.34	Percent

Samples P45, P46 : AISI 4340 (E), AISI 4340 (F)

Statistics based on 108 of 111 reporting participants

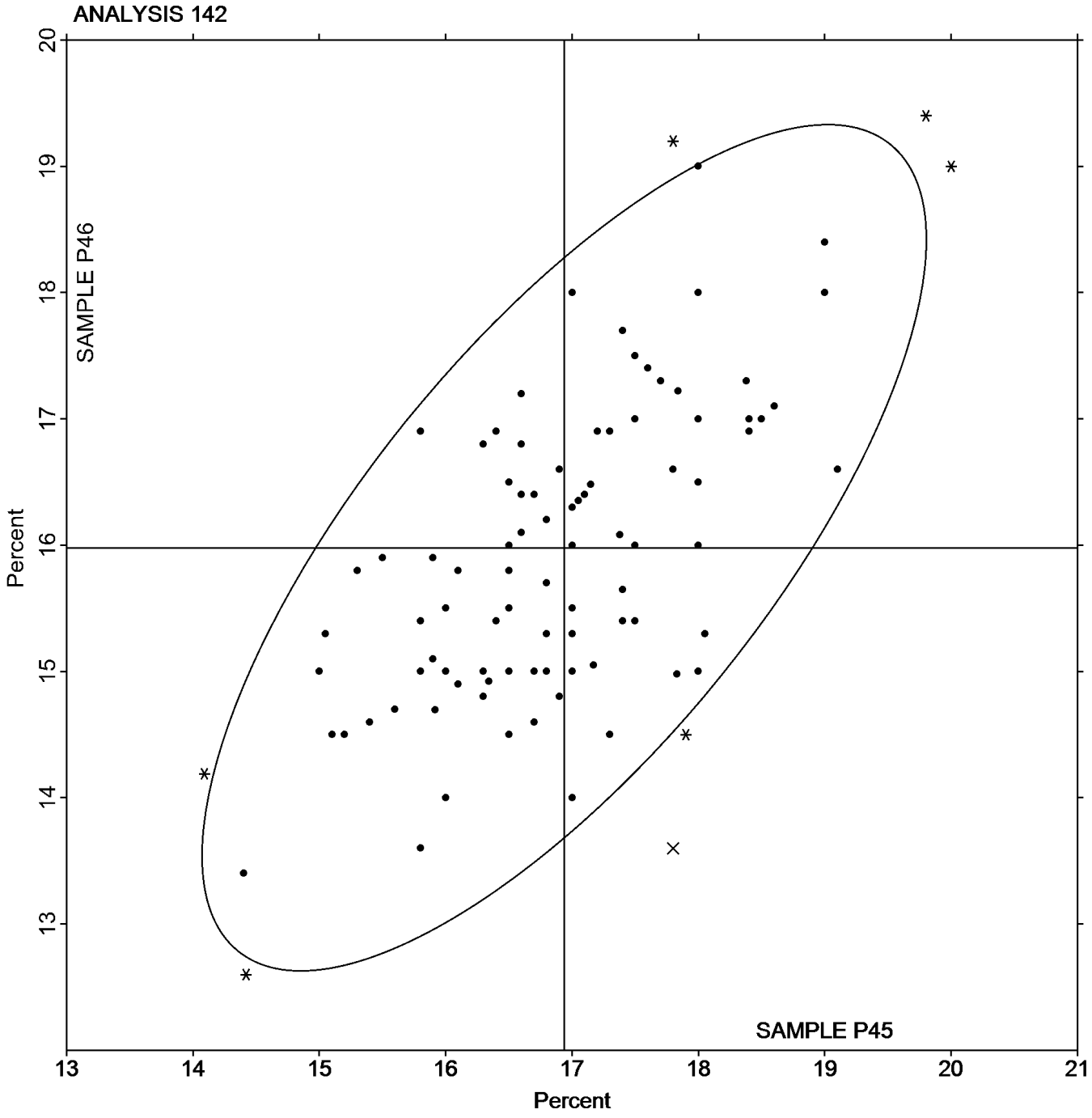
Comments on Assigned Data Flags for Test #142

9FHB6B (X) - Data for both samples are low.

G4FMQK (X) - Inconsistent in testing between samples.

XZKG6D (X) - Data for sample P45 are low and data for sample P46 are high.

SAMPLE P45	SAMPLE P46
16.94 Percent	15.98 Percent



		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2AFTMC		50.30	-0.52	-0.35	46.20	0.52	0.20
2FMCZV		51.10	0.28	0.19	42.00	-3.68	-1.43
2J6MY9	*	53.40	2.58	1.73	51.20	5.52	2.14
2Q44EK		50.09	-0.73	-0.49	43.11	-2.57	-1.00
2RK4U4		50.00	-0.82	-0.55	47.00	1.32	0.51
2UMWUT	X	42.10	-8.72	-5.84	48.00	2.32	0.90
3GXENF		49.20	-1.62	-1.09	45.20	-0.48	-0.19
3HADHP		51.00	0.18	0.12	46.00	0.32	0.12
3JGJ6D		52.50	1.68	1.12	45.00	-0.68	-0.26
3VXFZG		50.90	0.08	0.05	42.70	-2.98	-1.16
3ZBYE6		51.00	0.18	0.12	43.40	-2.28	-0.88
46HUN7	*	55.10	4.28	2.86	47.28	1.60	0.62
6343W2		51.30	0.48	0.32	49.40	3.72	1.44
64MMWR		48.52	-2.30	-1.54	44.87	-0.81	-0.31
6HJ3Q7		48.70	-2.12	-1.42	43.50	-2.18	-0.85
6MAEL3		51.53	0.71	0.47	44.49	-1.19	-0.46
6T3E3J		51.00	0.18	0.12	49.00	3.32	1.28
78YZZY		52.00	1.18	0.79	42.00	-3.68	-1.43
7HYJJE		50.00	-0.82	-0.55	44.60	-1.08	-0.42
7NNXFL		49.30	-1.52	-1.02	46.40	0.72	0.28
7RMB2P		50.70	-0.12	-0.08	45.80	0.12	0.05
7UPC2M		49.40	-1.42	-0.95	47.40	1.72	0.67
864WP3		49.52	-1.30	-0.87	46.91	1.23	0.48
88C2CC		52.20	1.38	0.92	47.50	1.82	0.70
8ZBRVY		51.00	0.18	0.12	48.00	2.32	0.90
9FHB6B		51.10	0.28	0.19	40.70	-4.98	-1.93
9QKQUF	*	52.00	1.18	0.79	40.00	-5.68	-2.20
9RCKRJ	X	47.10	-3.72	-2.49	52.00	6.32	2.45
9U2T9K		51.00	0.18	0.12	48.00	2.32	0.90
A2E8HV		49.40	-1.42	-0.95	43.50	-2.18	-0.85
A4MEUA		50.90	0.08	0.05	43.40	-2.28	-0.88
AYQRZL		50.80	-0.02	-0.01	46.70	1.02	0.39
BFX7WA		50.90	0.08	0.05	41.10	-4.58	-1.78
BY7AQY		50.70	-0.12	-0.08	48.80	3.12	1.21
CKLBUX		48.00	-2.82	-1.89	46.00	0.32	0.12
DHBRF7		51.30	0.48	0.32	46.30	0.62	0.24
DKEJJT		50.80	-0.02	-0.01	45.21	-0.47	-0.18
DMMJU2		50.00	-0.82	-0.55	42.00	-3.68	-1.43
DZQ2G8		50.70	-0.12	-0.08	43.00	-2.68	-1.04
E2JEG6		52.00	1.18	0.79	45.50	-0.18	-0.07
E92JKD		51.60	0.78	0.52	46.80	1.12	0.43
EAYQXC		51.70	0.88	0.59	42.40	-3.28	-1.27
ECY6AV		49.00	-1.82	-1.22	46.00	0.32	0.12
EKTCNU		51.90	1.08	0.72	42.40	-3.28	-1.27
F6ZW7F		51.50	0.68	0.45	46.00	0.32	0.12
FKDBLT		51.70	0.88	0.59	48.10	2.42	0.94
G2DMQM		50.90	0.08	0.05	48.80	3.12	1.21

		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
G4FMQK		53.00	2.18	1.46	43.30	-2.38	-0.92
G8HGTV		50.00	-0.82	-0.55	43.00	-2.68	-1.04
GMBDKT		51.10	0.28	0.19	44.20	-1.48	-0.57
GV3UD4		49.86	-0.96	-0.64	44.62	-1.06	-0.41
HC8DT7		50.00	-0.82	-0.55	47.00	1.32	0.51
HWFD4R		51.30	0.48	0.32	49.00	3.32	1.28
JPRHCM		51.10	0.28	0.19	45.30	-0.38	-0.15
JVF63L		50.51	-0.31	-0.21	46.44	0.75	0.29
JXMCH7		50.30	-0.52	-0.35	42.30	-3.38	-1.31
KFKXQ7		48.80	-2.02	-1.35	46.80	1.12	0.43
KUZVXR		51.00	0.18	0.12	44.60	-1.08	-0.42
KVFGC9		51.70	0.88	0.59	47.00	1.32	0.51
KYWQCK		50.90	0.08	0.05	41.50	-4.18	-1.62
L39WNK		48.20	-2.62	-1.76	43.20	-2.48	-0.96
LH2JXJ		49.10	-1.72	-1.15	49.40	3.72	1.44
LL2VUJ		50.70	-0.12	-0.08	43.60	-2.08	-0.81
LP3V42		50.10	-0.72	-0.48	46.90	1.22	0.47
LRTW86		52.72	1.90	1.27	46.80	1.12	0.43
LWKCHK		52.87	2.05	1.37	50.21	4.53	1.75
M6VVEN	X	46.00	-4.82	-3.23	52.00	6.32	2.45
MPHJPG		51.00	0.18	0.12	51.00	5.32	2.06
MXDJDU		49.00	-1.82	-1.22	46.10	0.42	0.16
N4W36M		49.90	-0.92	-0.62	44.50	-1.18	-0.46
NBEFYF		47.89	-2.93	-1.96	43.82	-1.86	-0.72
ND37XC		47.80	-3.02	-2.02	48.30	2.62	1.01
NEU3F7		48.60	-2.22	-1.49	47.40	1.72	0.67
NHHKTK		50.00	-0.82	-0.55	48.00	2.32	0.90
NMD7WU		49.10	-1.72	-1.15	42.60	-3.08	-1.19
NYJJQZ		51.20	0.38	0.25	42.60	-3.08	-1.19
P4AY7L	X	43.40	-7.42	-4.97	46.60	0.92	0.36
PMP98L		51.62	0.80	0.53	47.32	1.64	0.63
PYX9KR		50.00	-0.82	-0.55	43.00	-2.68	-1.04
PZQYQ7		52.00	1.18	0.79	48.00	2.32	0.90
Q9LLWV		51.20	0.38	0.25	50.00	4.32	1.67
QNYRAG		50.10	-0.72	-0.48	45.90	0.22	0.08
QYCYZP	*	54.24	3.42	2.29	51.42	5.74	2.22
R3P4CP		52.42	1.60	1.07	45.40	-0.28	-0.11
RB42WZ	*	47.20	-3.62	-2.43	48.10	2.42	0.94
RCVZ8T		51.70	0.88	0.59	44.30	-1.38	-0.54
RJWAF7	X	50.10	-0.72	-0.48	55.40	9.72	3.76
RVUYKA		52.72	1.90	1.27	46.80	1.12	0.43
RZ7YT8		49.10	-1.72	-1.15	45.50	-0.18	-0.07
TDMCGD		51.30	0.48	0.32	45.50	-0.18	-0.07
TLHFBM		49.00	-1.82	-1.22	44.00	-1.68	-0.65
TZH3QH	*	55.10	4.28	2.86	50.10	4.42	1.71
U78VMH	X	33.60	-17.22	-11.53	29.10	-16.58	-6.42
UAH86P		51.90	1.08	0.72	43.40	-2.28	-0.88

		Sample P45			Sample P46		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
UHVZQ9		50.12	-0.70	-0.47	45.46	-0.22	-0.09
VETJUQ		50.00	-0.82	-0.55	46.00	0.32	0.12
W7FNHG		51.00	0.18	0.12	43.00	-2.68	-1.04
WEMLYK		52.90	2.08	1.39	45.90	0.22	0.08
WFLVXG		50.60	-0.22	-0.15	41.70	-3.98	-1.54
WGXMRJ	X	48.80	-2.02	-1.35	37.10	-8.58	-3.32
WZNHUU	X	36.00	-14.82	-9.92	43.00	-2.68	-1.04
XZKG6D	X	64.00	13.18	8.82	65.00	19.32	7.48
Y9UBUE		51.92	1.10	0.74	42.46	-3.22	-1.25
YPGJYP		50.00	-0.82	-0.55	46.00	0.32	0.12
Z3L394		51.00	0.18	0.12	50.00	4.32	1.67
Z7N3BM		52.00	1.18	0.79	46.00	0.32	0.12
Z8X8LP		53.80	2.98	1.99	48.20	2.52	0.97
ZA4UYU		53.00	2.18	1.46	50.00	4.32	1.67

Summary Statistics

	Sample P45		Sample P46	
Grand Means	50.82	Percent	45.68	Percent
Stnd Dev Btwn Labs	1.49	Percent	2.58	Percent

Samples P45, P46 : AISI 4340 (E), AISI 4340 (F)

Statistics based on 99 of 108 reporting participants

Comments on Assigned Data Flags for Test #143

2UMWUT (X) - Data for sample P45 are low.

9RCKRJ (X) - Inconsistent in testing between samples.

M6VVEN (X) - Data for sample P45 are low.

P4AY7L (X) - Data for sample P45 are low.

RJWAF7 (X) - Data for sample P46 are high.

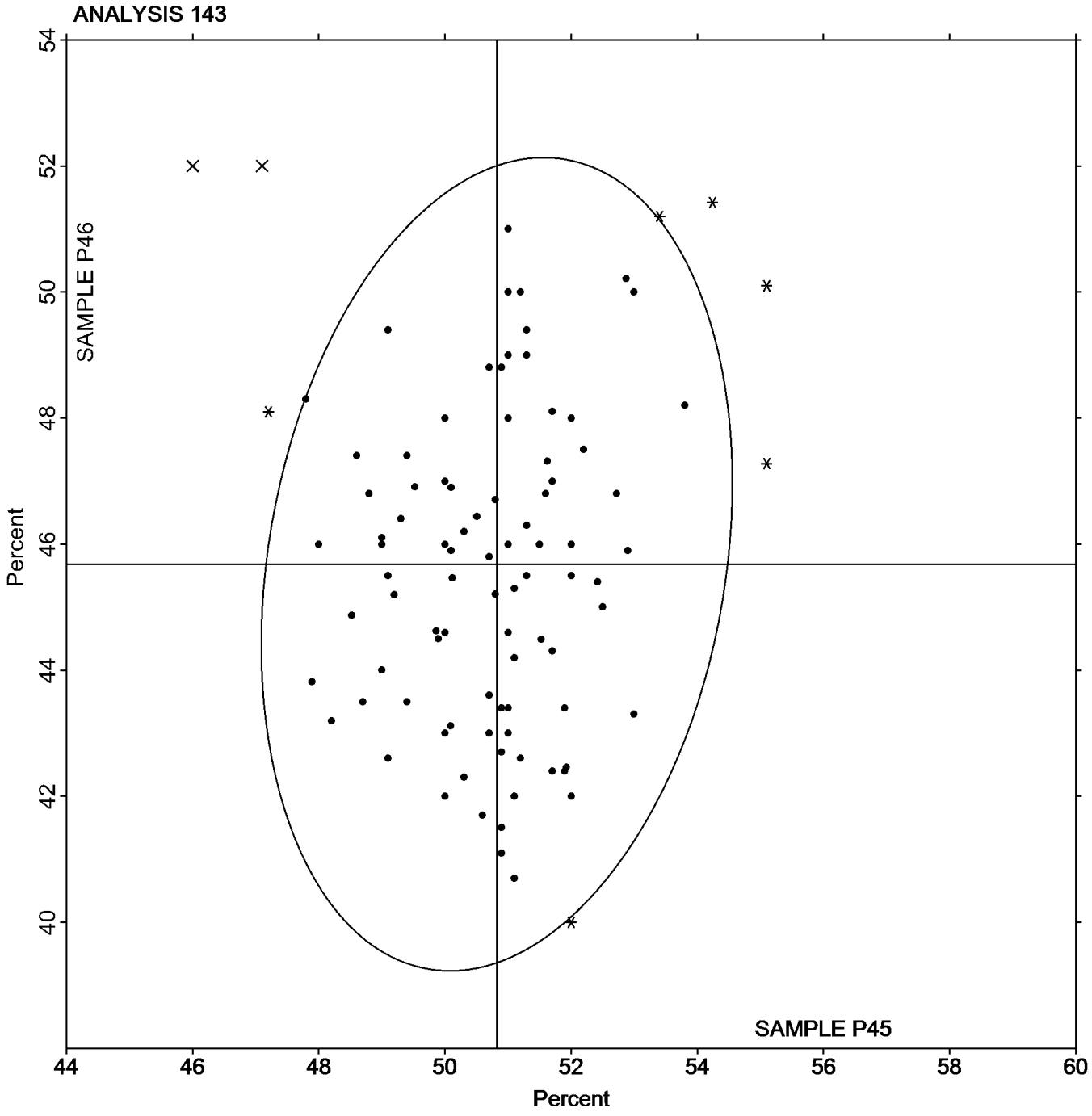
U78VMH (X) - Data for both samples are low.

WGXMRJ (X) - Data for sample P46 are low.

WZNHUU (X) - Data for sample P45 are low.

XZKG6D (X) - Data for both samples are high.

SAMPLE P45	SAMPLE P46
50.82 Percent	45.68 Percent



WebCode	Data Flag	Sample W43 Lab Mean	Sample W43 Diff. from Grand Mean	Sample W43 CPV	Sample W44 Lab Mean	Sample W44 Diff. from Grand Mean	Sample W44 CPV
6HJ3Q7		0.000400	0.000077	0.99	0.000200	-0.000001	-0.02
6V2DZF	M	No Data Reported			0.000154	-0.000047	-0.58
8VHP2K		0.000334	0.000011	0.14	0.000164	-0.000037	-0.46
AALJYB		0.000400	0.000077	0.99	0.000180	-0.000021	-0.26
BWTHWA		0.000352	0.000029	0.37	0.000199	-0.000002	-0.03
EVFBLR		0.000266	-0.000057	-0.73	0.000194	-0.000007	-0.09
FRB3UM	*	0.000096	-0.000227	-2.90	0.000093	-0.000108	-1.33
MR64UK		0.000342	0.000019	0.24	0.000218	0.000017	0.21
NYJJQZ		0.000337	0.000014	0.18	0.000132	-0.000070	-0.86
Q9LLWV		0.000400	0.000077	0.99	0.000200	-0.000001	-0.02
TZH3QH		0.000361	0.000038	0.49	0.000340	0.000139	1.71
UNJMKE		0.000342	0.000019	0.24	0.000422	0.000221	2.71
V64TAJ		0.000241	-0.000082	-1.05	0.000175	-0.000026	-0.33
VVE2T7		0.000284	-0.000039	-0.50	0.000152	-0.000049	-0.61
WGXMRJ		0.000330	0.000007	0.09	0.000150	-0.000051	-0.63
ZLHLWP		0.000360	0.000037	0.47	0.000200	-0.000001	-0.02

Summary Statistics

	Sample W43		Sample W44	
Grand Means	0.000323	inches	0.000201	inches
Stnd Dev Btwn Labs	0.000078	inches	0.000081	inches

Samples W43, W44 : Ti 6Al-4V, Ti CP2

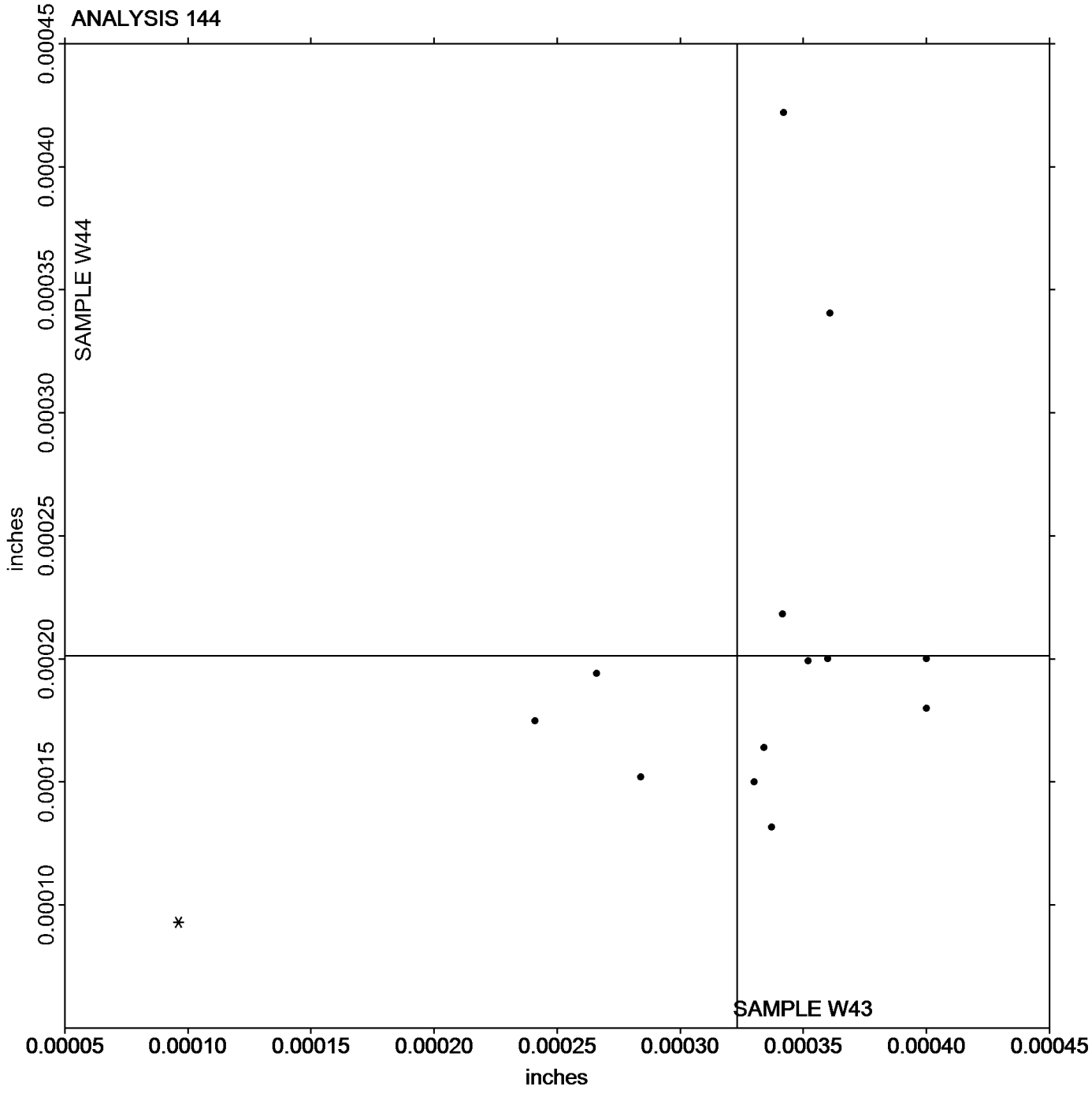
Statistics based on 15 of 16 reporting participants

Comments on Assigned Data Flags for Test #144

6V2DZF (M) - Participant did not submit data for sample W43.

SAMPLE W43
0.00032 inches

SAMPLE W44
0.00020 inches



WebCode	Data Flag	Sample K43 Lab Mean	Sample K43 Diff. from Grand Mean	Sample K43 CPV	Sample K44 Lab Mean	Sample K44 Diff. from Grand Mean	Sample K44 CPV
8VHP2K		0.000332	0.000059	0.38	0.000298	-0.000136	-0.54
EVFBLR		0.000272	-0.000001	-0.01	0.000230	-0.000204	-0.81
NYJJQZ		0.000161	-0.000112	-0.72	0.000696	0.000262	1.04
PHDHLR		0.000216	-0.000057	-0.37	0.000758	0.000324	1.28
Q7E4YZ		0.000074	-0.000199	-1.29	0.000196	-0.000238	-0.94
UJZ9HQ		0.000292	0.000019	0.12	0.000644	0.000210	0.83
W7FNHG		0.000564	0.000291	1.88	0.000217	-0.000217	-0.86

Summary Statistics

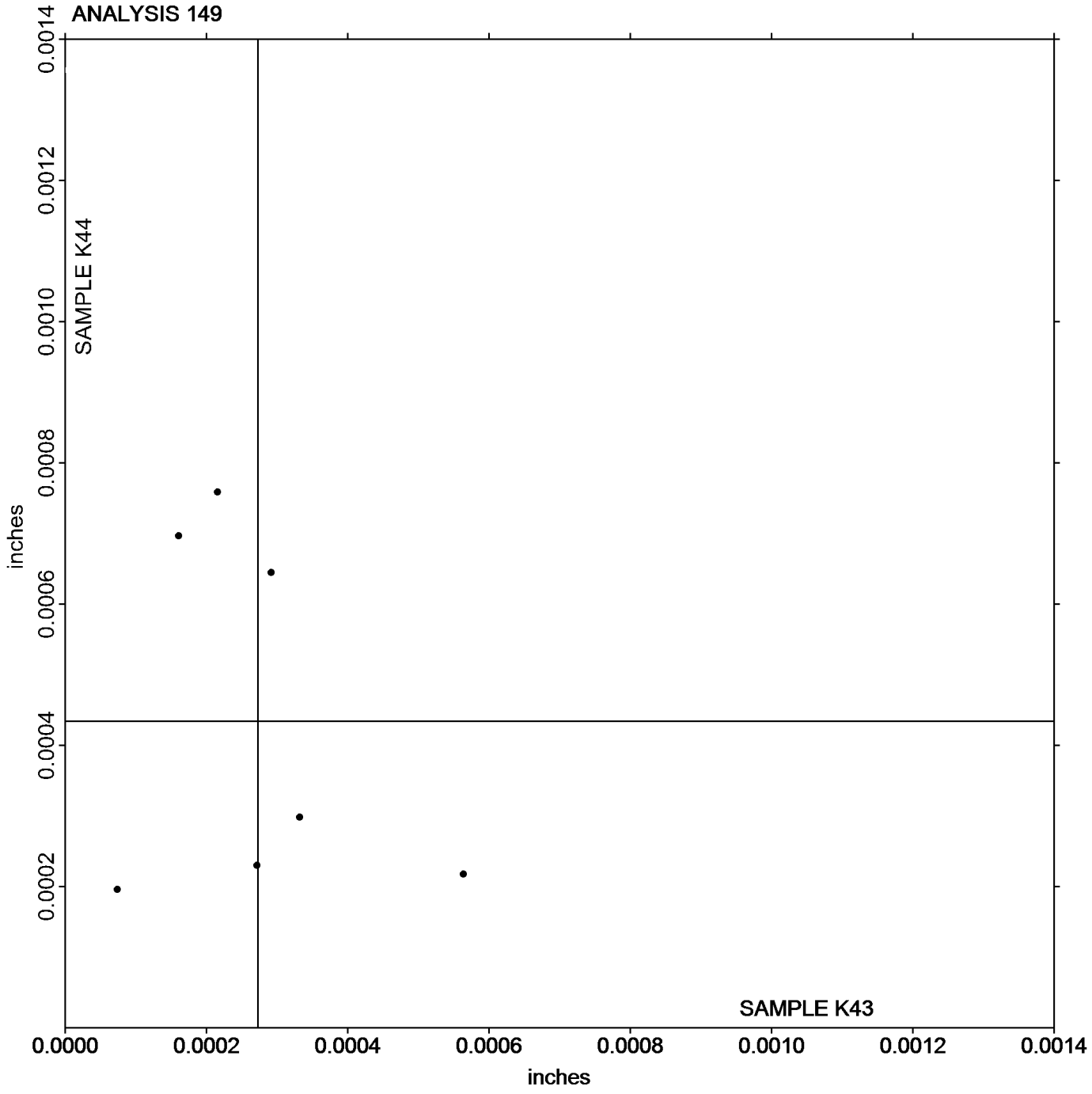
	Sample K43		Sample K44	
Grand Means	0.000273	inches	0.000434	inches
Stnd Dev Btwn Labs	0.000155	inches	0.000252	inches

Samples K43, K44 : Inco 718, Waspaloy

Statistics based on 7 of 7 reporting participants

SAMPLE K43
0.00027 inches

SAMPLE K44
0.00043 inches



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.4870	-0.0009	-0.09	0.4183	-0.0016	-0.16	OE
2CKB2K		0.5000	0.0121	1.19	0.4210	0.0010	0.10	CI
2L9AGJ		0.4803	-0.0076	-0.75	0.4143	-0.0056	-0.55	OE
2PVUN9		0.5068	0.0189	1.86	0.4357	0.0157	1.52	XX
2UMWUT		0.4923	0.0044	0.44	0.4223	0.0024	0.23	OE
2XM8N9		0.4899	0.0020	0.20	0.4270	0.0071	0.68	OE
33DXFA		0.4910	0.0031	0.30	0.4090	-0.0110	-1.06	OE
366YJC		0.4857	-0.0022	-0.22	0.4170	-0.0030	-0.29	OE
39647K		0.4933	0.0054	0.53	0.4202	0.0002	0.02	CI
3GXENF		0.4913	0.0034	0.33	0.4294	0.0094	0.91	OE
3MJ9MY		0.4963	0.0084	0.83	0.4250	0.0050	0.49	CO
3PQWNW		0.4867	-0.0012	-0.12	0.4147	-0.0053	-0.51	OE
42G2E9		0.4847	-0.0032	-0.32	0.4140	-0.0060	-0.58	OE
4FGKDK		0.4829	-0.0050	-0.50	0.4162	-0.0037	-0.36	CI
4QWGAC		0.4965	0.0086	0.85	0.4291	0.0091	0.88	OE
4UWNV9	*	0.4770	-0.0109	-1.07	0.4350	0.0150	1.46	OE
4VC8F7		0.4927	0.0048	0.47	0.4340	0.0140	1.36	DR
4Y9T8A		0.4879	0.0000	0.00	0.4199	-0.0001	-0.01	CI
64J9A7		0.4871	-0.0008	-0.08	0.4050	-0.0150	-1.45	OE
6EJYTT		0.4860	-0.0019	-0.19	0.4147	-0.0053	-0.51	OE
6H3NJW		0.4820	-0.0059	-0.58	0.4120	-0.0080	-0.77	CI
6JB3MW	X	0.5667	0.0788	7.76	0.4967	0.0767	7.43	OE
6L3YMW		0.4827	-0.0052	-0.52	0.4193	-0.0006	-0.06	OE
6MU33C		0.4850	-0.0029	-0.29	0.4140	-0.0060	-0.58	OE
6RM3HT		0.5063	0.0184	1.81	0.4362	0.0162	1.57	OE
6WJNAV		0.5003	0.0124	1.22	0.4407	0.0207	2.00	XX
772KT9		0.4813	-0.0066	-0.65	0.4130	-0.0070	-0.68	OE
77H49Y		0.5130	0.0251	2.47	0.4467	0.0267	2.59	GD
797BW3		0.4833	-0.0046	-0.46	0.4070	-0.0130	-1.26	OE
79PDEN		0.4956	0.0077	0.76	0.4256	0.0056	0.54	OE
7CCTZ6		0.5010	0.0131	1.29	0.4253	0.0054	0.52	OE
7D6R8B		0.4844	-0.0035	-0.35	0.4211	0.0011	0.11	OE
7NNXFL		0.4923	0.0044	0.44	0.4157	-0.0043	-0.42	CI
7R4TNH		0.4910	0.0031	0.30	0.4227	0.0027	0.26	CI
7TEC38		0.4877	-0.0002	-0.02	0.4287	0.0087	0.84	OE
7VGFG3		0.4863	-0.0016	-0.16	0.4135	-0.0064	-0.62	OE
7WEL23		0.4667	-0.0212	-2.09	0.4027	-0.0173	-1.68	XX
827DM6		0.4833	-0.0046	-0.45	0.4167	-0.0033	-0.32	OE
88C2CC		0.4907	0.0028	0.28	0.4254	0.0054	0.52	CI
8BTAN7		0.4870	-0.0009	-0.09	0.4180	-0.0019	-0.19	CI
8BWW6J		0.4907	0.0028	0.27	0.4067	-0.0133	-1.29	GD
8PNVQR		0.4843	-0.0036	-0.35	0.4040	-0.0160	-1.55	OE
8ZBRVY		0.4975	0.0096	0.94	0.4189	-0.0011	-0.10	OE
964CE9		0.4954	0.0075	0.73	0.4244	0.0044	0.43	OE
98LF37		0.4810	-0.0069	-0.68	0.4177	-0.0023	-0.22	CI
9AUQYA		0.4639	-0.0240	-2.36	0.4021	-0.0179	-1.73	OE
9E92GJ		0.4763	-0.0116	-1.14	0.4120	-0.0080	-0.77	XX

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9L8QRW		0.4993	0.0114	1.12	0.4343	0.0144	1.39	OE
9L9M3R		0.4810	-0.0069	-0.68	0.4190	-0.0010	-0.09	OE
9MGUE7		0.4987	0.0108	1.06	0.4193	-0.0006	-0.06	OE
9RCKRJ		0.4870	-0.0009	-0.09	0.4113	-0.0086	-0.84	CI
9WP8NA		0.4807	-0.0072	-0.71	0.4245	0.0045	0.44	OE
9ZR749		0.4912	0.0033	0.32	0.4279	0.0079	0.76	OE
A3ALY8		0.4793	-0.0086	-0.85	0.4147	-0.0053	-0.51	OE
A4MEUA		0.4863	-0.0016	-0.16	0.3977	-0.0223	-2.16	OE
A6YBYD		0.4890	0.0011	0.11	0.4180	-0.0020	-0.19	CI
AJYXCN		0.4900	0.0021	0.21	0.4267	0.0067	0.65	OE
AWNP76		0.4825	-0.0054	-0.53	0.4176	-0.0024	-0.23	CI
AWPMFZ		0.5000	0.0121	1.19	0.4313	0.0114	1.10	OE
AXYQWH		0.5077	0.0198	1.95	0.4375	0.0175	1.70	OE
B38BQW		0.4850	-0.0029	-0.29	0.4220	0.0020	0.20	OE
B6FQRL		0.4830	-0.0049	-0.48	0.4057	-0.0143	-1.39	OE
B8JHR2		0.4868	-0.0011	-0.11	0.4228	0.0028	0.27	OE
B9BJTH		0.4886	0.0007	0.07	0.4347	0.0147	1.43	OE
BA8Y29		0.4943	0.0064	0.63	0.4247	0.0047	0.45	OE
BEY7GW		0.4670	-0.0209	-2.06	0.4000	-0.0200	-1.93	XX
BPK6NE		0.4767	-0.0112	-1.11	0.4180	-0.0020	-0.19	OE
BQRPXM		0.4821	-0.0058	-0.58	0.4251	0.0051	0.50	OE
BVP4R4		0.4740	-0.0139	-1.37	0.4087	-0.0113	-1.09	OE
BZ6CF4		0.4847	-0.0032	-0.32	0.4223	0.0024	0.23	OE
CJ7WK3		0.4652	-0.0227	-2.24	0.4098	-0.0102	-0.99	OE
CNKR3K		0.4926	0.0046	0.46	0.4296	0.0096	0.93	OE
CR4QHZ		0.4839	-0.0040	-0.40	0.4162	-0.0037	-0.36	OE
CT3N99		0.4827	-0.0052	-0.52	0.4170	-0.0030	-0.29	OE
CTDT7K		0.4853	-0.0026	-0.25	0.4180	-0.0020	-0.19	OE
D8DPH6		0.4927	0.0048	0.47	0.4257	0.0057	0.55	GD
D8DUK8		0.4853	-0.0026	-0.25	0.4210	0.0010	0.10	OE
DECACZ		0.4873	-0.0006	-0.06	0.4160	-0.0040	-0.38	CO
DJ6JEL		0.4887	0.0008	0.07	0.4310	0.0110	1.07	OE
DKEJJT		0.4810	-0.0069	-0.68	0.4030	-0.0170	-1.64	OE
DPADGU		0.4898	0.0019	0.19	0.4194	-0.0005	-0.05	CO
DU68CA	X	0.4587	-0.0292	-2.88	0.3763	-0.0436	-4.23	OE
DZPADK		0.4870	-0.0009	-0.09	0.4247	0.0047	0.45	OE
DZQ2G8		0.4833	-0.0046	-0.45	0.4133	-0.0066	-0.64	OE
E63ACX		0.4773	-0.0106	-1.04	0.4233	0.0034	0.33	GD
EKTCNU		0.4777	-0.0102	-1.01	0.4000	-0.0200	-1.93	GD
F4PY66	X	0.4537	-0.0342	-3.37	0.4180	-0.0020	-0.19	OE
F6ZW7F		0.5040	0.0161	1.58	0.4380	0.0180	1.75	DR
G4FMQK	X	0.4841	-0.0038	-0.38	0.3854	-0.0346	-3.35	XX
G8HGTV		0.5020	0.0141	1.39	0.4300	0.0100	0.97	OE
GBHQP4		0.5040	0.0161	1.58	0.4293	0.0094	0.91	OE
GDLKC3		0.4943	0.0064	0.63	0.4247	0.0047	0.45	CI
GMAGD4		0.4967	0.0088	0.86	0.4243	0.0044	0.42	CI
GNMTEU		0.4793	-0.0086	-0.85	0.4110	-0.0090	-0.87	CI

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GQCET3		0.4803	-0.0076	-0.75	0.4216	0.0016	0.16	OE
GQXN38		0.4845	-0.0034	-0.34	0.4334	0.0134	1.30	OE
GRPN24		0.4850	-0.0029	-0.29	0.4123	-0.0076	-0.74	CI
GV3UD4	X	0.4530	-0.0349	-3.44	0.4190	-0.0010	-0.09	GD
GV7CF9	*	0.5057	0.0178	1.75	0.4497	0.0297	2.88	OE
HM9X3Y		0.4826	-0.0053	-0.52	0.4333	0.0133	1.29	OE
HQP97H		0.4887	0.0008	0.07	0.4180	-0.0020	-0.19	CO
JKJT87		0.4820	-0.0059	-0.58	0.4057	-0.0143	-1.39	OE
JMMR3M		0.4962	0.0083	0.82	0.4245	0.0046	0.44	OE
JPEM22		0.4950	0.0071	0.70	0.4230	0.0030	0.29	GD
JTRL6V		0.4970	0.0091	0.89	0.4280	0.0080	0.78	OE
KENGFU		0.4913	0.0034	0.34	0.4123	-0.0076	-0.74	OE
KMHN2T		0.4733	-0.0146	-1.44	0.3933	-0.0266	-2.58	OE
KVFGC9		0.4953	0.0074	0.73	0.4237	0.0037	0.36	CO
KW7HFB		0.4930	0.0051	0.50	0.4307	0.0107	1.04	XX
KW8KRN		0.4953	0.0074	0.73	0.4202	0.0003	0.03	CI
KYWQCK	X	0.7017	0.2138	21.05	0.5813	0.1614	15.63	OE
LFCHQB		0.4880	0.0001	0.01	0.4150	-0.0050	-0.48	CI
LRTW86		0.4860	-0.0019	-0.19	0.4327	0.0127	1.23	CI
LWK9TF		0.4948	0.0069	0.68	0.4140	-0.0060	-0.58	OE
LZ2TQ2	X	0.5243	0.0364	3.59	0.4247	0.0047	0.45	OE
MHG64E		0.4860	-0.0019	-0.19	0.4210	0.0010	0.10	XX
MQVBJH		0.4923	0.0044	0.43	0.4242	0.0042	0.41	OE
MR64UK		0.4981	0.0102	1.00	0.4247	0.0048	0.46	CO
MVAMY8		0.4750	-0.0129	-1.27	0.4138	-0.0061	-0.59	OE
MVLQ4J		0.4901	0.0022	0.21	0.4213	0.0014	0.13	OE
MXDJDU		0.4993	0.0114	1.12	0.4303	0.0104	1.00	CI
N3PK7R		0.4970	0.0091	0.89	0.4237	0.0037	0.36	OE
NEU3F7		0.4959	0.0080	0.79	0.4280	0.0080	0.77	OE
NN6ACA		0.4887	0.0008	0.07	0.4183	-0.0016	-0.16	CI
NYJJQZ		0.4897	0.0018	0.17	0.4167	-0.0033	-0.32	CI
P9K6LR		0.4933	0.0054	0.53	0.4317	0.0117	1.13	OE
PQ6YT9		0.4767	-0.0112	-1.11	0.4267	0.0067	0.65	OE
PWRNU7		0.5153	0.0274	2.70	0.4423	0.0224	2.17	CI
PZQYQ7		0.4813	-0.0066	-0.65	0.4034	-0.0166	-1.60	AE
QHPEQW		0.4772	-0.0107	-1.05	0.4082	-0.0117	-1.14	OE
QP4J89		0.4903	0.0024	0.24	0.4263	0.0064	0.62	GD
QQ2VXW		0.4720	-0.0159	-1.57	0.4003	-0.0196	-1.90	OE
QQL9VV		0.4688	-0.0191	-1.88	0.4114	-0.0086	-0.83	OE
QVG3LW		0.4987	0.0108	1.06	0.4237	0.0037	0.36	CI
QWPHQG		0.4866	-0.0013	-0.13	0.4238	0.0039	0.37	OE
R3P4CP		0.4767	-0.0112	-1.11	0.4140	-0.0060	-0.58	OE
R9XHZF		0.5047	0.0168	1.65	0.4157	-0.0043	-0.42	CI
RGAGR6		0.4998	0.0119	1.17	0.4348	0.0149	1.44	OE
RW9FTU		0.4880	0.0001	0.01	0.4183	-0.0016	-0.16	CO
TBHVXN		0.5007	0.0128	1.26	0.4387	0.0187	1.81	OE
TEG8TN		0.4967	0.0088	0.86	0.4200	0.0000	0.00	IR

Fasteners and Metals Interlaboratory Testing Program

Analysis 170

Carbon & Low Alloy Steel, Element #1
CARBON (C)

WebCode	Data Flag	Sample L45 Lab Mean	Sample L45 Diff. from Grand Mean	Sample L45 CPV	Sample L46 Lab Mean	Sample L46 Diff. from Grand Mean	Sample L46 CPV	Method
TLHFBM		0.4900	0.0021	0.21	0.4200	0.0000	0.00	CI
TR8UAG		0.4880	0.0001	0.01	0.4200	0.0000	0.00	OE
TTZTJ9		0.4890	0.0011	0.11	0.4170	-0.0030	-0.29	CI
TVPUPW		0.4767	-0.0112	-1.11	0.4093	-0.0106	-1.03	XX
TZH7FM	*	0.4643	-0.0236	-2.32	0.4167	-0.0033	-0.32	OE
U33ATQ		0.4893	0.0014	0.14	0.4187	-0.0013	-0.13	CI
U6NBHJ		0.4820	-0.0059	-0.58	0.4143	-0.0056	-0.55	OE
UAH86P		0.4600	-0.0279	-2.75	0.3970	-0.0230	-2.22	OE
UQQXGH		0.4844	-0.0035	-0.34	0.4159	-0.0040	-0.39	OE
UYMUAY		0.4861	-0.0018	-0.18	0.4384	0.0184	1.78	OE
VBANYX		0.4733	-0.0146	-1.44	0.4067	-0.0133	-1.29	OE
VVE9LC		0.4763	-0.0116	-1.14	0.4103	-0.0096	-0.93	OE
WE98M6		0.4887	0.0008	0.07	0.4207	0.0007	0.07	OE
WHA3KY		0.4903	0.0024	0.24	0.4235	0.0035	0.34	OE
WKCZVR		0.4900	0.0021	0.21	0.4083	-0.0116	-1.13	OE
WNFYYK		0.4974	0.0095	0.94	0.4390	0.0191	1.85	XX
WU4LWJ		0.4942	0.0063	0.62	0.4224	0.0024	0.24	OE
WZ443B		0.5000	0.0121	1.19	0.4243	0.0044	0.42	IR
WZNHUU		0.5018	0.0139	1.37	0.4341	0.0141	1.37	DR
X86DBN		0.4770	-0.0109	-1.07	0.4127	-0.0073	-0.71	OE
XCHE4K		0.4987	0.0108	1.06	0.4300	0.0100	0.97	OE
XFW3MH		0.4881	0.0002	0.02	0.4196	-0.0004	-0.04	OE
Y29FTB		0.4670	-0.0209	-2.06	0.4067	-0.0133	-1.29	OE
Y9UBUE	*	0.4583	-0.0296	-2.91	0.3937	-0.0263	-2.55	GD
YFWDZZ		0.4933	0.0054	0.53	0.4367	0.0167	1.62	OE
YL2CBQ	X	0.4163	-0.0716	-7.05	0.3573	-0.0626	-6.07	XX
YN8JW4		0.5055	0.0175	1.73	0.4326	0.0126	1.22	OE
YZY4EF		0.4943	0.0064	0.63	0.4179	-0.0021	-0.20	OE
Z32HCH		0.5023	0.0144	1.42	0.4220	0.0020	0.20	DR
Z8VFUA		0.4875	-0.0004	-0.04	0.4150	-0.0049	-0.48	CI
Z9RVCK		0.4890	0.0011	0.11	0.4157	-0.0043	-0.42	CO
ZA4UYU		0.4766	-0.0113	-1.11	0.4238	0.0038	0.37	AE
ZAZA8K		0.4880	0.0001	0.01	0.4187	-0.0013	-0.13	IR
ZLHLWP		0.4763	-0.0116	-1.14	0.4137	-0.0063	-0.61	OE
ZRJZHQ		0.4627	-0.0252	-2.49	0.4017	-0.0183	-1.77	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.4879	Percent	0.4200	Percent
Stnd Dev Btwn Labs	0.0102	Percent	0.0103	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 167 of 176 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	CI	Combustion / IR
CO	Combustion	DR	Spectrometry - Direct Reading OE (DROES)
GD	Spectrometry - Glow Discharge (GDS)	IR	IR (Absorption / Detection)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #170

6JB3MW (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.

DU68CA (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample L45.

F4PY66 (X) - Data for sample L45 are low. Inconsistent within the determinations of sample L45.

G4FMQK (X) - Data for sample L46 are low.

GV3UD4 (X) - Data for sample L45 are low.

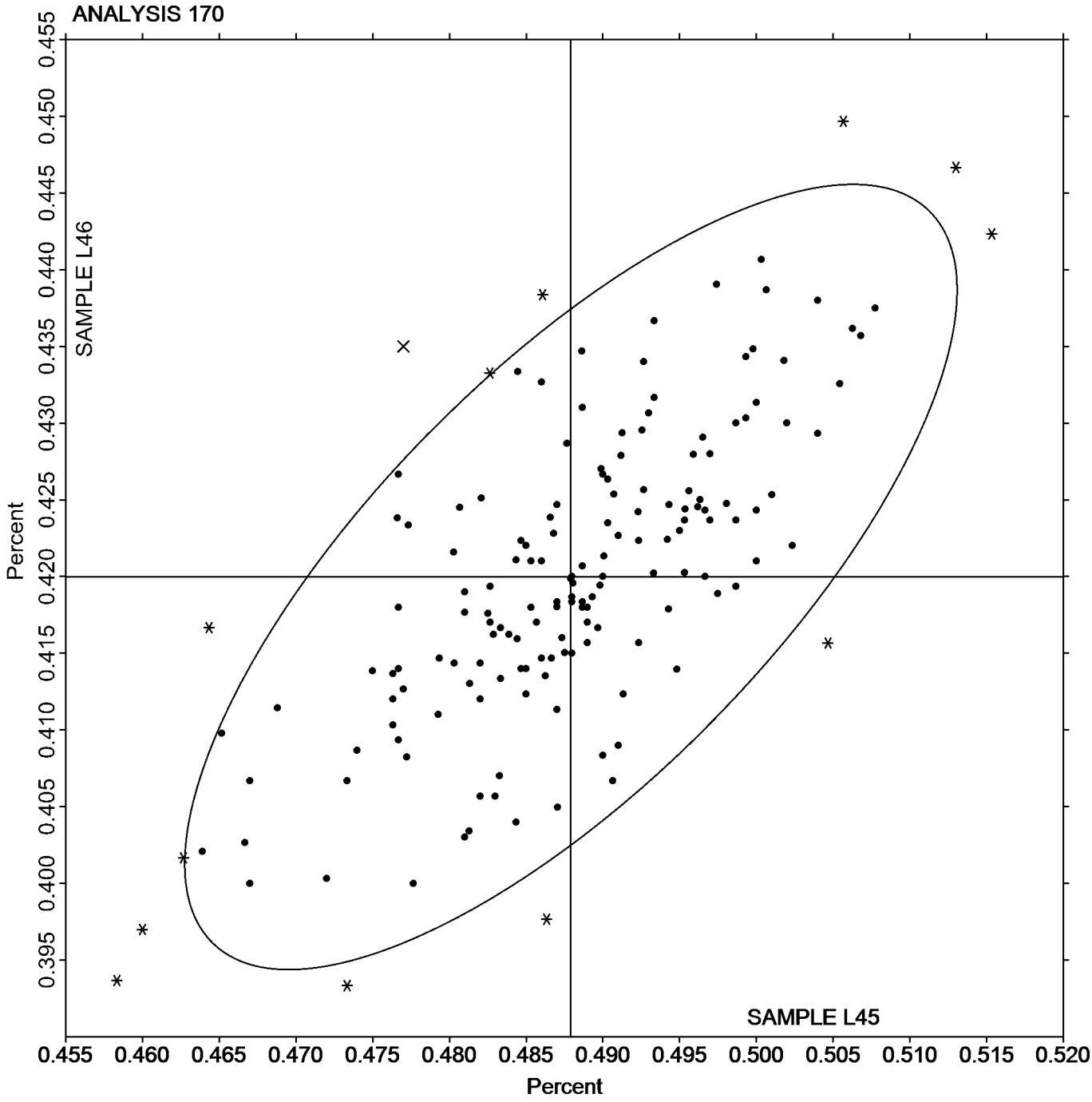
KYWQCK (X) - Data for both samples are extremely high. Inconsistent within the determinations of sample L46.

LZ2TQ2 (X) - Data for sample L45 are high.

YL2CBQ (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.

SAMPLE L45
0.4879 Percent

SAMPLE L46
0.4200 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.8390	0.0041	0.46	0.7897	0.0012	0.14	OE
2CKB2K		0.8413	0.0064	0.72	0.7940	0.0056	0.66	IC
2L9AGJ		0.8333	-0.0016	-0.18	0.7833	-0.0051	-0.61	OE
2PVUN9		0.8323	-0.0026	-0.29	0.7884	-0.0001	-0.01	XX
2UMWUT		0.8237	-0.0112	-1.25	0.7770	-0.0114	-1.36	OE
2XM8N9		0.8282	-0.0067	-0.75	0.7868	-0.0016	-0.19	OE
33DXFA		0.8370	0.0021	0.23	0.7860	-0.0024	-0.29	OE
366YJC		0.8183	-0.0166	-1.85	0.7697	-0.0188	-2.23	OE
39647K		0.8282	-0.0067	-0.75	0.7878	-0.0007	-0.08	IC
3GXENF		0.8441	0.0092	1.02	0.7969	0.0085	1.01	OE
3MJ9MY		0.8353	0.0004	0.05	0.7860	-0.0024	-0.29	OE
3PQWNW		0.8420	0.0071	0.79	0.7917	0.0032	0.38	OE
42G2E9		0.8363	0.0014	0.16	0.7880	-0.0004	-0.05	XX
4FGKDK		0.8353	0.0004	0.05	0.7868	-0.0017	-0.20	OE
4QWGAC		0.8317	-0.0032	-0.36	0.7857	-0.0028	-0.33	OE
4UWNV9		0.8237	-0.0112	-1.25	0.7770	-0.0114	-1.36	OE
4VC8F7		0.8407	0.0058	0.64	0.7967	0.0082	0.98	DR
4Y9T8A		0.8322	-0.0027	-0.31	0.7902	0.0018	0.21	OE
64J9A7		0.8345	-0.0004	-0.05	0.7861	-0.0023	-0.27	OE
6EJYTT		0.8377	0.0028	0.31	0.7923	0.0039	0.46	OE
6H3NJW		0.8447	0.0098	1.09	0.7950	0.0066	0.78	IC
6JB3MW	X	0.7900	-0.0449	-5.01	0.7600	-0.0284	-3.38	OE
6L3YMW		0.8330	-0.0019	-0.21	0.7863	-0.0021	-0.25	OE
6MU33C		0.8383	0.0034	0.38	0.7837	-0.0048	-0.57	OE
6RM3HT		0.8318	-0.0031	-0.35	0.7883	-0.0001	-0.02	OE
6WJNAV		0.8480	0.0131	1.46	0.8067	0.0182	2.16	XX
772KT9		0.8295	-0.0054	-0.60	0.7819	-0.0065	-0.78	OE
77H49Y		0.8590	0.0241	2.68	0.8097	0.0212	2.52	GD
797BW3		0.8396	0.0047	0.52	0.7795	-0.0089	-1.06	OE
79PDEN		0.8336	-0.0013	-0.15	0.7896	0.0011	0.13	OE
7CCTZ6		0.8310	-0.0039	-0.44	0.7790	-0.0094	-1.12	OE
7D6R8B		0.8433	0.0084	0.93	0.8020	0.0136	1.61	OE
7NNXFL		0.8323	-0.0026	-0.29	0.7873	-0.0011	-0.13	OE
7R4TNH		0.8413	0.0064	0.72	0.8000	0.0116	1.37	OE
7TEC38		0.8567	0.0218	2.42	0.8117	0.0232	2.75	OE
7VGFG3		0.8230	-0.0119	-1.33	0.7795	-0.0089	-1.06	OE
7WEL23		0.8327	-0.0022	-0.25	0.7897	0.0012	0.14	XX
827DM6		0.8333	-0.0016	-0.18	0.7833	-0.0051	-0.61	OE
88C2CC		0.8347	-0.0002	-0.03	0.7957	0.0072	0.86	OE
8BTAN7		0.8386	0.0037	0.41	0.7845	-0.0039	-0.46	IC
8BWW6J	X	0.8253	-0.0096	-1.07	0.7593	-0.0291	-3.45	OE
8PNVQR		0.8370	0.0021	0.23	0.7810	-0.0074	-0.88	OE
8ZBRVY		0.8400	0.0051	0.57	0.7865	-0.0019	-0.23	OE
964CE9		0.8342	-0.0007	-0.08	0.7840	-0.0045	-0.53	OE
98LF37		0.8254	-0.0095	-1.06	0.7775	-0.0110	-1.30	IC
9AUQYA		0.8360	0.0011	0.12	0.7954	0.0069	0.82	OE
9E92GJ		0.8417	0.0068	0.75	0.7960	0.0076	0.90	XX

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9EAYM9	X	0.7330	-0.1019	-11.36	0.6580	-0.1304	-15.48	IC
9L8QRW		0.8547	0.0198	2.20	0.7987	0.0102	1.21	OE
9L9M3R		0.8450	0.0101	1.12	0.7917	0.0032	0.38	OE
9MGUE7		0.8290	-0.0059	-0.66	0.7793	-0.0091	-1.08	OE
9RCKRJ		0.8373	0.0024	0.27	0.7990	0.0106	1.25	OE
9WP8NA		0.8410	0.0061	0.68	0.8007	0.0122	1.45	OE
9ZR749		0.8278	-0.0071	-0.80	0.7803	-0.0081	-0.97	OE
A3ALY8		0.8280	-0.0069	-0.77	0.7807	-0.0078	-0.92	OE
A4MEUA		0.8477	0.0128	1.42	0.7903	0.0019	0.22	OE
A6YBYD		0.8415	0.0066	0.74	0.8008	0.0123	1.46	OE
AJYXCN		0.8233	-0.0116	-1.29	0.7800	-0.0084	-1.00	OE
AWNP76		0.8407	0.0058	0.64	0.7930	0.0046	0.54	OE
AWPMFZ		0.8237	-0.0112	-1.25	0.7780	-0.0104	-1.24	OE
AXYQWH		0.8370	0.0021	0.24	0.7888	0.0004	0.05	OE
B38BQW		0.8220	-0.0129	-1.44	0.7797	-0.0088	-1.04	OE
B6FQRL		0.8477	0.0128	1.42	0.7943	0.0059	0.70	OE
B8JHR2		0.8293	-0.0056	-0.63	0.7834	-0.0050	-0.60	OE
B9BJTH		0.8389	0.0040	0.44	0.7975	0.0091	1.07	OE
BA8Y29		0.8417	0.0068	0.75	0.8007	0.0122	1.45	OE
BEY7GW		0.8200	-0.0149	-1.66	0.7700	-0.0184	-2.19	XX
BPK6NE		0.8400	0.0051	0.57	0.7933	0.0049	0.58	OE
BQRPXM		0.8355	0.0006	0.07	0.7951	0.0066	0.79	OE
BVP4R4		0.8303	-0.0046	-0.51	0.7800	-0.0084	-1.00	OE
BZ6CF4		0.8307	-0.0042	-0.47	0.7943	0.0059	0.70	OE
CJ7WK3		0.8293	-0.0056	-0.62	0.7853	-0.0031	-0.37	OE
CNKR3K		0.8341	-0.0008	-0.09	0.7897	0.0012	0.14	XX
CR4QHZ		0.8331	-0.0018	-0.21	0.7861	-0.0024	-0.28	OE
CT3N99		0.8107	-0.0242	-2.70	0.7673	-0.0211	-2.51	OE
CTDT7K		0.8380	0.0031	0.34	0.7827	-0.0058	-0.69	OE
D8DPH6	*	0.8603	0.0254	2.83	0.8073	0.0189	2.24	GD
D8DUK8		0.8353	0.0004	0.05	0.7853	-0.0031	-0.37	OE
DECACZ		0.8377	0.0028	0.31	0.7840	-0.0044	-0.53	IC
DJ6JEL		0.8277	-0.0072	-0.81	0.7843	-0.0041	-0.49	OE
DKEJJT		0.8457	0.0108	1.20	0.7923	0.0039	0.46	OE
DPADGU		0.8363	0.0014	0.16	0.7897	0.0012	0.14	IC
DU68CA	X	0.8337	-0.0012	-0.14	0.8437	0.0552	6.55	OE
DZPADK		0.8167	-0.0182	-2.03	0.7700	-0.0184	-2.19	OE
DZQ2G8		0.8300	-0.0049	-0.55	0.7800	-0.0084	-1.00	OE
E63ACX		0.8457	0.0108	1.20	0.7883	-0.0001	-0.01	GD
EKTCNU	X	0.8613	0.0264	2.94	0.8013	0.0129	1.53	GD
F4PY66	*	0.8260	-0.0089	-0.99	0.7970	0.0086	1.01	OE
F6ZW7F		0.8250	-0.0099	-1.10	0.7823	-0.0061	-0.73	DR
G4FMQK	X	0.8246	-0.0103	-1.15	0.7605	-0.0280	-3.32	XX
G8HGTV		0.8333	-0.0016	-0.18	0.7870	-0.0014	-0.17	OE
GBHQP4		0.8373	0.0024	0.27	0.7890	0.0006	0.07	OE
GDLKC3		0.8240	-0.0109	-1.22	0.7753	-0.0131	-1.56	IC
GJDRWW		0.8342	-0.0007	-0.08	0.7883	-0.0002	-0.02	WD

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GMAGD4		0.8343	-0.0006	-0.06	0.7870	-0.0014	-0.17	WD
GNMTEU		0.8366	0.0017	0.19	0.7913	0.0028	0.33	OE
GQCET3		0.8182	-0.0167	-1.86	0.7797	-0.0087	-1.04	OE
GQXN38	*	0.8437	0.0088	0.98	0.7745	-0.0139	-1.65	OE
GRPN24		0.8323	-0.0026	-0.29	0.7857	-0.0028	-0.33	IC
GV3UD4	X	0.7847	-0.0502	-5.60	0.7547	-0.0338	-4.01	GD
GV7CF9		0.8257	-0.0092	-1.03	0.7853	-0.0031	-0.37	OE
HM9X3Y		0.8344	-0.0005	-0.06	0.7851	-0.0034	-0.40	OE
HQP97H		0.8339	-0.0010	-0.11	0.7884	0.0000	-0.01	OE
JKJT87		0.8450	0.0101	1.12	0.7877	-0.0008	-0.09	OE
JMMR3M		0.8430	0.0081	0.90	0.7971	0.0087	1.03	OE
JPEM22		0.8380	0.0031	0.34	0.7947	0.0062	0.74	GD
JTRL6V		0.8217	-0.0132	-1.48	0.7797	-0.0088	-1.04	OE
KENGFU	*	0.8460	0.0111	1.24	0.7723	-0.0161	-1.91	OE
KMHN2T		0.8333	-0.0016	-0.18	0.7833	-0.0051	-0.61	OE
KVFGC9		0.8357	0.0008	0.08	0.7907	0.0022	0.26	DR
KW7HFB		0.8330	-0.0019	-0.21	0.7923	0.0039	0.46	XX
KW8KRN	X	0.8703	0.0354	3.95	0.8287	0.0402	4.77	IC
KYWQCK		0.8150	-0.0199	-2.22	0.7757	-0.0128	-1.52	OE
LFCHQB		0.8420	0.0071	0.79	0.7930	0.0046	0.54	OE
LRTW86		0.8300	-0.0049	-0.55	0.7870	-0.0014	-0.17	OE
LWK9TF		0.8297	-0.0052	-0.58	0.7886	0.0001	0.01	OE
LZ2TQ2		0.8467	0.0118	1.31	0.7933	0.0049	0.58	OE
MHG64E		0.8390	0.0041	0.46	0.7910	0.0026	0.30	OE
MQVBJH		0.8282	-0.0067	-0.75	0.7824	-0.0060	-0.71	OE
MR64UK		0.8233	-0.0116	-1.29	0.7833	-0.0051	-0.61	OE
MVAMY8		0.8378	0.0029	0.33	0.8001	0.0117	1.38	OE
MVLQ4J		0.8378	0.0029	0.33	0.7904	0.0019	0.23	OE
MXDJDU		0.8233	-0.0116	-1.29	0.7760	-0.0124	-1.48	IC
N3PK7R		0.8360	0.0011	0.12	0.7900	0.0016	0.18	OE
NEU3F7		0.8171	-0.0178	-1.99	0.7725	-0.0159	-1.89	OE
NN6ACA		0.8387	0.0038	0.42	0.7930	0.0046	0.54	OE
NYJJQZ		0.8340	-0.0009	-0.10	0.7853	-0.0031	-0.37	IC
P9K6LR		0.8450	0.0101	1.12	0.8060	0.0176	2.08	OE
PQ6YT9		0.8333	-0.0016	-0.18	0.7967	0.0082	0.98	OE
PZQYQ7	*	0.8546	0.0197	2.19	0.7865	-0.0019	-0.23	AE
QHPEQW		0.8350	0.0001	0.01	0.7903	0.0019	0.22	IC
QP4J89	X	0.8203	-0.0146	-1.62	0.7887	0.0002	0.03	GD
QQ2VXW		0.8131	-0.0218	-2.43	0.7711	-0.0174	-2.06	OE
QQL9VV		0.8323	-0.0026	-0.29	0.7894	0.0010	0.12	OE
QVG3LW		0.8347	-0.0002	-0.03	0.7873	-0.0011	-0.13	IC
QWPHQG		0.8549	0.0200	2.23	0.8069	0.0185	2.19	OE
R3P4CP		0.8333	-0.0016	-0.18	0.7767	-0.0118	-1.40	OE
RGAGR6		0.8393	0.0044	0.49	0.7895	0.0011	0.13	OE
RW9FTU		0.8273	-0.0076	-0.84	0.7837	-0.0048	-0.57	OE
T6FHKZ		0.8350	0.0001	0.01	0.7860	-0.0024	-0.29	XR
TBHVXN		0.8513	0.0164	1.83	0.8100	0.0216	2.56	OE

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
TEG8TN		0.8500	0.0151	1.68	0.8000	0.0116	1.37	IC
TLHFBM		0.8333	-0.0016	-0.18	0.7900	0.0016	0.18	OE
TR8UAG		0.8333	-0.0016	-0.18	0.7880	-0.0004	-0.05	OE
TTZTJ9		0.8403	0.0054	0.60	0.7927	0.0042	0.50	OE
TVPUPW		0.8270	-0.0079	-0.88	0.7877	-0.0008	-0.09	XX
TZH7FM	X	0.8473	0.0124	1.38	0.8123	0.0239	2.83	OE
U33ATQ		0.8397	0.0048	0.53	0.7883	-0.0001	-0.01	IC
U6NBHJ		0.8437	0.0088	0.98	0.7973	0.0089	1.05	OE
UAH86P		0.8517	0.0168	1.87	0.8053	0.0169	2.00	OE
UQQXGH		0.8276	-0.0073	-0.81	0.7845	-0.0040	-0.47	OE
UYMUAY		0.8283	-0.0066	-0.73	0.7833	-0.0051	-0.61	OE
VBANYX		0.8367	0.0018	0.20	0.7933	0.0049	0.58	OE
VGFXJZ	X	0.8117	-0.0232	-2.59	0.7840	-0.0044	-0.53	AA
VJNEB4		0.8333	-0.0016	-0.18	0.7923	0.0039	0.46	OE
VVE9LC		0.8240	-0.0109	-1.22	0.7807	-0.0078	-0.92	OE
WE98M6		0.8417	0.0068	0.75	0.7973	0.0089	1.05	XX
WHA3KY		0.8370	0.0021	0.23	0.7890	0.0006	0.07	WD
WKCZVR		0.8467	0.0118	1.31	0.7970	0.0086	1.01	OE
WNFYYK		0.8335	-0.0014	-0.15	0.7851	-0.0033	-0.40	XX
WU4LWJ		0.8373	0.0024	0.26	0.7891	0.0006	0.08	OE
WZ443B		0.8440	0.0091	1.01	0.7977	0.0092	1.09	OE
WZNHUU		0.8347	-0.0002	-0.03	0.7917	0.0032	0.38	DR
X86DBN		0.8327	-0.0022	-0.25	0.7777	-0.0108	-1.28	OE
XCHE4K		0.8320	-0.0029	-0.32	0.7870	-0.0014	-0.17	OE
XFW3MH		0.8311	-0.0038	-0.43	0.7866	-0.0018	-0.22	OE
Y29FTB		0.8283	-0.0066	-0.73	0.7837	-0.0048	-0.57	OE
Y9UBUE		0.8233	-0.0116	-1.29	0.7763	-0.0121	-1.44	GD
YFWDZZ		0.8277	-0.0072	-0.81	0.7837	-0.0048	-0.57	OE
YL2CBQ		0.8533	0.0184	2.05	0.8007	0.0122	1.45	XX
YN8JW4		0.8355	0.0006	0.07	0.7884	0.0000	0.00	OE
YZY4EF		0.8126	-0.0223	-2.49	0.7673	-0.0212	-2.51	OE
Z32HCH		0.8440	0.0091	1.01	0.7967	0.0082	0.98	DR
Z8VFUA		0.8356	0.0007	0.08	0.7907	0.0022	0.26	OE
Z9RVCK		0.8347	-0.0002	-0.03	0.7923	0.0039	0.46	OE
ZA4UYU		0.8570	0.0221	2.46	0.7990	0.0106	1.25	AE
ZAZA8K		0.8360	0.0011	0.12	0.7907	0.0022	0.26	WD
ZLHLWP		0.8337	-0.0012	-0.14	0.7907	0.0022	0.26	OE
ZRJZHQ		0.8260	-0.0089	-0.99	0.7830	-0.0054	-0.65	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.8349	Percent	0.7884	Percent
Stnd Dev Btwn Labs	0.0090	Percent	0.0084	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 164 of 179 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 #171

6JB3MW (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample L45.

8BWW6J (X) - Data for sample L46 are low.

9EAYM9 (X) - Data for both samples are extremely low.

DU68CA (X) - Data for sample L46 are high. Inconsistent within the determinations of sample L45.

EKTCNU (X) - Data for sample L45 are high.

G4FMQK (X) - Data for sample L46 are low.

GV3UD4 (X) - Data for both samples are low. Possible Systematic Error.

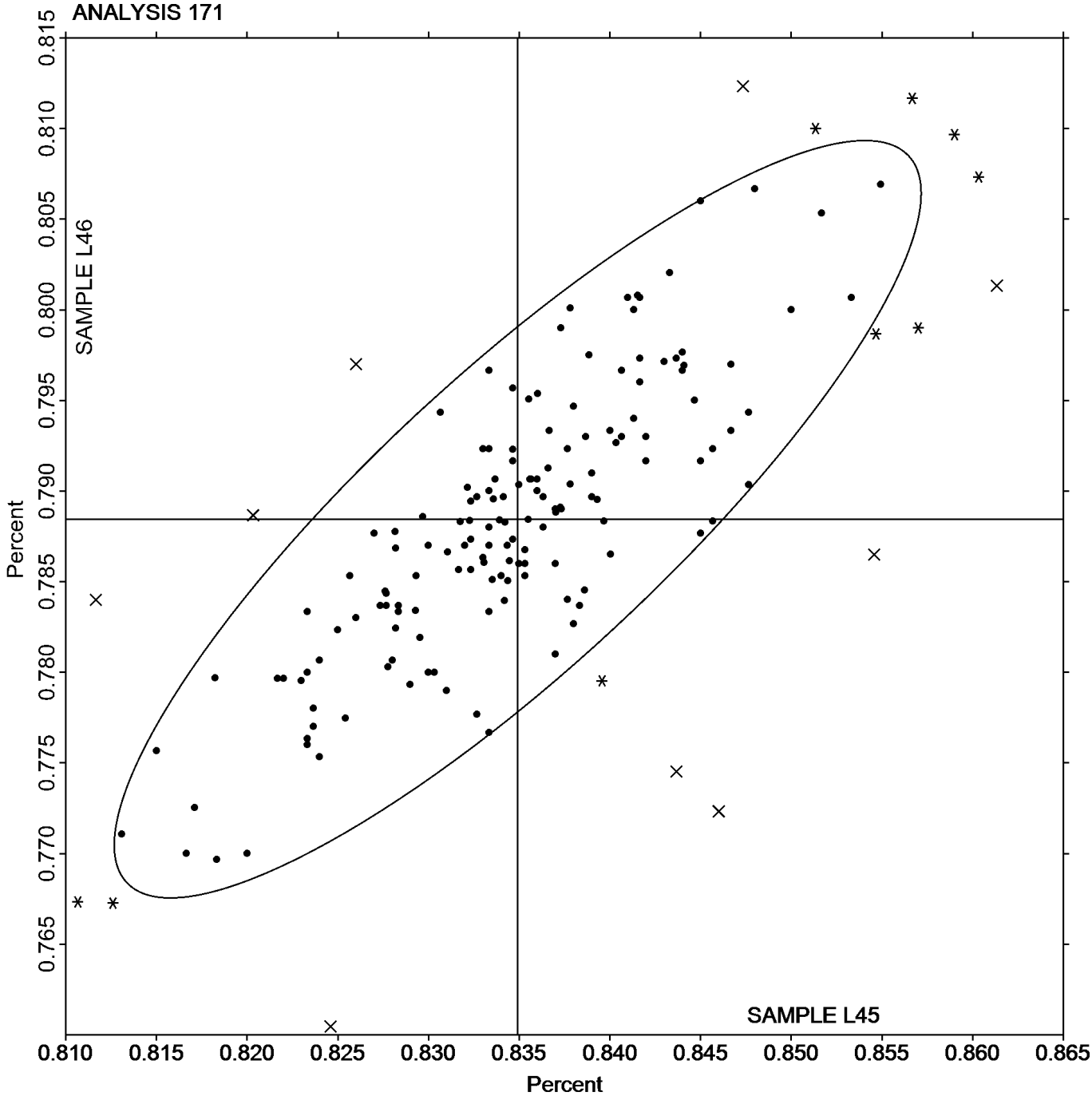
KW8KRN (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample L45.

QP4J89 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L46.

TZH7FM (X) - Data for sample L46 are high.

VGFXJZ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L46.

SAMPLE L45	SAMPLE L46
0.8349 Percent	0.7884 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.0126	-0.0005	-0.45	0.0198	-0.0024	-1.59	OE
2CKB2K		0.0120	-0.0010	-1.02	0.0208	-0.0014	-0.93	IC
2L9AGJ		0.0150	0.0020	1.97	0.0233	0.0012	0.78	XX
2PVUN9		0.0143	0.0013	1.27	0.0247	0.0026	1.72	XX
2UMWUT		0.0138	0.0008	0.81	0.0241	0.0019	1.27	OE
2XM8N9		0.0135	0.0005	0.48	0.0229	0.0007	0.47	OE
33DXFA		0.0125	-0.0005	-0.49	0.0210	-0.0012	-0.79	OE
366YJC		0.0132	0.0001	0.14	0.0229	0.0008	0.51	OE
39647K		0.0113	-0.0018	-1.74	0.0206	-0.0016	-1.04	IC
3GXENF		0.0133	0.0003	0.28	0.0229	0.0007	0.48	OE
3MJ9MY		0.0131	0.0000	0.04	0.0202	-0.0019	-1.28	OE
3PQWNW		0.0125	-0.0005	-0.49	0.0201	-0.0021	-1.39	OE
42G2E9		0.0133	0.0002	0.24	0.0223	0.0002	0.12	OE
4FGKDK	*	0.0134	0.0004	0.41	0.0182	-0.0039	-2.61	OE
4QWGAC	X	0.1377	0.1246	123.91	0.0258	0.0036	2.42	OE
4UWNV9		0.0123	-0.0008	-0.75	0.0215	-0.0007	-0.46	OE
4VC8F7		0.0127	-0.0004	-0.35	0.0211	-0.0010	-0.68	DR
4Y9T8A		0.0128	-0.0003	-0.25	0.0221	-0.0001	-0.04	OE
64J9A7		0.0149	0.0019	1.90	0.0243	0.0021	1.40	OE
6EJYTT		0.0130	0.0000	-0.02	0.0200	-0.0022	-1.44	OE
6H3NJW		0.0125	-0.0006	-0.55	0.0223	0.0001	0.09	IC
6JB3MW	X	0.0170	0.0040	3.95	0.0297	0.0075	4.99	OE
6L3YMW		0.0130	0.0000	-0.02	0.0220	-0.0002	-0.11	OE
6MU33C		0.0132	0.0002	0.18	0.0222	0.0001	0.05	OE
6RM3HT		0.0138	0.0008	0.81	0.0237	0.0015	1.02	OE
6WJNAV	X	0.0143	0.0013	1.30	0.0267	0.0045	3.00	XX
772KT9		0.0127	-0.0003	-0.29	0.0207	-0.0015	-0.97	OE
77H49Y		0.0157	0.0026	2.63	0.0243	0.0022	1.45	GD
797BW3		0.0121	-0.0009	-0.88	0.0214	-0.0008	-0.51	OE
79PDEN		0.0130	0.0000	-0.02	0.0229	0.0007	0.48	OE
7CCTZ6		0.0130	0.0000	-0.02	0.0227	0.0005	0.34	OE
7D6R8B		0.0128	-0.0002	-0.19	0.0223	0.0002	0.12	OE
7NNXFL		0.0134	0.0004	0.38	0.0230	0.0009	0.58	OE
7R4TNH		0.0154	0.0024	2.40	0.0239	0.0017	1.13	OE
7TEC38		0.0140	0.0010	0.97	0.0253	0.0032	2.11	OE
7VGFG3		0.0133	0.0003	0.28	0.0233	0.0011	0.74	OE
7WEL23		0.0120	-0.0010	-1.02	0.0210	-0.0012	-0.77	XX
827DM6	X	0.0160	0.0030	2.96	0.0243	0.0022	1.45	OE
88C2CC		0.0127	-0.0004	-0.35	0.0212	-0.0009	-0.62	OE
8BTAN7		0.0116	-0.0014	-1.41	0.0200	-0.0022	-1.44	CL
8BWW6J		0.0140	0.0010	0.97	0.0220	-0.0002	-0.11	GD
8PNVQR		0.0127	-0.0003	-0.29	0.0217	-0.0005	-0.32	OE
8ZBRVY		0.0125	-0.0006	-0.55	0.0223	0.0001	0.09	OE
964CE9		0.0126	-0.0004	-0.42	0.0213	-0.0008	-0.55	OE
98LF37		0.0108	-0.0023	-2.24	0.0206	-0.0016	-1.04	IC
9AUQYA		0.0134	0.0004	0.39	0.0249	0.0027	1.80	OE
9E92GJ		0.0127	-0.0004	-0.35	0.0220	-0.0002	-0.11	OE

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9L8QRW		0.0124	-0.0006	-0.62	0.0217	-0.0005	-0.31	OE
9L9M3R		0.0130	0.0000	0.01	0.0200	-0.0022	-1.46	OE
9MGUE7		0.0135	0.0005	0.51	0.0228	0.0006	0.43	OE
9RCKRJ		0.0129	-0.0002	-0.15	0.0229	0.0007	0.47	OE
9WP8NA		0.0126	-0.0005	-0.45	0.0230	0.0008	0.54	OE
9ZR749		0.0126	-0.0004	-0.42	0.0201	-0.0021	-1.37	OE
A3ALY8	*	0.0160	0.0030	2.96	0.0250	0.0028	1.89	OE
A4MEUA	X	0.0159	0.0029	2.89	0.0236	0.0015	0.98	OE
A6YBYD		0.0131	0.0001	0.12	0.0229	0.0008	0.50	OE
AJYXCN		0.0153	0.0023	2.30	0.0247	0.0025	1.67	OE
AWNP76		0.0138	0.0008	0.81	0.0235	0.0013	0.89	OE
AWPMFZ		0.0130	0.0000	-0.02	0.0217	-0.0005	-0.33	OE
AXYQWH		0.0136	0.0006	0.58	0.0227	0.0006	0.38	OE
B38BQW		0.0122	-0.0009	-0.85	0.0217	-0.0005	-0.33	OE
B6FQRL		0.0137	0.0006	0.64	0.0219	-0.0003	-0.17	OE
B8JHR2		0.0128	-0.0003	-0.25	0.0223	0.0001	0.09	OE
B9BJTH		0.0142	0.0012	1.21	0.0230	0.0008	0.55	OE
BA8Y29		0.0123	-0.0007	-0.68	0.0217	-0.0004	-0.28	OE
BEY7GW		0.0130	0.0000	-0.02	0.0233	0.0012	0.78	XX
BPK6NE		0.0130	0.0000	-0.02	0.0203	-0.0018	-1.21	OE
BQRPXM		0.0129	-0.0001	-0.09	0.0209	-0.0013	-0.84	OE
BVP4R4		0.0122	-0.0009	-0.85	0.0206	-0.0016	-1.06	OE
BZ6CF4		0.0135	0.0004	0.44	0.0224	0.0002	0.14	OE
CJ7WK3	*	0.0103	-0.0027	-2.67	0.0202	-0.0020	-1.33	OE
CNKR3K		0.0126	-0.0004	-0.40	0.0220	-0.0001	-0.08	XX
CR4QHZ		0.0130	0.0000	0.01	0.0214	-0.0008	-0.51	OE
CT3N99		0.0120	-0.0010	-1.02	0.0210	-0.0012	-0.77	OE
CTDT7K		0.0131	0.0000	0.04	0.0197	-0.0025	-1.64	OE
D8DPH6		0.0106	-0.0024	-2.37	0.0201	-0.0021	-1.37	GD
D8DUK8		0.0119	-0.0012	-1.15	0.0218	-0.0004	-0.24	OE
DECACZ		0.0131	0.0001	0.11	0.0221	0.0000	-0.02	IC
DJ6JEL		0.0142	0.0012	1.20	0.0252	0.0030	2.00	OE
DKEJJT		0.0130	0.0000	-0.02	0.0213	-0.0008	-0.55	OE
DPADGU		0.0124	-0.0007	-0.65	0.0221	0.0000	-0.02	IC
DU68CA	X	0.0137	0.0006	0.64	0.0137	-0.0085	-5.65	OE
DZPADK		0.0120	-0.0010	-1.02	0.0203	-0.0018	-1.21	OE
DZQ2G8		0.0130	0.0000	-0.02	0.0217	-0.0005	-0.33	OE
E63ACX		0.0137	0.0006	0.64	0.0233	0.0012	0.78	GD
EKTCNU		0.0136	0.0005	0.54	0.0218	-0.0004	-0.26	GD
F4PY66		0.0123	-0.0007	-0.68	0.0212	-0.0010	-0.64	OE
F6ZW7F		0.0143	0.0013	1.30	0.0230	0.0008	0.56	DR
G4FMQK	X	0.0161	0.0031	3.06	0.0224	0.0002	0.16	XX
G8HGTV		0.0137	0.0006	0.64	0.0229	0.0007	0.47	OE
GBHQP4		0.0143	0.0012	1.24	0.0225	0.0003	0.20	OE
GDLKC3		0.0117	-0.0013	-1.28	0.0207	-0.0015	-0.99	IC
GJDRWW		0.0112	-0.0018	-1.78	0.0203	-0.0018	-1.21	WD
GMAGD4		0.0129	-0.0001	-0.09	0.0219	-0.0002	-0.15	WD

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GNMTEU		0.0136	0.0006	0.57	0.0249	0.0027	1.82	OE
GQCET3		0.0131	0.0001	0.11	0.0223	0.0001	0.07	OE
GQXN38		0.0145	0.0015	1.50	0.0232	0.0010	0.67	OE
GRPN24		0.0130	-0.0001	-0.05	0.0222	0.0000	0.03	XX
GV3UD4		0.0133	0.0003	0.31	0.0217	-0.0005	-0.33	GD
GV7CF9		0.0143	0.0013	1.30	0.0247	0.0025	1.67	OE
HM9X3Y		0.0136	0.0005	0.53	0.0235	0.0013	0.89	OE
HQP97H		0.0124	-0.0006	-0.64	0.0216	-0.0006	-0.39	OE
JKJT87		0.0127	-0.0004	-0.35	0.0210	-0.0012	-0.77	OE
JMMR3M		0.0123	-0.0007	-0.72	0.0222	0.0000	0.00	OE
JPEM22		0.0149	0.0019	1.87	0.0261	0.0040	2.64	GD
JTRL6V		0.0127	-0.0003	-0.32	0.0222	0.0000	0.03	OE
KENGFU		0.0133	0.0002	0.24	0.0217	-0.0004	-0.28	OE
KW7HFB		0.0130	0.0000	-0.02	0.0230	0.0008	0.56	XX
KW8KRN	X	0.0155	0.0025	2.46	0.0107	-0.0114	-7.60	IC
KYWQCK	X	0.00130	-0.0117	-11.65	0.00833	-0.0138	-9.19	OE
LFCHQB		0.0123	-0.0007	-0.72	0.0200	-0.0022	-1.46	OE
LRTW86		0.0140	0.0010	0.97	0.0237	0.0015	1.00	OE
LWK9TF		0.0126	-0.0004	-0.39	0.0220	-0.0001	-0.08	OE
LZ2TQ2		0.0103	-0.0027	-2.67	0.0187	-0.0035	-2.32	OE
MHG64E		0.0128	-0.0002	-0.22	0.0199	-0.0023	-1.50	OE
MQVBJH		0.0134	0.0003	0.34	0.0229	0.0007	0.49	OE
MR64UK	X	0.0167	0.0036	3.62	0.0270	0.0048	3.22	OE
MVAMY8		0.0136	0.0006	0.61	0.0238	0.0017	1.11	OE
MVLQ4J		0.0139	0.0008	0.84	0.0242	0.0020	1.33	OE
MXDJDU		0.0120	-0.0010	-1.02	0.0200	-0.0022	-1.44	IC
N3PK7R		0.0126	-0.0004	-0.39	0.0219	-0.0002	-0.15	OE
NEU3F7		0.0154	0.0023	2.33	0.0252	0.0030	2.00	OE
NN6ACA		0.0131	0.0000	0.04	0.0213	-0.0008	-0.55	OE
P9K6LR		0.0118	-0.0012	-1.21	0.0218	-0.0003	-0.22	OE
PQ6YT9		0.0123	-0.0007	-0.68	0.0187	-0.0035	-2.32	OE
PZQYQ7		0.0119	-0.0011	-1.11	0.0222	0.0001	0.05	AE
QHPEQW		0.0121	-0.0009	-0.88	0.0213	-0.0009	-0.57	IC
QP4J89		0.0137	0.0006	0.64	0.0227	0.0005	0.34	GD
QQ2VXW		0.0120	-0.0011	-1.05	0.0197	-0.0024	-1.61	OE
QQL9VV		0.0132	0.0002	0.22	0.0231	0.0009	0.62	OE
QVG3LW		0.0112	-0.0018	-1.81	0.0215	-0.0007	-0.44	IC
QWPHQG		0.0136	0.0006	0.58	0.0239	0.0017	1.13	OE
R3P4CP	X	0.0110	-0.0020	-2.01	0.0173	-0.0048	-3.21	OE
RGAGR6		0.0135	0.0005	0.50	0.0230	0.0009	0.57	OE
RW9FTU		0.0130	0.0000	-0.02	0.0231	0.0010	0.65	OE
T6FHKZ		0.0150	0.0020	1.97	0.0253	0.0032	2.11	OE
TBHVXN		0.0125	-0.0005	-0.52	0.0243	0.0021	1.42	OE
TEG8TN		0.0133	0.0003	0.31	0.0227	0.0005	0.34	IC
TLHFBM		0.0130	0.0000	-0.02	0.0217	-0.0005	-0.33	OE
TR8UAG		0.0133	0.0003	0.31	0.0233	0.0012	0.78	OE
TTZTJ9		0.0139	0.0009	0.87	0.0225	0.0003	0.20	OE

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
TVPUPW		0.0120	-0.0010	-1.02	0.0213	-0.0008	-0.55	XX
TZH7FM		0.0113	-0.0017	-1.71	0.0196	-0.0026	-1.72	OE
U33ATQ		0.0127	-0.0004	-0.35	0.0223	0.0002	0.12	IC
U6NBHJ		0.0137	0.0007	0.71	0.0226	0.0004	0.29	OE
UAH86P		0.0148	0.0018	1.77	0.0236	0.0014	0.96	OE
UQQXGH		0.0143	0.0013	1.26	0.0228	0.0006	0.39	OE
UYMUAY		0.0145	0.0015	1.47	0.0245	0.0023	1.56	OE
VBANYX	*	0.0130	0.0000	-0.02	0.0260	0.0038	2.55	OE
VJNEB4	*	0.0127	-0.0004	-0.35	0.0183	-0.0039	-2.57	OE
VVE9LC		0.0130	0.0000	-0.02	0.0230	0.0008	0.56	OE
WE98M6		0.0130	0.0000	0.01	0.0210	-0.0012	-0.77	XX
WHA3KY		0.0121	-0.0010	-0.95	0.0209	-0.0013	-0.86	OE
WKCZVR		0.0121	-0.0009	-0.92	0.0203	-0.0019	-1.24	OE
WNFYYK		0.0138	0.0008	0.77	0.0233	0.0011	0.74	XX
WU4LWJ		0.0142	0.0012	1.22	0.0231	0.0009	0.60	OE
WZ443B		0.0136	0.0006	0.58	0.0216	-0.0006	-0.37	OE
WZNHUU		0.0117	-0.0013	-1.28	0.0206	-0.0016	-1.04	DR
X86DBN		0.0125	-0.0006	-0.55	0.0217	-0.0004	-0.28	OE
XCHE4K		0.0127	-0.0003	-0.32	0.0198	-0.0023	-1.55	OE
XFW3MH		0.0130	-0.0001	-0.05	0.0224	0.0002	0.16	OE
Y29FTB	*	0.0106	-0.0025	-2.44	0.0175	-0.0046	-3.08	OE
Y9UBUE		0.0133	0.0003	0.31	0.0203	-0.0018	-1.21	GD
YFWDZZ		0.0130	0.0000	-0.02	0.0227	0.0005	0.34	OE
YL2CBQ		0.0127	-0.0004	-0.35	0.0220	-0.0002	-0.11	XX
YN8JW4		0.0124	-0.0006	-0.61	0.0218	-0.0003	-0.22	OE
YZY4EF		0.0135	0.0005	0.48	0.0243	0.0021	1.42	OE
Z32HCH	X	0.0203	0.0072	7.20	0.0364	0.0142	9.45	DR
Z8VFUA		0.0133	0.0003	0.30	0.0237	0.0016	1.04	OE
Z9RVCK		0.0127	-0.0004	-0.35	0.0230	0.0009	0.58	OE
ZA4UYU		0.0117	-0.0014	-1.35	0.0225	0.0003	0.20	AE
ZAZA8K		0.0127	-0.0003	-0.29	0.0226	0.0005	0.31	OE
ZLHLWP		0.0139	0.0009	0.87	0.0229	0.0007	0.49	OE
ZRJZHQ		0.0140	0.0010	0.97	0.0240	0.0018	1.22	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.0130	Percent	0.0222	Percent
Stnd Dev Btwn Labs	0.0010	Percent	0.0015	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 159 of 174 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	CL	Colorimetry
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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #172

4QWGAC (X) - Data for sample L45 are extremely high and appear to be off by a factor of ten.

6JB3MW (X) - Data for both samples are high. Inconsistent within the determinations of both samples.

6WJNAV (X) - Data for sample L46 are high. Inconsistent within the determinations of sample L45.

827DM6 (X) - Data for sample L45 are high. Inconsistent within the determinations of sample L45.

A4MEUA (X) - Data for sample L45 are high.

DU68CA (X) - Data for sample L46 are low.

G4FMQK (X) - Data for sample L45 are high.

KW8KRN (X) - Data for sample L46 are low. Inconsistent within the determinations of sample L45.

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

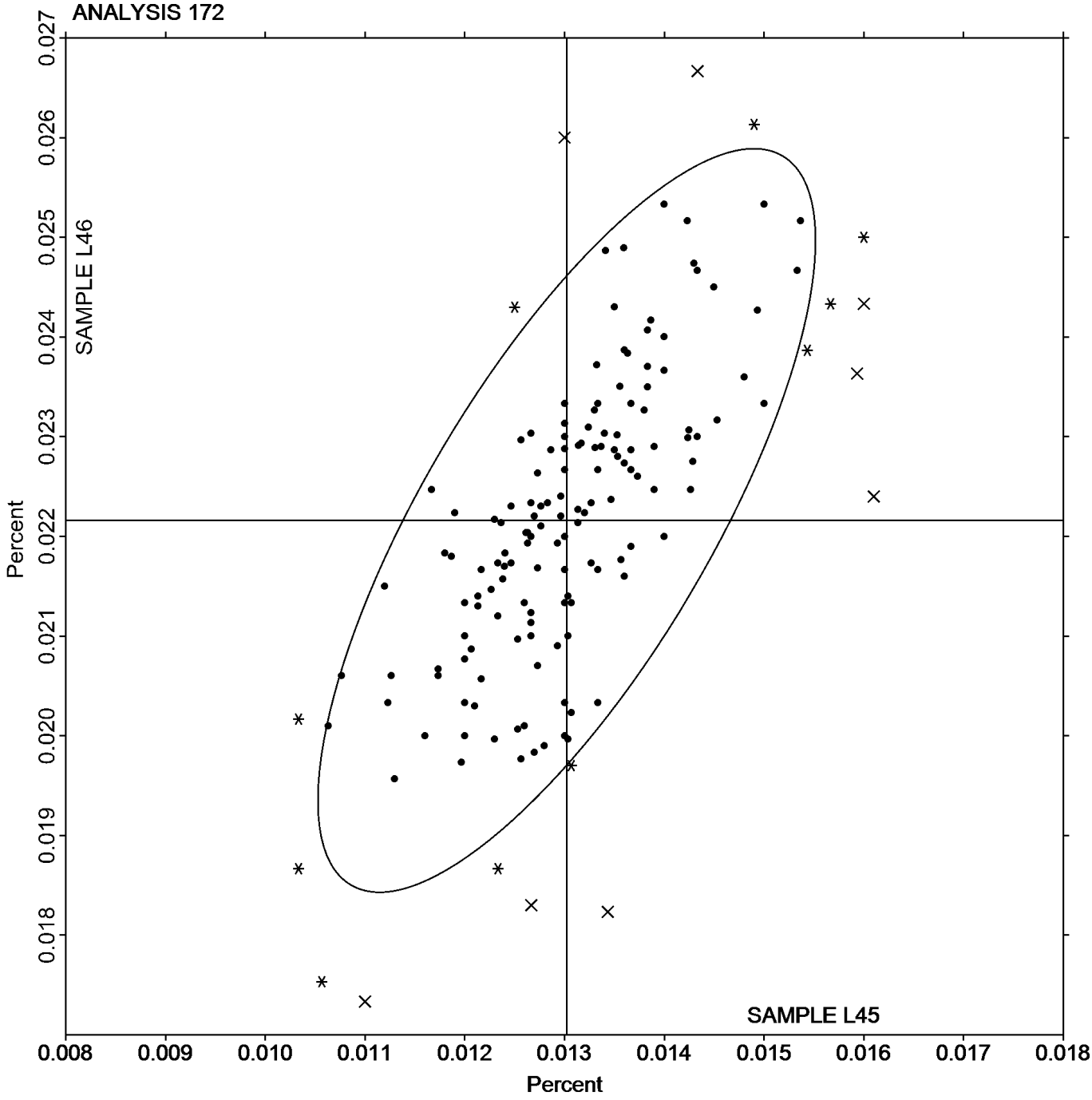
MR64UK (X) - Data for both samples are high.

R3P4CP (X) - Data for sample L46 are low.

Z32HCH (X) - Data for both samples are high.

SAMPLE L45
0.0130 Percent

SAMPLE L46
0.0222 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.0242	0.0000	0.00	0.0251	-0.0004	-0.21	OE
2CKB2K		0.0256	0.0014	0.81	0.0268	0.0013	0.68	CI
2L9AGJ	*	0.0203	-0.0039	-2.18	0.0200	-0.0055	-2.91	OE
2PVUN9		0.0251	0.0009	0.54	0.0261	0.0006	0.33	XX
2UMWUT		0.0281	0.0039	2.21	0.0286	0.0031	1.63	OE
2XM8N9		0.0248	0.0006	0.34	0.0254	-0.0001	-0.06	OE
33DXFA	X	0.0289	0.0047	2.64	0.0268	0.0013	0.69	OE
366YJC		0.0211	-0.0031	-1.77	0.0225	-0.0030	-1.60	OE
39647K		0.0227	-0.0015	-0.86	0.0238	-0.0017	-0.91	CI
3GXENF		0.0266	0.0024	1.33	0.0279	0.0024	1.26	OE
3MJ9MY		0.0233	-0.0009	-0.50	0.0246	-0.0009	-0.49	CO
3PQWNW		0.0241	-0.0001	-0.03	0.0257	0.0002	0.11	OE
42G2E9		0.0249	0.0007	0.40	0.0253	-0.0002	-0.08	OE
4FGKDK		0.0239	-0.0003	-0.17	0.0257	0.0002	0.13	CI
4QWGAC		0.0237	-0.0005	-0.30	0.0267	0.0012	0.62	OE
4UWNV9		0.0244	0.0002	0.12	0.0256	0.0001	0.06	OE
4Y9T8A		0.0232	-0.0010	-0.56	0.0250	-0.0005	-0.24	CI
64J9A7		0.0244	0.0002	0.12	0.0244	-0.0011	-0.59	OE
6EJYTT		0.0250	0.0008	0.46	0.0250	-0.0005	-0.26	OE
6H3NJW		0.0222	-0.0020	-1.13	0.0236	-0.0019	-1.02	CI
6JB3MW		0.0257	0.0015	0.83	0.0267	0.0012	0.62	OE
6L3YMW		0.0247	0.0005	0.27	0.0260	0.0005	0.27	OE
6MU33C		0.0249	0.0007	0.42	0.0257	0.0002	0.11	OE
6RM3HT		0.0239	-0.0003	-0.15	0.0255	0.0000	-0.01	OE
6WJNAV		0.0263	0.0021	1.21	0.0280	0.0025	1.33	XX
772KT9		0.0229	-0.0013	-0.75	0.0250	-0.0005	-0.26	OE
77H49Y		0.0277	0.0035	1.96	0.0290	0.0035	1.86	GD
797BW3		0.0262	0.0020	1.13	0.0250	-0.0005	-0.26	OE
79PDEN		0.0251	0.0009	0.53	0.0274	0.0019	1.00	OE
7CCTZ6		0.0270	0.0028	1.58	0.0270	0.0015	0.80	OE
7D6R8B		0.0273	0.0031	1.75	0.0263	0.0008	0.41	OE
7NNXFL		0.0242	0.0000	0.00	0.0257	0.0002	0.13	CI
7R4TNH		0.0221	-0.0021	-1.18	0.0225	-0.0030	-1.58	CI
7TEC38		0.0247	0.0005	0.29	0.0286	0.0031	1.63	OE
7VGFG3		0.0228	-0.0014	-0.81	0.0252	-0.0003	-0.14	OE
7WEL23		0.0230	-0.0012	-0.67	0.0233	-0.0022	-1.14	XX
827DM6	X	0.0177	-0.0065	-3.69	0.0180	-0.0075	-3.97	OE
88C2CC		0.0238	-0.0004	-0.22	0.0250	-0.0005	-0.26	CI
8BTAN7		0.0225	-0.0017	-0.95	0.0240	-0.0015	-0.78	CI
8BWW6J		0.0237	-0.0005	-0.30	0.0233	-0.0022	-1.14	GD
8PNVQR		0.0219	-0.0023	-1.30	0.0226	-0.0029	-1.56	OE
8ZBRVY		0.0236	-0.0006	-0.35	0.0253	-0.0002	-0.12	OE
964CE9		0.0252	0.0010	0.55	0.0260	0.0005	0.29	OE
98LF37		0.0213	-0.0029	-1.62	0.0230	-0.0025	-1.32	CI
9AUQYA		0.0257	0.0015	0.86	0.0282	0.0027	1.42	OE
9E92GJ		0.0237	-0.0005	-0.30	0.0250	-0.0005	-0.26	XX
9L8QRW		0.0228	-0.0014	-0.81	0.0242	-0.0013	-0.68	OE

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9L9M3R		0.0248	0.0006	0.36	0.0254	-0.0001	-0.05	OE
9MGUE7		0.0241	-0.0001	-0.03	0.0252	-0.0003	-0.14	OE
9RCKRJ		0.0214	-0.0028	-1.56	0.0227	-0.0028	-1.46	OE
9WP8NA		0.0265	0.0023	1.30	0.0283	0.0028	1.51	OE
9ZR749		0.0239	-0.0003	-0.15	0.0231	-0.0024	-1.28	OE
A3ALY8		0.0260	0.0018	1.02	0.0267	0.0012	0.62	OE
A4MEUA		0.0249	0.0007	0.38	0.0238	-0.0017	-0.89	OE
A6YBYD		0.0241	-0.0001	-0.07	0.0255	0.0000	0.01	CI
AJYXCN		0.0263	0.0021	1.21	0.0260	0.0005	0.27	OE
AWNP76		0.0234	-0.0008	-0.47	0.0241	-0.0014	-0.75	CI
AWPMFZ		0.0260	0.0018	1.02	0.0270	0.0015	0.80	OE
AXYQWH		0.0253	0.0011	0.64	0.0251	-0.0004	-0.22	OE
B38BQW		0.0217	-0.0025	-1.39	0.0235	-0.0020	-1.04	OE
B6FQRL		0.0231	-0.0011	-0.64	0.0250	-0.0005	-0.26	OE
B8JHR2		0.0225	-0.0017	-0.96	0.0239	-0.0016	-0.84	OE
B9BJTH	*	0.0295	0.0053	3.00	0.0306	0.0051	2.69	OE
BA8Y29		0.0266	0.0024	1.36	0.0270	0.0015	0.82	OE
BEY7GW		0.0237	-0.0005	-0.30	0.0260	0.0005	0.27	XX
BPK6NE		0.0240	-0.0002	-0.11	0.0250	-0.0005	-0.26	OE
BQRPXM		0.0248	0.0006	0.36	0.0279	0.0024	1.28	OE
BVP4R4		0.0233	-0.0009	-0.52	0.0252	-0.0003	-0.14	OE
BZ6CF4		0.0230	-0.0012	-0.66	0.0250	-0.0005	-0.24	OE
CJ7WK3		0.0253	0.0011	0.64	0.0280	0.0025	1.33	OE
CNKR3K		0.0242	0.0000	-0.02	0.0258	0.0003	0.17	XX
CR4QHZ		0.0250	0.0008	0.46	0.0253	-0.0002	-0.12	OE
CT3N99		0.0220	-0.0022	-1.24	0.0233	-0.0022	-1.14	OE
CTDT7K		0.0250	0.0008	0.46	0.0259	0.0004	0.20	OE
D8DPH6		0.0233	-0.0009	-0.50	0.0246	-0.0009	-0.47	GD
D8DUK8		0.0233	-0.0009	-0.50	0.0240	-0.0015	-0.79	OE
DECACZ		0.0224	-0.0018	-1.01	0.0240	-0.0015	-0.77	IC
DJ6JEL		0.0222	-0.0020	-1.11	0.0257	0.0002	0.13	OE
DKEJJT	X	0.0177	-0.0065	-3.69	0.0177	-0.0078	-4.14	OE
DPADGU		0.0216	-0.0026	-1.46	0.0232	-0.0023	-1.21	CO
DU68CA	X	0.0237	-0.0005	-0.30	0.0193	-0.0062	-3.26	XX
DZPADK		0.0247	0.0005	0.27	0.0257	0.0002	0.09	XX
DZQ2G8		0.0257	0.0015	0.83	0.0277	0.0022	1.15	OE
E63ACX		0.0260	0.0018	1.02	0.0267	0.0012	0.62	GD
EKTCNU		0.0254	0.0012	0.66	0.0257	0.0002	0.09	GD
F4PY66		0.0228	-0.0014	-0.77	0.0247	-0.0008	-0.40	OE
F6ZW7F		0.0250	0.0008	0.46	0.0253	-0.0002	-0.08	DR
G4FMQK		0.0257	0.0015	0.83	0.0258	0.0003	0.15	XX
G8HGTV		0.0227	-0.0015	-0.82	0.0247	-0.0008	-0.40	OE
GBHQP4		0.0248	0.0006	0.36	0.0268	0.0013	0.71	OE
GDLKC3		0.0234	-0.0008	-0.47	0.0248	-0.0007	-0.38	CI
GJDRWW		0.0232	-0.0010	-0.54	0.0238	-0.0017	-0.88	WD
GMAGD4		0.0216	-0.0026	-1.46	0.0223	-0.0032	-1.67	CI
GNMTEU		0.0217	-0.0025	-1.39	0.0228	-0.0027	-1.45	CI

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GQCET3		0.0262	0.0020	1.13	0.0272	0.0017	0.92	OE
GQXN38		0.0237	-0.0005	-0.26	0.0259	0.0004	0.22	OE
GRPN24		0.0230	-0.0012	-0.69	0.0238	-0.0017	-0.89	CI
GV3UD4		0.0237	-0.0005	-0.30	0.0280	0.0025	1.33	GD
GV7CF9		0.0257	0.0015	0.83	0.0263	0.0008	0.45	OE
HM9X3Y		0.0234	-0.0008	-0.46	0.0245	-0.0010	-0.54	OE
HQP97H		0.0206	-0.0036	-2.01	0.0224	-0.0031	-1.62	CO
JKJT87		0.0253	0.0011	0.64	0.0257	0.0002	0.09	OE
JMMR3M		0.0268	0.0026	1.45	0.0298	0.0043	2.30	OE
JPEM22		0.0243	0.0001	0.08	0.0251	-0.0004	-0.22	GD
JTRL6V		0.0235	-0.0007	-0.37	0.0257	0.0002	0.13	OE
KENGFU		0.0238	-0.0004	-0.24	0.0234	-0.0021	-1.12	OE
KMHN2T		0.0231	-0.0011	-0.62	0.0250	-0.0005	-0.26	OE
KW7HFB		0.0243	0.0001	0.08	0.0257	0.0002	0.09	XX
KW8KRN		0.0262	0.0020	1.11	0.0274	0.0019	1.01	CI
KYWQCK	X	0.0104	-0.0138	-7.77	0.0122	-0.0133	-7.04	OE
LFCHQB		0.0241	-0.0001	-0.05	0.0259	0.0004	0.22	CI
LRTW86		0.0233	-0.0009	-0.49	0.0252	-0.0003	-0.15	CI
LWK9TF	*	0.0208	-0.0034	-1.94	0.0271	0.0016	0.84	OE
LZ2TQ2		0.0243	0.0001	0.08	0.0240	-0.0015	-0.79	OE
MHG64E		0.0245	0.0003	0.17	0.0244	-0.0011	-0.58	XX
MQVBJH		0.0244	0.0002	0.14	0.0263	0.0008	0.43	OE
MR64UK		0.0215	-0.0027	-1.54	0.0205	-0.0050	-2.66	CO
MVAMY8		0.0224	-0.0018	-1.03	0.0246	-0.0009	-0.45	OE
MVLQ4J		0.0257	0.0015	0.87	0.0274	0.0019	0.99	OE
MXDJDU		0.0230	-0.0012	-0.67	0.0243	-0.0012	-0.61	CI
N3PK7R		0.0237	-0.0005	-0.28	0.0244	-0.0011	-0.59	OE
NEU3F7		0.0268	0.0026	1.47	0.0267	0.0012	0.66	OE
NN6ACA		0.0240	-0.0002	-0.11	0.0255	0.0000	0.02	CI
NYJJQZ		0.0257	0.0015	0.87	0.0271	0.0016	0.85	CI
P9K6LR		0.0247	0.0005	0.27	0.0259	0.0004	0.20	OE
PQ6YT9	X	0.0130	-0.0112	-6.32	0.0140	-0.0115	-6.08	OE
PWRNU7		0.0242	0.0000	0.00	0.0254	-0.0001	-0.03	CI
PZQYQ7		0.0234	-0.0008	-0.43	0.0237	-0.0018	-0.93	AE
QHPEQW		0.0219	-0.0023	-1.31	0.0236	-0.0019	-1.02	OE
QP4J89		0.0207	-0.0035	-1.99	0.0227	-0.0028	-1.49	GD
QQ2VXW		0.0201	-0.0041	-2.31	0.0212	-0.0043	-2.28	OE
QQL9VV		0.0253	0.0011	0.64	0.0270	0.0015	0.79	OE
QVG3LW		0.0253	0.0011	0.64	0.0265	0.0010	0.55	CI
QWPHQG	*	0.0276	0.0034	1.92	0.0239	-0.0016	-0.86	OE
R3P4CP	*	0.0230	-0.0012	-0.67	0.0290	0.0035	1.86	OE
R9XHZF		0.0213	-0.0029	-1.62	0.0223	-0.0032	-1.67	OE
RGAGR6		0.0250	0.0008	0.45	0.0251	-0.0004	-0.20	OE
RW9FTU		0.0264	0.0022	1.25	0.0286	0.0031	1.67	CO
TBHVXN		0.0251	0.0009	0.53	0.0275	0.0020	1.05	OE
TEG8TN		0.0257	0.0015	0.83	0.0270	0.0015	0.80	IR
TLHFBM		0.0233	-0.0009	-0.49	0.0237	-0.0018	-0.97	OE

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
TR8UAG		0.0237	-0.0005	-0.30	0.0263	0.0008	0.45	OE
TTZTJ9		0.0241	-0.0001	-0.05	0.0262	0.0007	0.38	CI
TVPUPW		0.0257	0.0015	0.83	0.0260	0.0005	0.27	XX
TZH7FM	X	0.0254	0.0012	0.70	0.0193	-0.0062	-3.28	OE
U33ATQ		0.0273	0.0031	1.77	0.0260	0.0005	0.27	CI
U6NBHJ		0.0246	0.0004	0.25	0.0263	0.0008	0.45	OE
UAH86P		0.0256	0.0014	0.78	0.0295	0.0040	2.12	OE
UQQXGH		0.0263	0.0021	1.20	0.0289	0.0034	1.83	OE
UYMUAY		0.0270	0.0028	1.57	0.0296	0.0041	2.18	OE
VBANYX		0.0243	0.0001	0.08	0.0263	0.0008	0.45	OE
VJNEB4		0.0218	-0.0024	-1.37	0.0243	-0.0012	-0.65	OE
VVE9LC		0.0247	0.0005	0.27	0.0267	0.0012	0.62	OE
WE98M6		0.0240	-0.0002	-0.11	0.0255	0.0000	0.02	OE
WHA3KY		0.0235	-0.0007	-0.39	0.0247	-0.0008	-0.44	OE
WKCZVR		0.0242	0.0000	0.02	0.0255	0.0000	0.01	OE
WNFYYK		0.0251	0.0009	0.51	0.0264	0.0009	0.50	XX
WU4LWJ		0.0210	-0.0032	-1.83	0.0225	-0.0030	-1.59	OE
WZ443B		0.0239	-0.0003	-0.17	0.0237	-0.0018	-0.95	IR
WZNHUU		0.0239	-0.0003	-0.15	0.0254	-0.0001	-0.06	DR
X86DBN		0.0259	0.0017	0.94	0.0245	-0.0010	-0.52	OE
XCHE4K		0.0240	-0.0002	-0.09	0.0243	-0.0012	-0.65	OE
XFW3MH		0.0207	-0.0035	-1.97	0.0228	-0.0027	-1.44	OE
Y29FTB		0.0231	-0.0011	-0.64	0.0254	-0.0001	-0.03	OE
Y9UBUE		0.0197	-0.0045	-2.56	0.0227	-0.0028	-1.49	GD
YFWDZZ		0.0233	-0.0009	-0.49	0.0270	0.0015	0.80	OE
YL2CBQ		0.0277	0.0035	1.96	0.0290	0.0035	1.86	XX
YN8JW4		0.0240	-0.0002	-0.12	0.0257	0.0002	0.11	OE
YZY4EF		0.0271	0.0029	1.66	0.0299	0.0044	2.32	OE
Z32HCH		0.0264	0.0022	1.25	0.0288	0.0033	1.74	DR
Z8VFUA		0.0239	-0.0003	-0.18	0.0258	0.0003	0.16	CI
Z9RVCK		0.0231	-0.0011	-0.62	0.0252	-0.0003	-0.15	CO
ZA4UYU		0.0239	-0.0003	-0.17	0.0258	0.0003	0.16	AE
ZAZA8K		0.0258	0.0016	0.89	0.0272	0.0017	0.91	IR
ZLHLWP		0.0220	-0.0022	-1.26	0.0246	-0.0009	-0.47	OE
ZRJZHQ	*	0.0293	0.0051	2.90	0.0307	0.0052	2.74	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.0242	Percent	0.0255	Percent
Stnd Dev Btwn Labs	0.0018	Percent	0.0019	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 166 of 176 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	CI	Combustion / IR
CO	Combustion	DR	Spectrometry - Direct Reading OE (DROES)
GD	Spectrometry - Glow Discharge (GDS)	IC	Spectrometry - Inductively Coupled Plasma (ICP)
IR	IR (Absorption / Detection)	OE	Spectrometry - Optical Emission (OES)
WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #173

33DXFA (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L46.

827DM6 (X) - Data for both samples are low. Possible Systematic Error.

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

DU68CA (X) - Data for sample L46 are low.

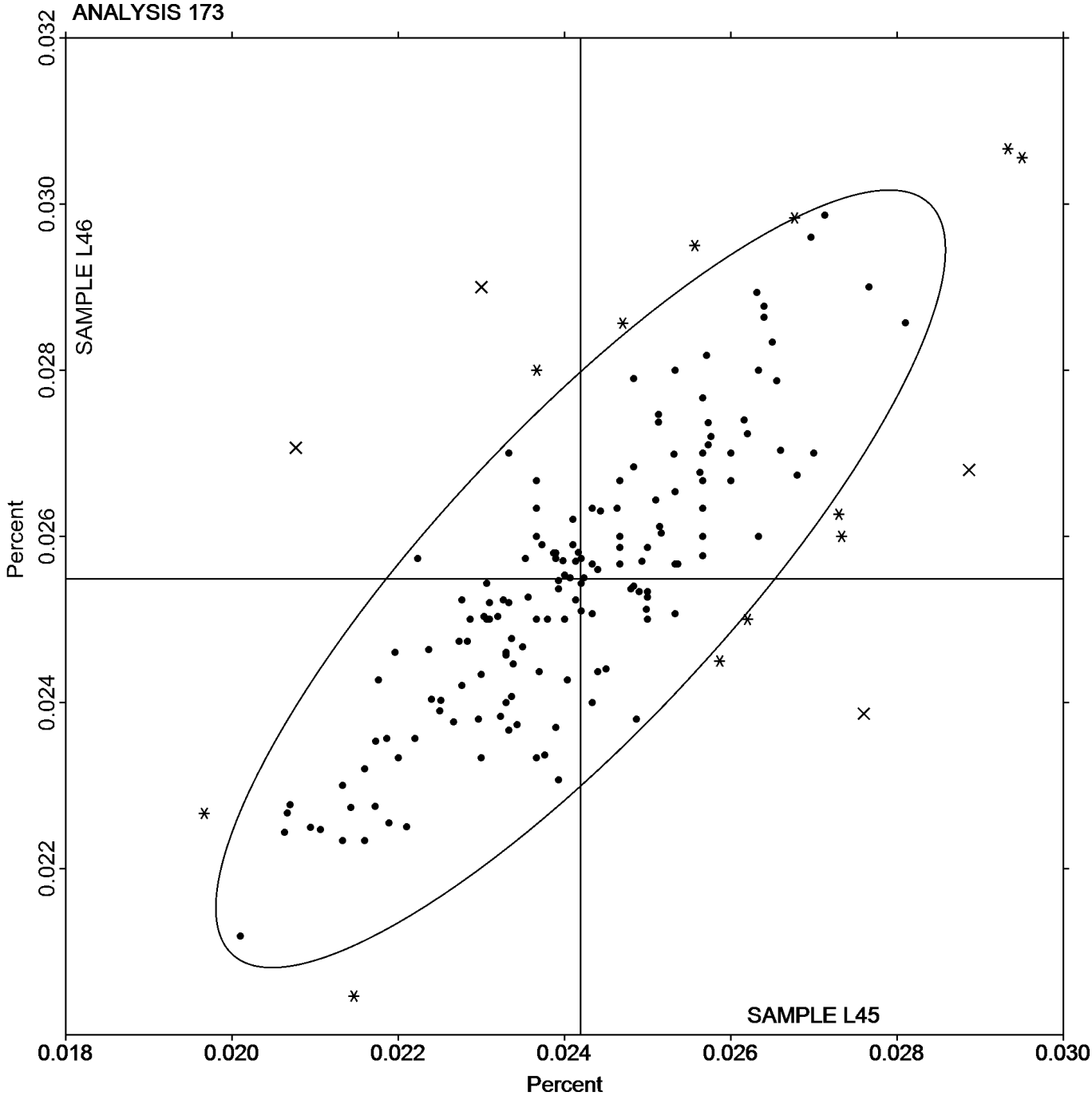
KYWQCK (X) - Data for both samples are low. Possible Systematic Error.

PQ6YT9 (X) - Data for both samples are low. Possible Systematic Error.

TZH7FM (X) - Data for sample L46 are low.

SAMPLE L45
0.0242 Percent

SAMPLE L46
0.0255 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.2353	-0.0009	-0.20	0.2330	0.0019	0.41	OE
2CKB2K		0.2373	0.0011	0.24	0.2303	-0.0008	-0.18	IC
2L9AGJ		0.2367	0.0004	0.09	0.2333	0.0022	0.49	XX
2PVUN9		0.2393	0.0030	0.68	0.2344	0.0032	0.72	XX
2UMWUT		0.2380	0.0018	0.39	0.2313	0.0002	0.04	OE
2XM8N9		0.2376	0.0014	0.31	0.2355	0.0043	0.96	OE
33DXFA		0.2450	0.0088	1.96	0.2363	0.0052	1.16	OE
366YJC		0.2473	0.0111	2.48	0.2413	0.0102	2.27	OE
39647K		0.2356	-0.0006	-0.14	0.2325	0.0014	0.31	IC
3GXENF		0.2369	0.0006	0.14	0.2321	0.0010	0.22	OE
3MJ9MY		0.2387	0.0024	0.54	0.2330	0.0019	0.41	OE
3PQWNW		0.2340	-0.0022	-0.50	0.2303	-0.0008	-0.18	OE
42G2E9		0.2370	0.0008	0.17	0.2317	0.0005	0.12	OE
4FGKDK		0.2373	0.0011	0.24	0.2281	-0.0031	-0.69	OE
4QWGAC		0.2360	-0.0002	-0.06	0.2317	0.0005	0.12	OE
4UWNV9		0.2360	-0.0002	-0.06	0.2303	-0.0008	-0.18	OE
4VC8F7	X	0.2503	0.0141	3.15	0.2490	0.0179	3.99	DR
4Y9T8A		0.2320	-0.0042	-0.95	0.2296	-0.0015	-0.34	OE
64J9A7		0.2257	-0.0105	-2.36	0.2202	-0.0110	-2.45	OE
6EJYTT		0.2380	0.0018	0.39	0.2320	0.0009	0.19	OE
6H3NJW		0.2347	-0.0016	-0.35	0.2313	0.0002	0.04	GR
6JB3MW	X	0.1900	-0.0462	-10.35	0.1900	-0.0411	-9.18	OE
6L3YMW		0.2397	0.0034	0.77	0.2347	0.0035	0.79	OE
6MU33C		0.2407	0.0044	0.99	0.2333	0.0022	0.49	OE
6RM3HT		0.2388	0.0026	0.58	0.2346	0.0035	0.77	OE
6WJNAV	X	0.2900	0.0538	12.03	0.2860	0.0549	12.24	XX
772KT9		0.2410	0.0047	1.06	0.2339	0.0027	0.61	OE
77H49Y		0.2453	0.0091	2.03	0.2373	0.0062	1.38	GD
797BW3	X	0.2222	-0.0141	-3.15	0.2332	0.0021	0.47	OE
79PDEN		0.2356	-0.0006	-0.14	0.2310	-0.0002	-0.04	OE
7CCTZ6		0.2343	-0.0019	-0.43	0.2267	-0.0045	-1.00	OE
7D6R8B		0.2306	-0.0056	-1.26	0.2273	-0.0038	-0.85	OE
7NNXFL		0.2350	-0.0012	-0.28	0.2327	0.0015	0.34	OE
7R4TNH		0.2410	0.0048	1.06	0.2373	0.0062	1.38	OE
7TEC38		0.2397	0.0034	0.77	0.2363	0.0052	1.16	OE
7VGFG3		0.2388	0.0025	0.56	0.2362	0.0050	1.12	OE
7WEL23		0.2380	0.0018	0.39	0.2293	-0.0018	-0.40	XX
827DM6		0.2240	-0.0122	-2.74	0.2223	-0.0088	-1.97	OE
88C2CC		0.2385	0.0023	0.50	0.2314	0.0003	0.06	OE
8BTAN7		0.2365	0.0002	0.05	0.2296	-0.0016	-0.35	IC
8BWW6J	*	0.2323	-0.0039	-0.88	0.2200	-0.0111	-2.49	GD
8PNVQR		0.2385	0.0023	0.51	0.2326	0.0014	0.31	OE
8ZBRVY	*	0.2332	-0.0031	-0.69	0.2231	-0.0080	-1.79	OE
964CE9		0.2356	-0.0006	-0.14	0.2288	-0.0023	-0.52	OE
98LF37		0.2383	0.0021	0.47	0.2313	0.0002	0.04	IC
9AUQYA		0.2357	-0.0005	-0.11	0.2334	0.0022	0.49	OE
9E92GJ		0.2330	-0.0032	-0.73	0.2283	-0.0028	-0.63	XX

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9L8QRW		0.2393	0.0031	0.69	0.2340	0.0029	0.64	OE
9L9M3R		0.2380	0.0018	0.39	0.2340	0.0029	0.64	OE
9MGUE7		0.2360	-0.0002	-0.06	0.2297	-0.0015	-0.33	OE
9RCKRJ		0.2377	0.0015	0.33	0.2334	0.0023	0.51	OE
9WP8NA		0.2314	-0.0048	-1.09	0.2271	-0.0040	-0.90	OE
9ZR749		0.2358	-0.0004	-0.10	0.2311	0.0000	-0.01	OE
A3ALY8	X	0.2523	0.0161	3.60	0.2460	0.0149	3.32	OE
A4MEUA		0.2427	0.0064	1.44	0.2317	0.0005	0.12	OE
A6YBYD		0.2405	0.0042	0.95	0.2375	0.0063	1.41	OE
AJYXCN		0.2337	-0.0026	-0.58	0.2293	-0.0018	-0.40	OE
AWNP76		0.2317	-0.0046	-1.03	0.2267	-0.0045	-1.00	OE
AWPMFZ		0.2320	-0.0042	-0.95	0.2260	-0.0051	-1.15	OE
AXYQWH		0.2421	0.0059	1.31	0.2376	0.0065	1.44	OE
B38BQW		0.2330	-0.0032	-0.73	0.2290	-0.0021	-0.48	OE
B6FQRL		0.2357	-0.0006	-0.13	0.2297	-0.0015	-0.33	OE
B8JHR2		0.2383	0.0021	0.46	0.2318	0.0007	0.15	OE
B9BJTH		0.2387	0.0025	0.55	0.2312	0.0000	0.00	OE
BA8Y29		0.2303	-0.0059	-1.32	0.2290	-0.0021	-0.48	OE
BEY7GW	X	0.2203	-0.0159	-3.56	0.2207	-0.0105	-2.34	XX
BPK6NE		0.2370	0.0008	0.17	0.2353	0.0042	0.93	OE
BQRPXM		0.2385	0.0023	0.50	0.2376	0.0065	1.44	OE
BVP4R4		0.2337	-0.0026	-0.58	0.2253	-0.0058	-1.30	OE
BZ6CF4		0.2347	-0.0016	-0.35	0.2313	0.0002	0.04	OE
CJ7WK3	X	0.2477	0.0114	2.56	0.2350	0.0039	0.86	OE
CNKR3K		0.2416	0.0053	1.19	0.2360	0.0049	1.08	XX
CR4QHZ		0.2447	0.0085	1.90	0.2389	0.0078	1.74	OE
CT3N99	*	0.2230	-0.0132	-2.97	0.2203	-0.0108	-2.41	OE
CTDT7K		0.2333	-0.0029	-0.65	0.2307	-0.0005	-0.11	OE
D8DPH6		0.2350	-0.0012	-0.28	0.2277	-0.0035	-0.78	GD
D8DUK8		0.2413	0.0051	1.14	0.2347	0.0035	0.79	OE
DECACZ		0.2407	0.0044	0.99	0.2347	0.0035	0.79	IC
DJ6JEL		0.2333	-0.0029	-0.65	0.2287	-0.0025	-0.55	OE
DKEJJT	X	0.2167	-0.0196	-4.38	0.2120	-0.0191	-4.27	OE
DPADGU		0.2363	0.0001	0.02	0.2297	-0.0015	-0.33	IC
DZPADK	X	0.2040	-0.0322	-7.22	0.2000	-0.0311	-6.95	OE
DZQ2G8		0.2400	0.0038	0.84	0.2300	-0.0011	-0.26	OE
E63ACX		0.2340	-0.0022	-0.50	0.2340	0.0029	0.64	GD
EKTCNU		0.2340	-0.0022	-0.50	0.2320	0.0009	0.19	GD
F4PY66		0.2387	0.0024	0.54	0.2330	0.0019	0.41	OE
F6ZW7F		0.2360	-0.0002	-0.06	0.2313	0.0002	0.04	DR
G4FMQK		0.2328	-0.0034	-0.77	0.2240	-0.0072	-1.60	XX
G8HGTV		0.2323	-0.0039	-0.88	0.2270	-0.0041	-0.93	OE
GBHQP4		0.2343	-0.0019	-0.43	0.2277	-0.0035	-0.78	OE
GDLKC3	X	0.2230	-0.0132	-2.97	0.2243	-0.0068	-1.52	IC
GJDRWW		0.2373	0.0011	0.24	0.2337	0.0026	0.58	WD
GMAGD4		0.2340	-0.0022	-0.50	0.2320	0.0009	0.19	WD
GNMTEU		0.2309	-0.0054	-1.20	0.2268	-0.0043	-0.96	OE

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GQCET3		0.2282	-0.0080	-1.79	0.2197	-0.0114	-2.55	OE
GQXN38		0.2367	0.0005	0.11	0.2277	-0.0035	-0.78	OE
GRPN24		0.2337	-0.0026	-0.58	0.2293	-0.0018	-0.40	XX
GV3UD4		0.2270	-0.0092	-2.07	0.2210	-0.0101	-2.26	GD
GV7CF9		0.2380	0.0018	0.39	0.2337	0.0025	0.56	OE
HM9X3Y	X	0.2336	-0.0026	-0.59	0.0229	-0.2083	-46.49	OE
HQP97H		0.2371	0.0008	0.18	0.2319	0.0007	0.16	OE
JKJT87		0.2380	0.0018	0.39	0.2300	-0.0011	-0.26	OE
JMMR3M		0.2372	0.0009	0.21	0.2313	0.0002	0.04	OE
JPEM22		0.2477	0.0114	2.56	0.2393	0.0082	1.83	GD
JTRL6V		0.2360	-0.0002	-0.06	0.2317	0.0005	0.12	OE
KENGFU		0.2360	-0.0002	-0.06	0.2307	-0.0005	-0.11	OE
KMHN2T		0.2400	0.0038	0.84	0.2300	-0.0011	-0.26	OE
KW7HFB		0.2337	-0.0026	-0.58	0.2303	-0.0008	-0.18	XX
KW8KRN	X	0.2223	-0.0139	-3.11	0.2307	-0.0005	-0.11	IC
KYWQCK		0.2333	-0.0029	-0.65	0.2330	0.0019	0.41	OE
LFCHQB		0.2320	-0.0042	-0.95	0.2300	-0.0011	-0.26	OE
LRTW86		0.2347	-0.0016	-0.35	0.2270	-0.0041	-0.93	OE
LWK9TF		0.2311	-0.0051	-1.15	0.2319	0.0008	0.17	OE
LZ2TQ2	X	0.0250	-0.2112	-47.29	0.0240	-0.2071	-46.23	OE
MHG64E		0.2360	-0.0002	-0.06	0.2340	0.0029	0.64	OE
MQVBJH		0.2352	-0.0010	-0.23	0.2282	-0.0029	-0.65	OE
MR64UK		0.2380	0.0018	0.39	0.2317	0.0005	0.12	OE
MVAMY8		0.2444	0.0081	1.82	0.2382	0.0071	1.57	OE
MVLQ4J		0.2338	-0.0024	-0.54	0.2286	-0.0026	-0.58	OE
MXDJDU	X	0.2280	-0.0082	-1.85	0.2137	-0.0175	-3.90	IC
N3PK7R		0.2323	-0.0039	-0.88	0.2267	-0.0045	-1.00	OE
NEU3F7		0.2331	-0.0032	-0.71	0.2253	-0.0058	-1.30	OE
NN6ACA		0.2347	-0.0016	-0.35	0.2303	-0.0008	-0.18	OE
NYJJQZ		0.2383	0.0021	0.47	0.2347	0.0035	0.79	IC
P9K6LR		0.2443	0.0081	1.81	0.2397	0.0085	1.90	OE
PQ6YT9		0.2343	-0.0019	-0.43	0.2307	-0.0005	-0.11	OE
PZQYQ7		0.2274	-0.0088	-1.97	0.2212	-0.0099	-2.21	AE
QHPEQW		0.2343	-0.0019	-0.43	0.2243	-0.0068	-1.52	IC
QP4J89		0.2303	-0.0059	-1.32	0.2207	-0.0105	-2.34	GD
QQ2VXW	X	0.2185	-0.0177	-3.97	0.2113	-0.0198	-4.42	XX
QQL9VV		0.2363	0.0001	0.02	0.2300	-0.0012	-0.27	OE
QVG3LW	X	0.2673	0.0311	6.96	0.2730	0.0419	9.34	GR
QWPHQG	X	0.2495	0.0133	2.97	0.2456	0.0145	3.23	OE
R3P4CP		0.2310	-0.0052	-1.17	0.2217	-0.0095	-2.12	OE
RGAGR6		0.2416	0.0053	1.19	0.2380	0.0069	1.53	OE
RW9FTU		0.2290	-0.0072	-1.62	0.2230	-0.0081	-1.82	OE
T6FHKZ		0.2427	0.0064	1.44	0.2363	0.0052	1.16	OE
TBHVXN		0.2340	-0.0022	-0.50	0.2303	-0.0008	-0.18	OE
TEG8TN		0.2433	0.0071	1.59	0.2333	0.0022	0.49	IC
TLHFBM		0.2300	-0.0062	-1.40	0.2300	-0.0011	-0.26	OE
TR8UAG		0.2353	-0.0009	-0.20	0.2303	-0.0008	-0.18	OE

WebCode	Data Flag	Sample L45 Lab Mean	Sample L45 Diff. from Grand Mean	Sample L45 CPV	Sample L46 Lab Mean	Sample L46 Diff. from Grand Mean	Sample L46 CPV	Method
TTZTJ9		0.2390	0.0028	0.62	0.2367	0.0055	1.23	OE
TVPUPW		0.2413	0.0051	1.14	0.2410	0.0099	2.20	XX
TZH7FM		0.2443	0.0081	1.81	0.2377	0.0065	1.46	OE
U33ATQ		0.2367	0.0004	0.09	0.2313	0.0002	0.04	IC
U6NBHJ		0.2407	0.0044	0.99	0.2343	0.0032	0.71	OE
UAH86P		0.2407	0.0044	0.99	0.2337	0.0025	0.56	OE
UQQXGH		0.2336	-0.0027	-0.60	0.2292	-0.0019	-0.43	OE
UYMUAY		0.2311	-0.0051	-1.15	0.2287	-0.0024	-0.54	OE
VBANYX	*	0.2267	-0.0096	-2.14	0.2267	-0.0045	-1.00	OE
VJNEB4		0.2297	-0.0066	-1.47	0.2273	-0.0038	-0.85	OE
VVE9LC		0.2407	0.0044	0.99	0.2367	0.0055	1.23	OE
WE98M6		0.2370	0.0008	0.17	0.2340	0.0029	0.64	OE
WHA3KY		0.2377	0.0014	0.32	0.2335	0.0024	0.53	OE
WKCZVR		0.2313	-0.0049	-1.10	0.2243	-0.0068	-1.52	OE
WNFYYK		0.2425	0.0063	1.41	0.2378	0.0067	1.49	XX
WU4LWJ		0.2379	0.0016	0.37	0.2334	0.0022	0.50	OE
WZ443B		0.2350	-0.0012	-0.28	0.2283	-0.0028	-0.63	OE
WZNHUU		0.2361	-0.0001	-0.03	0.2310	-0.0001	-0.03	DR
X86DBN		0.2350	-0.0012	-0.28	0.2303	-0.0008	-0.18	OE
XCHE4K		0.2410	0.0048	1.06	0.2357	0.0045	1.01	OE
XFW3MH		0.2282	-0.0081	-1.81	0.2227	-0.0084	-1.88	OE
Y29FTB		0.2393	0.0031	0.69	0.2350	0.0039	0.86	OE
Y9UBUE	X	0.2527	0.0164	3.68	0.2473	0.0162	3.61	GD
YFWDZZ		0.2283	-0.0079	-1.77	0.2240	-0.0071	-1.59	OE
YL2CBQ		0.2350	-0.0012	-0.28	0.2317	0.0005	0.12	XX
YN8JW4		0.2396	0.0033	0.74	0.2358	0.0047	1.04	OE
YZY4EF		0.2445	0.0083	1.85	0.2407	0.0096	2.13	OE
Z32HCH		0.2403	0.0041	0.91	0.2330	0.0019	0.41	DR
Z8VFUA		0.2335	-0.0027	-0.61	0.2283	-0.0029	-0.64	OE
Z9RVCK		0.2382	0.0020	0.44	0.2339	0.0028	0.62	OE
ZA4UYU		0.2304	-0.0058	-1.31	0.2253	-0.0058	-1.30	AE
ZAZA8K		0.2393	0.0031	0.69	0.2347	0.0035	0.79	WD
ZLHLWP		0.2353	-0.0009	-0.20	0.2303	-0.0008	-0.18	OE
ZRJZHQ		0.2400	0.0038	0.84	0.2350	0.0039	0.86	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.2362	Percent	0.2311	Percent
Stnd Dev Btwn Labs	0.0045	Percent	0.0045	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 156 of 175 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)	GR	Gravimetry
IC	Spectrometry - Inductively Coupled Plasma (ICP)	OE	Spectrometry - Optical Emission (OES)
WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #174

4VC8F7 (X) - Data for both samples are high. Possible Systematic Error.

6JB3MW (X) - Data for both samples are low. Possible Systematic Error.

6WJNAV (X) - Data for both samples are extremely high. Possible Systematic Error.

797BW3 (X) - Data for sample L45 are low. Inconsistent within the determinations of sample L46.

A3ALY8 (X) - Data for both samples are high. Possible Systematic Error.

BEY7GW (X) - Data for sample L45 are low.

CJ7WK3 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

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

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

GDLKC3 (X) - Data for sample L45 are low.

HM9X3Y (X) - Data for sample L46 are extremely low and appears to be off by a factor of ten.

KW8KRN (X) - Data for sample L45 are low.

LZ2TQ2 (X) - Data for both samples are extremely low and appears to be off by a factor of ten. Possible Systematic Error.

MXDJDU (X) - Data for sample L46 are low. Inconsistent within the determinations of sample L45.

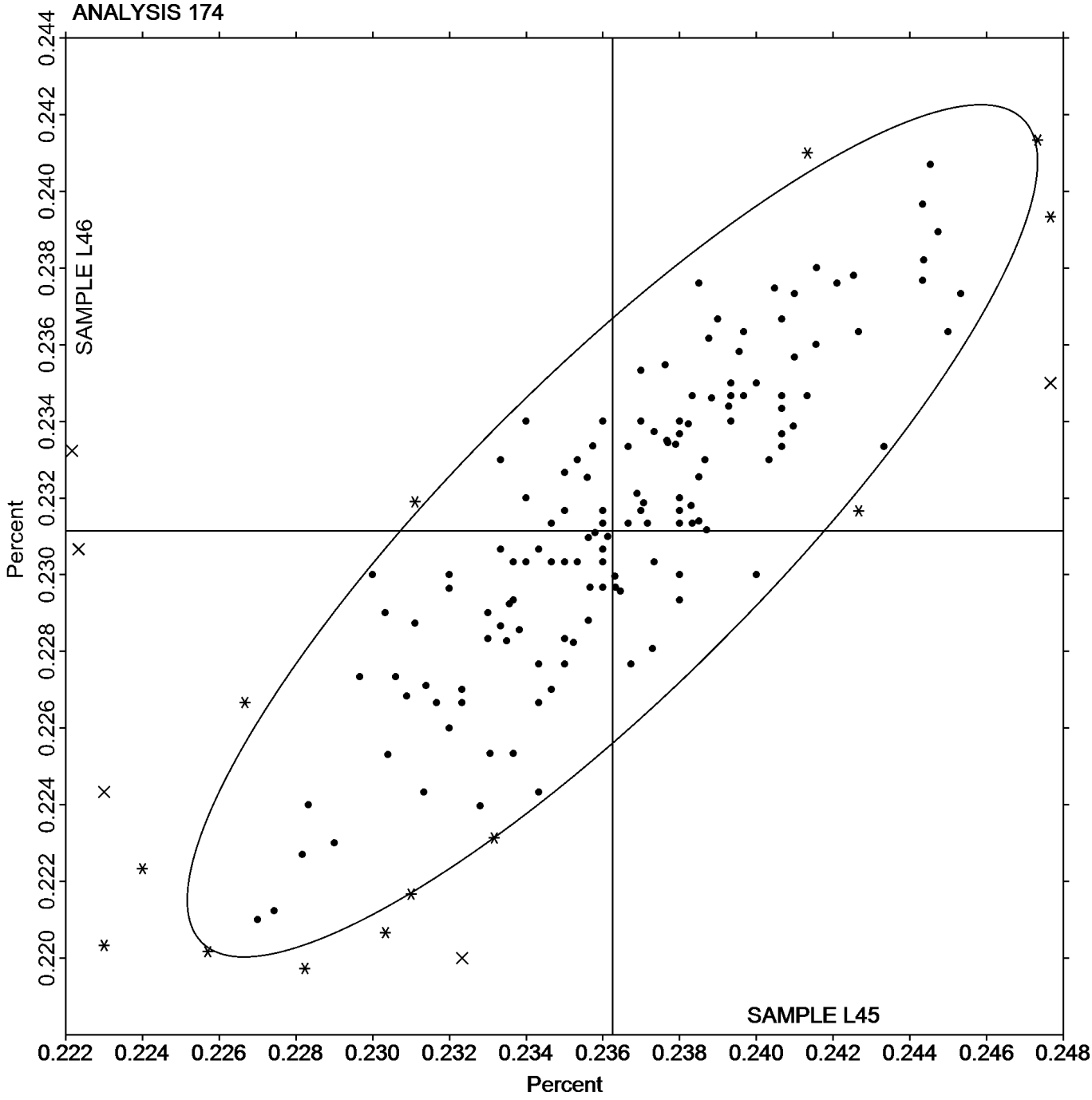
QQ2VXW (X) - Data for both samples are low. Possible Systematic Error.

QVG3LW (X) - Data for both samples are high. Inconsistent within the determinations of sample L46.

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

Y9UBUE (X) - Data for both samples are high. Possible Systematic Error.

SAMPLE L45	SAMPLE L46
0.2362 Percent	0.2311 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.0200	0.0003	0.24	0.0280	0.0006	0.49	OE
2CKB2K		0.0196	-0.0001	-0.11	0.0271	-0.0003	-0.21	IC
2L9AGJ	X	0.0237	0.0040	3.20	0.0310	0.0036	2.90	OE
2PVUN9		0.0195	-0.0003	-0.21	0.0270	-0.0004	-0.31	XX
2UMWUT		0.0204	0.0007	0.53	0.0285	0.0011	0.92	OE
2XM8N9		0.0193	-0.0004	-0.36	0.0271	-0.0003	-0.23	OE
33DXFA		0.0181	-0.0016	-1.33	0.0262	-0.0012	-0.96	OE
366YJC		0.0204	0.0007	0.59	0.0280	0.0006	0.49	OE
3GXENF		0.0192	-0.0005	-0.41	0.0273	-0.0001	-0.07	OE
3MJ9MY		0.0205	0.0008	0.61	0.0276	0.0002	0.20	OE
3PQWNW		0.0195	-0.0002	-0.14	0.0283	0.0009	0.70	OE
42G2E9		0.0199	0.0002	0.13	0.0274	0.0000	-0.02	OE
4FGKDK		0.0219	0.0022	1.77	0.0292	0.0018	1.43	OE
4QWGAC		0.0197	0.0000	-0.03	0.0277	0.0003	0.22	OE
4UWNV9	X	0.0240	0.0043	3.47	0.0310	0.0036	2.90	OE
4VC8F7		0.0203	0.0006	0.51	0.0273	-0.0001	-0.05	DR
4Y9T8A		0.0200	0.0003	0.24	0.0280	0.0006	0.49	OE
64J9A7		0.0203	0.0006	0.51	0.0285	0.0011	0.87	OE
6EJYTT		0.0200	0.0003	0.24	0.0283	0.0009	0.76	OE
6H3NJW		0.0197	0.0000	0.02	0.0273	-0.0001	-0.10	IC
6JB3MW		0.0190	-0.0007	-0.57	0.0257	-0.0017	-1.39	OE
6L3YMW	*	0.0230	0.0033	2.66	0.0310	0.0036	2.90	OE
6MU33C		0.0195	-0.0002	-0.17	0.0267	-0.0007	-0.53	OE
6RM3HT		0.0196	-0.0001	-0.06	0.0277	0.0003	0.28	OE
6WJNAV	X	0.0160	-0.0037	-3.00	0.0280	0.0006	0.49	XX
772KT9		0.0206	0.0009	0.72	0.0280	0.0006	0.49	OE
77H49Y		0.0200	0.0003	0.24	0.0287	0.0013	1.03	GD
797BW3		0.0202	0.0005	0.40	0.0272	-0.0002	-0.13	OE
79PDEN		0.0198	0.0001	0.05	0.0279	0.0005	0.42	OE
7CCTZ6		0.0200	0.0003	0.24	0.0273	-0.0001	-0.05	OE
7D6R8B		0.0190	-0.0007	-0.57	0.0267	-0.0007	-0.56	OE
7NNXFL		0.0207	0.0010	0.77	0.0286	0.0012	1.00	OE
7R4TNH		0.0208	0.0011	0.91	0.0282	0.0008	0.65	OE
7TEC38		0.0200	0.0003	0.24	0.0283	0.0009	0.76	OE
7VGFG3		0.0215	0.0018	1.48	0.0291	0.0017	1.40	OE
7WEL23	X	0.0240	0.0043	3.47	0.0343	0.0069	5.59	XX
827DM6	X	0.0147	-0.0050	-4.07	0.0227	-0.0047	-3.80	OE
88C2CC		0.0189	-0.0008	-0.65	0.0257	-0.0017	-1.39	OE
8BTAN7		0.0194	-0.0003	-0.25	0.0272	-0.0002	-0.15	IC
8BWW6J		0.0223	0.0026	2.12	0.0303	0.0029	2.37	GD
8PNVQR		0.0209	0.0011	0.92	0.0280	0.0006	0.47	OE
8ZBRVY	*	0.0188	-0.0009	-0.76	0.0249	-0.0025	-2.03	OE
964CE9		0.0191	-0.0006	-0.46	0.0273	-0.0001	-0.10	OE
98LF37	X	0.0188	-0.0009	-0.71	0.0364	0.0090	7.22	IC
9AUQYA		0.0188	-0.0009	-0.75	0.0265	-0.0009	-0.70	OE
9E92GJ		0.0190	-0.0007	-0.57	0.0270	-0.0004	-0.31	XX
9EAYM9		0.0187	-0.0010	-0.81	0.0265	-0.0009	-0.74	IC

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9L8QRW		0.0183	-0.0014	-1.16	0.0253	-0.0021	-1.68	OE
9L9M3R	*	0.0196	-0.0001	-0.09	0.0290	0.0016	1.29	OE
9MGUE7		0.0176	-0.0021	-1.73	0.0247	-0.0027	-2.14	OE
9RCKRJ		0.0189	-0.0008	-0.68	0.0266	-0.0008	-0.66	GD
9WP8NA		0.0191	-0.0006	-0.46	0.0266	-0.0008	-0.64	OE
9ZR749		0.0200	0.0003	0.26	0.0277	0.0003	0.28	OE
A3ALY8		0.0203	0.0006	0.51	0.0277	0.0003	0.22	OE
A4MEUA		0.0201	0.0004	0.32	0.0274	0.0000	0.03	OE
A6YBYD		0.0193	-0.0004	-0.33	0.0271	-0.0003	-0.23	OE
AJYXCN		0.0213	0.0016	1.31	0.0290	0.0016	1.29	OE
AWNP76		0.0197	0.0000	0.02	0.0273	-0.0001	-0.05	OE
AWPMFZ		0.0193	-0.0004	-0.30	0.0270	-0.0004	-0.31	OE
AXYQWH		0.0215	0.0018	1.48	0.0292	0.0018	1.43	OE
B38BQW		0.0197	0.0000	-0.03	0.0269	-0.0005	-0.40	OE
B6FQRL		0.0203	0.0006	0.51	0.0288	0.0014	1.16	OE
B8JHR2		0.0182	-0.0015	-1.22	0.0262	-0.0012	-0.96	XX
B9BJTH	*	0.0161	-0.0036	-2.91	0.0243	-0.0031	-2.49	OE
BEY7GW	X	0.0160	-0.0037	-3.00	0.0227	-0.0047	-3.80	XX
BPK6NE		0.0200	0.0003	0.24	0.0280	0.0006	0.49	OE
BQRPXM	*	0.0196	-0.0001	-0.06	0.0301	0.0027	2.15	OE
BVP4R4		0.0202	0.0005	0.40	0.0274	0.0000	-0.02	OE
BZ6CF4		0.0207	0.0010	0.77	0.0273	-0.0001	-0.05	OE
CJ7WK3	*	0.0230	0.0033	2.66	0.0290	0.0016	1.29	OE
CNKR3K		0.0198	0.0000	0.04	0.0275	0.0001	0.07	XX
CR4QHZ		0.0213	0.0016	1.29	0.0286	0.0012	0.95	OE
CT3N99	*	0.0160	-0.0037	-3.00	0.0240	-0.0034	-2.73	OE
CTDT7K		0.0203	0.0006	0.48	0.0281	0.0007	0.54	OE
D8DPH6		0.0210	0.0013	1.04	0.0280	0.0006	0.49	GD
D8DUK8		0.0199	0.0002	0.18	0.0278	0.0004	0.36	OE
DECACZ		0.0200	0.0003	0.21	0.0273	-0.0001	-0.07	IC
DJ6JEL		0.0202	0.0005	0.40	0.0286	0.0012	1.00	OE
DKEJJT		0.0220	0.0023	1.85	0.0297	0.0023	1.83	OE
DPADGU		0.0187	-0.0010	-0.84	0.0261	-0.0013	-1.01	IC
DZPADK	*	0.0233	0.0036	2.93	0.0310	0.0036	2.90	OE
DZQ2G8		0.0190	-0.0007	-0.57	0.0267	-0.0007	-0.58	OE
E63ACX	X	0.0223	0.0026	2.12	0.0320	0.0046	3.71	GD
EKTCNU	X	0.0257	0.0060	4.81	0.0327	0.0053	4.27	GD
F4PY66		0.0199	0.0002	0.13	0.0280	0.0006	0.52	OE
F6ZW7F		0.0210	0.0013	1.04	0.0290	0.0016	1.29	DR
G4FMQK		0.0184	-0.0013	-1.03	0.0254	-0.0020	-1.63	XX
G8HGTV		0.0194	-0.0003	-0.22	0.0265	-0.0009	-0.69	OE
GBHQP4		0.0191	-0.0006	-0.52	0.0270	-0.0004	-0.31	OE
GDLKC3		0.0184	-0.0013	-1.06	0.0262	-0.0012	-0.99	IC
GMAGD4		0.0199	0.0002	0.13	0.0277	0.0003	0.25	WD
GNMTEU		0.0197	0.0000	-0.03	0.0282	0.0008	0.63	OE
GQXN38		0.0196	-0.0001	-0.09	0.0277	0.0003	0.25	OE
GRPN24		0.0194	-0.0003	-0.28	0.0267	-0.0007	-0.56	IC

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GV3UD4		0.0180	-0.0017	-1.38	0.0270	-0.0004	-0.31	GD
GV7CF9	*	0.0197	0.0000	-0.03	0.0253	-0.0021	-1.66	OE
HM9X3Y	*	0.0199	0.0002	0.18	0.0261	-0.0013	-1.04	OE
HQP97H		0.0201	0.0004	0.33	0.0274	0.0000	-0.02	OE
JKJT87		0.0180	-0.0017	-1.38	0.0257	-0.0017	-1.39	OE
JMMR3M	X	0.0281	0.0084	6.75	0.0344	0.0070	5.67	OE
JPEM22		0.0197	0.0000	0.02	0.0272	-0.0002	-0.18	GD
JTRL6V		0.0190	-0.0007	-0.57	0.0270	-0.0004	-0.31	OE
KENGFU		0.0202	0.0005	0.37	0.0279	0.0005	0.38	OE
KMHN2T		0.0208	0.0011	0.86	0.0272	-0.0002	-0.18	OE
KW7HFB		0.0193	-0.0004	-0.30	0.0273	-0.0001	-0.05	XX
KW8KRN		0.0187	-0.0010	-0.84	0.0266	-0.0008	-0.66	IC
KYWQCK	*	0.0223	0.0026	2.12	0.0261	-0.0013	-1.07	OE
LFCHQB	X	0.0190	-0.0007	-0.57	0.0300	0.0026	2.10	OE
LRTW86		0.0200	0.0003	0.24	0.0280	0.0006	0.49	OE
LWK9TF		0.0186	-0.0011	-0.92	0.0258	-0.0016	-1.31	OE
LZ2TQ2		0.0180	-0.0017	-1.38	0.0263	-0.0011	-0.85	OE
MHG64E		0.0201	0.0004	0.32	0.0283	0.0009	0.73	OE
MQVBJH		0.0208	0.0011	0.91	0.0288	0.0014	1.11	OE
MR64UK	X	0.0130	-0.0067	-5.42	0.0243	-0.0031	-2.46	OE
MVAMY8		0.0227	0.0030	2.39	0.0304	0.0030	2.45	OE
MVLQ4J		0.0198	0.0001	0.07	0.0274	0.0000	0.03	OE
MXDJDU		0.0180	-0.0017	-1.38	0.0260	-0.0014	-1.12	IC
N3PK7R		0.0180	-0.0017	-1.35	0.0256	-0.0018	-1.44	OE
NEU3F7		0.0208	0.0011	0.88	0.0290	0.0016	1.29	OE
NN6ACA	*	0.0190	-0.0007	-0.57	0.0287	0.0013	1.03	OE
NYJJQZ		0.0197	0.0000	-0.03	0.0273	-0.0001	-0.10	IC
P9K6LR		0.0183	-0.0014	-1.11	0.0263	-0.0011	-0.85	OE
PQ6YT9	*	0.0187	-0.0010	-0.84	0.0293	0.0019	1.56	OE
PZQYQ7		0.0175	-0.0022	-1.81	0.0247	-0.0027	-2.19	AE
QHPEQW		0.0199	0.0002	0.13	0.0271	-0.0003	-0.23	IC
QP4J89		0.0193	-0.0004	-0.30	0.0270	-0.0004	-0.31	GD
QQ2VXW	X	0.00960	-0.0101	-8.17	0.0121	-0.0153	-12.34	OE
QQL9VV		0.0192	-0.0005	-0.40	0.0272	-0.0002	-0.17	OE
QVG3LW		0.0198	0.0001	0.07	0.0268	-0.0006	-0.45	IC
QWPHQG		0.0186	-0.0011	-0.92	0.0266	-0.0008	-0.61	OE
R3P4CP	X	0.0170	-0.0027	-2.19	0.0230	-0.0044	-3.53	OE
RGAGR6		0.0205	0.0008	0.66	0.0279	0.0005	0.41	OE
RW9FTU		0.0194	-0.0003	-0.25	0.0272	-0.0002	-0.18	OE
T6FHKZ		0.0200	0.0003	0.24	0.0270	-0.0004	-0.31	OE
TBHVXN	X	0.0237	0.0040	3.20	0.0230	-0.0044	-3.53	OE
TEG8TN		0.0190	-0.0007	-0.57	0.0263	-0.0011	-0.85	IC
TLHFBM	*	0.0200	0.0003	0.24	0.0300	0.0026	2.10	OE
TR8UAG		0.0200	0.0003	0.24	0.0280	0.0006	0.49	OE
TTZTJ9		0.0200	0.0003	0.21	0.0276	0.0002	0.20	OE
TVPUPW	X	0.0250	0.0053	4.28	0.0313	0.0039	3.17	XX
TZH7FM		0.0223	0.0026	2.09	0.0290	0.0016	1.29	OE

Fasteners and Metals Interlaboratory Testing Program

Analysis 175

Carbon & Low Alloy Steel, Element #6

MOLYBDENUM (Mo)

Cycle 119
3rd Qtr 2017

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
U33ATQ		0.0200	0.0003	0.24	0.0277	0.0003	0.22	IC
U6NBHJ		0.0200	0.0003	0.24	0.0280	0.0006	0.49	OE
UAH86P	X	0.0237	0.0040	3.20	0.0320	0.0046	3.74	OE
UQQXGH		0.0195	-0.0002	-0.13	0.0277	0.0004	0.29	OE
UYMUAY		0.0189	-0.0008	-0.68	0.0259	-0.0015	-1.20	OE
VBANYX		0.0190	-0.0007	-0.57	0.0267	-0.0007	-0.58	OE
VGFXJZ		0.0231	0.0034	2.74	0.0301	0.0027	2.18	AA
VJNEB4		0.0180	-0.0017	-1.35	0.0256	-0.0018	-1.41	OE
VVE9LC		0.0200	0.0003	0.24	0.0280	0.0006	0.49	OE
WE98M6		0.0196	-0.0001	-0.09	0.0272	-0.0002	-0.13	OE
WHA3KY		0.0174	-0.0023	-1.86	0.0262	-0.0012	-0.96	OE
WKCZVR		0.0192	-0.0005	-0.44	0.0268	-0.0006	-0.48	OE
WNFYYK		0.0195	-0.0002	-0.17	0.0261	-0.0013	-1.07	XX
WU4LWJ		0.0212	0.0015	1.21	0.0281	0.0007	0.60	OE
WZ443B		0.0177	-0.0020	-1.65	0.0255	-0.0019	-1.52	OE
WZNHUU		0.0202	0.0005	0.40	0.0284	0.0010	0.81	DR
X86DBN		0.0196	-0.0001	-0.11	0.0275	0.0001	0.06	OE
XCHE4K	*	0.0229	0.0032	2.61	0.0309	0.0035	2.80	OE
XFW3MH		0.0189	-0.0008	-0.63	0.0273	-0.0001	-0.05	OE
Y29FTB	X	0.0244	0.0047	3.82	0.0319	0.0045	3.60	OE
Y9UBUE		0.0223	0.0026	2.12	0.0300	0.0026	2.10	GD
YFWDZZ		0.0170	-0.0027	-2.19	0.0260	-0.0014	-1.12	OE
YL2CBQ		0.0193	-0.0004	-0.30	0.0263	-0.0011	-0.85	XX
YN8JW4		0.0193	-0.0004	-0.35	0.0267	-0.0007	-0.53	OE
YZY4EF		0.0204	0.0007	0.59	0.0279	0.0005	0.38	OE
Z32HCH		0.0199	0.0002	0.16	0.0280	0.0006	0.49	DR
Z8VFUA		0.0200	0.0003	0.26	0.0277	0.0003	0.22	OE
Z9RVCK		0.0188	-0.0009	-0.73	0.0271	-0.0003	-0.26	OE
ZA4UYU	*	0.0189	-0.0008	-0.63	0.0253	-0.0021	-1.68	AE
ZAZA8K		0.0191	-0.0006	-0.46	0.0267	-0.0007	-0.58	WD
ZLHLWP		0.0186	-0.0011	-0.92	0.0270	-0.0004	-0.29	OE
ZRJZHQ		0.0190	-0.0007	-0.57	0.0270	-0.0004	-0.31	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.0197	Percent	0.0274	Percent
Stnd Dev Btwn Labs	0.0012	Percent	0.0012	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 146 of 173 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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #175

2L9AGJ (X) - Data for both samples are high. Possible Systematic Error.

4UWNV9 (X) - Data for both samples are high. Possible Systematic Error.

6WJNAV (X) - Data for sample L45 are low.

7WEL23 (X) - Data for both samples are high.

827DM6 (X) - Data for both samples are low. Possible Systematic Error.

98LF37 (X) - Data for sample L46 are high. Inconsistent within the determinations of both samples.

BEY7GW (X) - Data for both samples are low. Possible Systematic Error.

E63ACX (X) - Data for sample L46 are high. Inconsistent within the determinations of both samples.

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

JMMR3M (X) - Data for both samples are high. Possible Systematic Error.

LFCHQB (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L45.

MR64UK (X) - Data for sample L45 are low.

QQ2VXW (X) - Data for both samples are low. Inconsistent within the determinations of sample L45.

R3P4CP (X) - Data for sample L46 are low.

TBHVXN (X) - Data for sample L45 are high and data for sample L46 are low. Inconsistent in testing between samples.

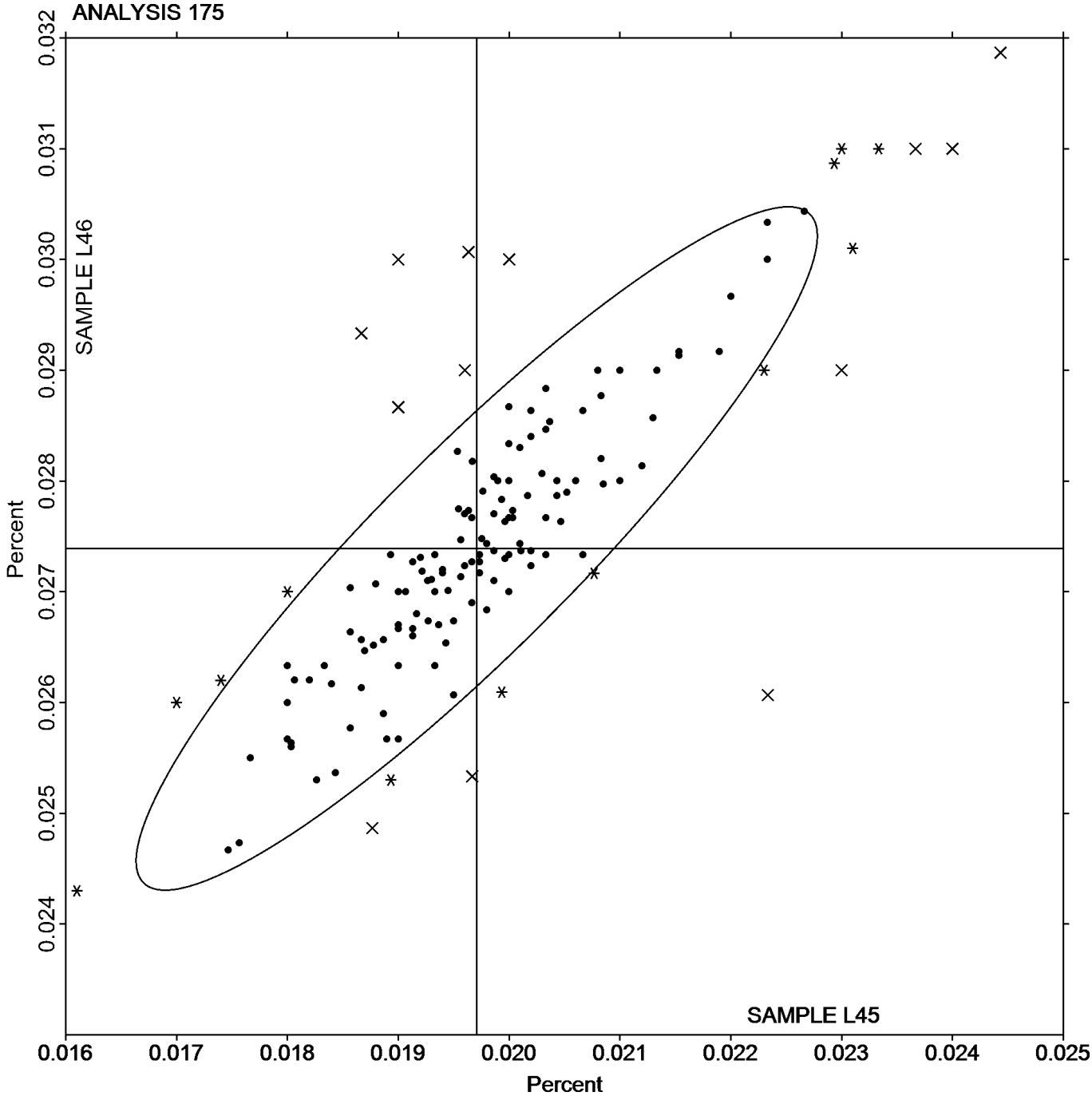
TVPUPW (X) - Data for both samples are high. Possible Systematic Error.

UAH86P (X) - Data for both samples are high. Possible Systematic Error.

Y29FTB (X) - Data for both samples are high. Possible Systematic Error.

SAMPLE L45
0.0197 Percent

SAMPLE L46
0.0274 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.0570	-0.0029	-1.19	0.0890	-0.0032	-1.03	OE
2CKB2K		0.0610	0.0011	0.48	0.0937	0.0014	0.46	IC
2L9AGJ		0.0620	0.0021	0.89	0.0947	0.0024	0.78	OE
2PVUN9		0.0622	0.0023	0.96	0.0944	0.0021	0.68	XX
2UMWUT		0.0613	0.0015	0.61	0.0943	0.0021	0.67	OE
2XM8N9		0.0602	0.0004	0.16	0.0926	0.0004	0.12	OE
33DXFA		0.0633	0.0035	1.45	0.0983	0.0061	1.94	OE
366YJC		0.0578	-0.0020	-0.84	0.0869	-0.0053	-1.68	OE
3GXENF		0.0592	-0.0007	-0.29	0.0919	-0.0004	-0.11	OE
3MJ9MY		0.0570	-0.0029	-1.19	0.0890	-0.0032	-1.03	OE
3PQWNW		0.0580	-0.0019	-0.78	0.0898	-0.0024	-0.76	OE
42G2E9		0.0587	-0.0012	-0.49	0.0917	-0.0006	-0.18	OE
4FGKDK		0.0634	0.0036	1.49	0.0964	0.0041	1.32	OE
4QWGAC		0.0590	-0.0009	-0.35	0.0917	-0.0006	-0.18	OE
4UWNV9		0.0547	-0.0052	-2.16	0.0883	-0.0039	-1.24	OE
4VC8F7		0.0570	-0.0029	-1.19	0.0870	-0.0052	-1.66	DR
4Y9T8A		0.0620	0.0021	0.89	0.0950	0.0028	0.88	OE
64J9A7		0.0586	-0.0013	-0.53	0.0899	-0.0023	-0.73	OE
6EJYTT		0.0577	-0.0022	-0.91	0.0883	-0.0039	-1.24	OE
6H3NJW		0.0587	-0.0012	-0.49	0.0910	-0.0012	-0.39	IC
6JB3MW	X	0.0737	0.0138	5.74	0.0970	0.0048	1.52	OE
6L3YMW		0.0590	-0.0009	-0.35	0.0900	-0.0022	-0.71	OE
6MU33C		0.0577	-0.0022	-0.91	0.0877	-0.0046	-1.45	OE
6RM3HT		0.0583	-0.0016	-0.65	0.0917	-0.0006	-0.18	OE
6WJNAV		0.0577	-0.0022	-0.91	0.0910	-0.0012	-0.39	XX
772KT9		0.0598	0.0000	-0.01	0.0893	-0.0029	-0.93	OE
77H49Y		0.0550	-0.0049	-2.02	0.0897	-0.0026	-0.81	GD
797BW3	X	0.0527	-0.0072	-2.99	0.0859	-0.0063	-2.01	OE
79PDEN		0.0594	-0.0004	-0.17	0.0905	-0.0017	-0.55	OE
7CCTZ6		0.0627	0.0028	1.17	0.0960	0.0038	1.20	OE
7D6R8B		0.0627	0.0028	1.18	0.0973	0.0051	1.62	OE
7NNXFL		0.0610	0.0011	0.48	0.0937	0.0014	0.46	OE
7R4TNH		0.0637	0.0038	1.58	0.0970	0.0048	1.52	OE
7TEC38		0.0613	0.0015	0.61	0.0953	0.0031	0.99	OE
7VGFG3		0.0621	0.0022	0.93	0.0964	0.0041	1.32	OE
7WEL23	*	0.0597	-0.0002	-0.08	0.0973	0.0051	1.62	XX
827DM6		0.0570	-0.0029	-1.19	0.0870	-0.0052	-1.66	OE
88C2CC		0.0584	-0.0015	-0.62	0.0924	0.0002	0.05	OE
8BTAN7		0.0581	-0.0018	-0.74	0.0905	-0.0018	-0.56	IC
8BWW6J	X	0.0430	-0.0169	-7.00	0.0777	-0.0146	-4.63	GD
8PNVQR		0.0628	0.0029	1.20	0.0932	0.0010	0.32	OE
8ZBRVY		0.0604	0.0005	0.23	0.0931	0.0009	0.29	OE
964CE9		0.0586	-0.0013	-0.52	0.0919	-0.0003	-0.09	OE
98LF37		0.0584	-0.0015	-0.62	0.0934	0.0011	0.36	IC
9AUQYA		0.0613	0.0014	0.60	0.0932	0.0010	0.32	OE
9E92GJ		0.0593	-0.0005	-0.22	0.0903	-0.0019	-0.60	XX
9EAYM9	X	0.0545	-0.0054	-2.22	0.0785	-0.0137	-4.36	IC

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9L8QRW		0.0616	0.0017	0.73	0.0935	0.0012	0.39	OE
9L9M3R		0.0599	0.0000	0.01	0.0896	-0.0026	-0.83	OE
9MGUE7		0.0607	0.0008	0.34	0.0927	0.0004	0.14	OE
9RCKRJ		0.0603	0.0004	0.19	0.0910	-0.0012	-0.38	OE
9WP8NA		0.0626	0.0027	1.13	0.0964	0.0042	1.34	OE
9ZR749		0.0579	-0.0019	-0.80	0.0905	-0.0017	-0.54	OE
A3ALY8	X	0.0960	0.0361	15.02	0.1533	0.0611	19.42	XX
A4MEUA		0.0560	-0.0039	-1.62	0.0872	-0.0051	-1.61	OE
A6YBYD		0.0608	0.0010	0.40	0.0934	0.0012	0.38	OE
AJYXCN		0.0610	0.0011	0.48	0.0923	0.0001	0.03	OE
AWNP76		0.0630	0.0031	1.31	0.0967	0.0044	1.41	OE
AWPMFZ		0.0633	0.0035	1.45	0.0977	0.0054	1.73	OE
AXYQWH		0.0616	0.0017	0.73	0.0937	0.0014	0.46	OE
B38BQW		0.0583	-0.0015	-0.63	0.0907	-0.0016	-0.50	OE
B6FQRL		0.0615	0.0017	0.70	0.0925	0.0003	0.10	OE
B8JHR2		0.0614	0.0015	0.64	0.0929	0.0007	0.21	OE
B9BJTH	*	0.0668	0.0069	2.89	0.1001	0.0079	2.50	OE
BEY7GW	*	0.0663	0.0065	2.69	0.1010	0.0088	2.79	XX
BPK6NE	*	0.0660	0.0061	2.55	0.0930	0.0008	0.25	OE
BQRPXM		0.0588	-0.0011	-0.45	0.0913	-0.0010	-0.31	OE
BVP4R4		0.0617	0.0018	0.75	0.0927	0.0004	0.14	OE
BZ6CF4		0.0607	0.0008	0.34	0.0923	0.0001	0.03	OE
CJ7WK3	*	0.0581	-0.0018	-0.73	0.0951	0.0029	0.91	OE
CNKR3K		0.0582	-0.0017	-0.70	0.0912	-0.0010	-0.31	XX
CR4QHZ		0.0611	0.0012	0.52	0.0938	0.0015	0.49	OE
CT3N99		0.0577	-0.0022	-0.91	0.0880	-0.0042	-1.34	OE
CTDT7K		0.0573	-0.0026	-1.06	0.0884	-0.0038	-1.22	OE
D8DPH6	X	0.5580	0.4981	206.99	0.0902	-0.0020	-0.64	GD
D8DUK8		0.0593	-0.0005	-0.22	0.0940	0.0018	0.56	OE
DECACZ		0.0610	0.0011	0.48	0.0917	-0.0006	-0.18	IC
DJ6JEL		0.0544	-0.0055	-2.27	0.0852	-0.0070	-2.22	OE
DKEJJT		0.0627	0.0028	1.17	0.0973	0.0051	1.62	OE
DPADGU		0.0595	-0.0004	-0.15	0.0943	0.0021	0.67	IC
DZPADK	X	0.0853	0.0255	10.59	0.1170	0.0248	7.87	OE
DZQ2G8		0.0603	0.0005	0.20	0.0933	0.0011	0.35	OE
E63ACX	X	0.0597	-0.0002	-0.08	0.0830	-0.0092	-2.93	GD
EKTCNU		0.0617	0.0018	0.75	0.0929	0.0007	0.21	GD
F4PY66		0.0597	-0.0002	-0.08	0.0933	0.0011	0.35	OE
F6ZW7F		0.0593	-0.0005	-0.22	0.0927	0.0004	0.14	XX
G4FMQK		0.0537	-0.0062	-2.56	0.0859	-0.0063	-2.01	XX
G8HGTV		0.0617	0.0018	0.75	0.0947	0.0024	0.78	OE
GBHQP4		0.0563	-0.0035	-1.46	0.0900	-0.0022	-0.71	OE
GDLKC3		0.0587	-0.0012	-0.49	0.0893	-0.0029	-0.92	IC
GJDRWW		0.0592	-0.0006	-0.26	0.0916	-0.0006	-0.20	WD
GMAGD4		0.0610	0.0011	0.48	0.0944	0.0021	0.68	WD
GNMTEU		0.0624	0.0026	1.07	0.0959	0.0036	1.15	OE
GQXN38		0.0599	0.0000	0.02	0.0895	-0.0027	-0.86	OE

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GRPN24		0.0603	0.0005	0.20	0.0927	0.0004	0.14	IC
GV3UD4	*	0.0570	-0.0029	-1.19	0.0940	0.0018	0.56	GD
GV7CF9	*	0.0587	-0.0012	-0.49	0.1000	0.0078	2.47	OE
HM9X3Y		0.0589	-0.0010	-0.40	0.0929	0.0007	0.22	OE
HQP97H		0.0602	0.0003	0.13	0.0930	0.0008	0.26	OE
JKJT87		0.0557	-0.0042	-1.74	0.0870	-0.0052	-1.66	OE
JMMR3M		0.0625	0.0027	1.11	0.0932	0.0010	0.32	OE
JPEM22		0.0617	0.0018	0.75	0.0950	0.0028	0.88	GD
JTRL6V		0.0620	0.0021	0.89	0.0980	0.0058	1.83	OE
KENGFU		0.0590	-0.0009	-0.35	0.0887	-0.0036	-1.13	OE
KMHN2T		0.0627	0.0028	1.17	0.0920	-0.0002	-0.07	OE
KW7HFB		0.0597	-0.0002	-0.08	0.0910	-0.0012	-0.39	XX
KW8KRN		0.0617	0.0018	0.77	0.0914	-0.0009	-0.27	IC
KYWQCK		0.0587	-0.0012	-0.48	0.0920	-0.0002	-0.07	OE
LFCHQB		0.0600	0.0001	0.06	0.0910	-0.0012	-0.39	OE
LRTW86		0.0610	0.0011	0.48	0.0930	0.0008	0.25	OE
LWK9TF	X	0.0512	-0.0087	-3.61	0.0864	-0.0058	-1.85	OE
LZ2TQ2		0.0600	0.0001	0.06	0.0933	0.0011	0.35	OE
MHG64E		0.0574	-0.0025	-1.02	0.0889	-0.0033	-1.06	OE
MQVBJH		0.0601	0.0003	0.12	0.0928	0.0006	0.18	OE
MR64UK	X	0.0750	0.0151	6.29	0.1090	0.0168	5.33	OE
MVAMY8		0.0576	-0.0023	-0.94	0.0909	-0.0014	-0.43	OE
MVLQ4J		0.0629	0.0030	1.25	0.0965	0.0043	1.37	OE
MXDJDU		0.0587	-0.0012	-0.49	0.0890	-0.0032	-1.03	IC
N3PK7R		0.0600	0.0001	0.06	0.0927	0.0004	0.14	OE
NEU3F7		0.0608	0.0009	0.38	0.0937	0.0014	0.46	OE
NN6ACA		0.0577	-0.0022	-0.91	0.0893	-0.0029	-0.92	OE
NYJJQZ		0.0603	0.0005	0.20	0.0923	0.0001	0.03	IC
P9K6LR		0.0617	0.0018	0.75	0.0953	0.0031	0.99	OE
PQ6YT9		0.0590	-0.0009	-0.35	0.0940	0.0018	0.56	OE
PZQYQ7		0.0538	-0.0060	-2.50	0.0858	-0.0065	-2.05	AE
QHPEQW		0.0580	-0.0019	-0.78	0.0901	-0.0021	-0.68	IC
QP4J89		0.0577	-0.0022	-0.91	0.0917	-0.0006	-0.18	GD
QQ2VXW		0.0595	-0.0004	-0.15	0.0886	-0.0036	-1.15	OE
QQL9VV		0.0598	0.0000	-0.02	0.0914	-0.0008	-0.26	OE
QVG3LW		0.0580	-0.0019	-0.77	0.0907	-0.0016	-0.50	IC
QWPHQG		0.0591	-0.0008	-0.31	0.0921	-0.0002	-0.05	OE
R3P4CP		0.0580	-0.0019	-0.77	0.0863	-0.0059	-1.87	OE
RGAGR6		0.0588	-0.0011	-0.45	0.0912	-0.0010	-0.32	OE
RW9FTU		0.0580	-0.0019	-0.77	0.0893	-0.0029	-0.93	OE
T6FHKZ		0.0600	0.0001	0.06	0.0930	0.0008	0.25	OE
TBHVXN		0.0643	0.0045	1.86	0.0983	0.0061	1.94	OE
TEG8TN		0.0577	-0.0022	-0.91	0.0883	-0.0039	-1.24	IC
TLHFBM		0.0600	0.0001	0.06	0.0900	-0.0022	-0.71	OE
TR8UAG		0.0610	0.0011	0.48	0.0930	0.0008	0.25	OE
TTZTJ9		0.0590	-0.0009	-0.35	0.0897	-0.0026	-0.81	OE
TVPUPW		0.0577	-0.0022	-0.91	0.0890	-0.0032	-1.03	XX

Fasteners and Metals Interlaboratory Testing Program

Analysis 176

Carbon & Low Alloy Steel, Element #7

NICKEL (Ni)

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
TZH7FM	*	0.0636	0.0038	1.57	0.0886	-0.0036	-1.14	OE
U33ATQ		0.0577	-0.0022	-0.91	0.0907	-0.0016	-0.50	IC
U6NBHJ		0.0597	-0.0002	-0.08	0.0930	0.0008	0.25	OE
UAH86P		0.0560	-0.0039	-1.60	0.0873	-0.0049	-1.56	OE
UQQXGH		0.0595	-0.0004	-0.16	0.0918	-0.0004	-0.14	OE
UYMUAY		0.0642	0.0043	1.81	0.0971	0.0049	1.56	OE
VBANYX		0.0600	0.0001	0.06	0.0907	-0.0016	-0.50	OE
VGFXJZ	X	0.0577	-0.0022	-0.91	0.0853	-0.0070	-2.21	AA
VJNEB4		0.0582	-0.0017	-0.70	0.0922	0.0000	-0.01	OE
VVE9LC		0.0600	0.0001	0.06	0.0933	0.0011	0.35	OE
WE98M6		0.0567	-0.0032	-1.32	0.0897	-0.0026	-0.81	OE
WHA3KY		0.0612	0.0013	0.56	0.0945	0.0023	0.72	OE
WKCZVR		0.0597	-0.0002	-0.08	0.0917	-0.0006	-0.18	OE
WNFYYK		0.0583	-0.0016	-0.65	0.0906	-0.0016	-0.52	XX
WU4LWJ		0.0652	0.0053	2.21	0.0986	0.0064	2.03	OE
WZ443B		0.0617	0.0018	0.75	0.0943	0.0021	0.67	OE
WZNHUU		0.0606	0.0007	0.30	0.0952	0.0029	0.93	DR
X86DBN		0.0563	-0.0035	-1.46	0.0877	-0.0046	-1.45	OE
XCHE4K	X	0.0527	-0.0072	-2.99	0.0873	-0.0049	-1.56	OE
XFW3MH		0.0623	0.0025	1.03	0.0928	0.0006	0.19	OE
Y29FTB		0.0630	0.0031	1.29	0.0967	0.0045	1.43	OE
Y9UBUE	X	0.0817	0.0218	9.06	0.0887	-0.0036	-1.13	GD
YFWDZZ		0.0633	0.0035	1.45	0.0980	0.0058	1.83	OE
YL2CBQ		0.0607	0.0008	0.34	0.0933	0.0011	0.35	XX
YN8JW4		0.0651	0.0053	2.19	0.0992	0.0070	2.22	OE
YZY4EF		0.0625	0.0027	1.11	0.0966	0.0043	1.38	OE
Z32HCH		0.0620	0.0021	0.89	0.0939	0.0017	0.53	DR
Z8VFUA		0.0630	0.0031	1.31	0.0967	0.0045	1.43	OE
Z9RVCK		0.0588	-0.0011	-0.45	0.0942	0.0020	0.64	OE
ZA4UYU		0.0543	-0.0056	-2.31	0.0860	-0.0063	-1.99	AE
ZAZA8K		0.0603	0.0005	0.20	0.0930	0.0008	0.25	WD
ZLHLWP		0.0572	-0.0027	-1.12	0.0888	-0.0034	-1.08	OE
ZRJZHQ		0.0573	-0.0025	-1.05	0.0893	-0.0029	-0.92	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.0599	Percent	0.0922	Percent
Stnd Dev Btwn Labs	0.0024	Percent	0.0031	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 155 of 174 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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #176

6JB3MW (X) - Data for sample L45 are high. Inconsistent within the determinations of sample L45.

797BW3 (X) - Data for sample L45 are low.

8BWW6J (X) - Data for both samples are low.

9EAYM9 (X) - Data for sample L46 are low. Inconsistent within the determinations of sample L45.

A3ALY8 (X) - Data for both samples are extremely high.

D8DPH6 (X) - Data for sample L45 are extremely high and appear to be off by a factor of ten.

DZPADK (X) - Data for both samples are high. Inconsistent within the determinations of sample L45.

E63ACX (X) - Data for sample L46 are low. Inconsistent within the determinations of both samples.

LWK9TF (X) - Data for sample L45 are low.

MR64UK (X) - Data for both samples are high. Inconsistent within the determinations of sample L45.

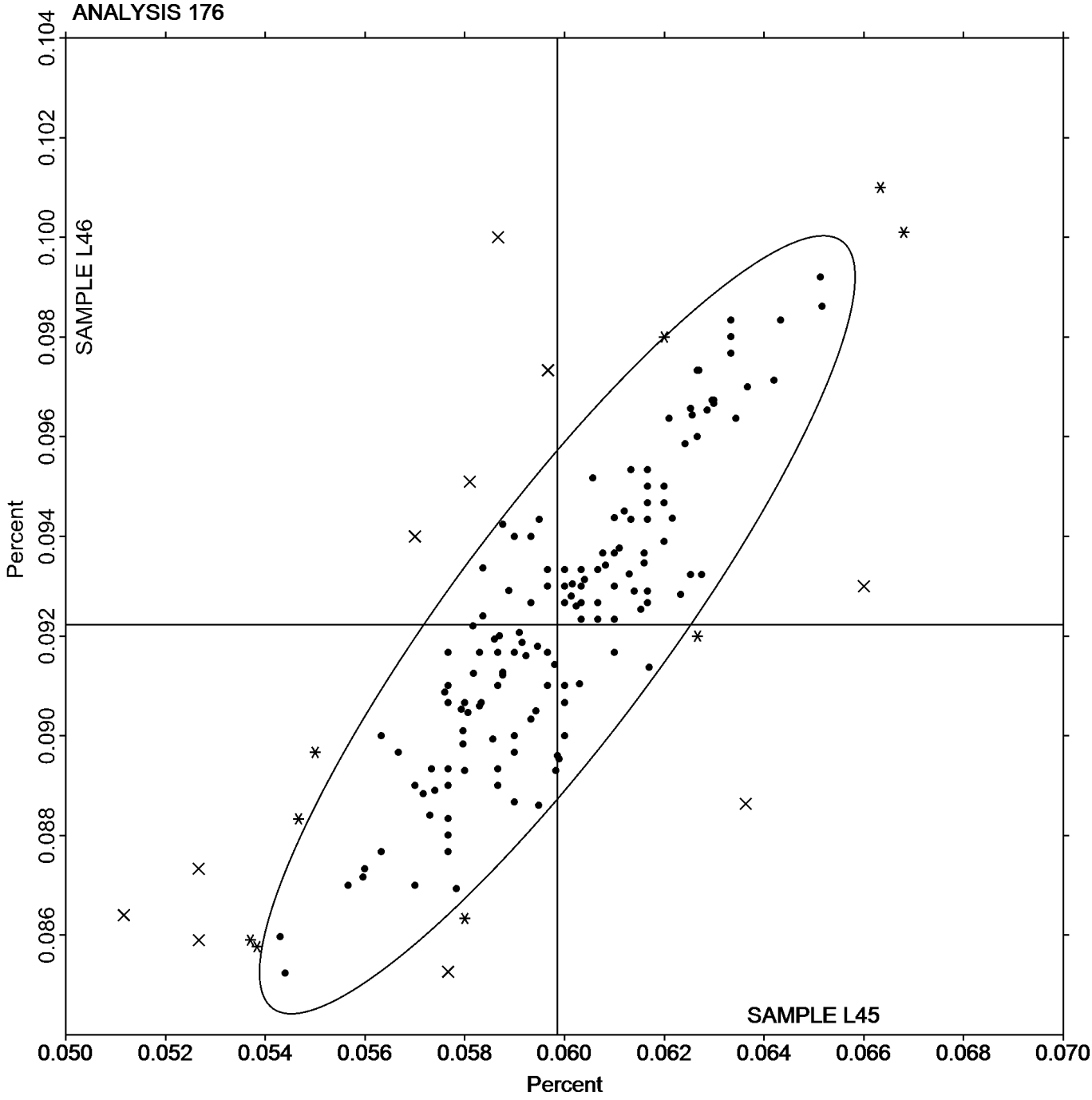
VGFXJZ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L45.

XCHE4K (X) - Data for sample L45 are low.

Y9UBUE (X) - Data for sample L45 are high. Inconsistent within the determinations of both samples.

SAMPLE L45
0.0599 Percent

SAMPLE L46
0.0922 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.1093	0.0017	0.63	0.1947	0.0029	0.71	OE
2CKB2K		0.1073	-0.0003	-0.09	0.1937	0.0019	0.46	IC
2L9AGJ		0.1060	-0.0016	-0.57	0.1877	-0.0041	-1.02	OE
2PVUN9		0.1070	-0.0006	-0.21	0.1905	-0.0013	-0.33	XX
2UMWUT		0.1130	0.0054	1.95	0.1953	0.0035	0.87	OE
2XM8N9		0.1101	0.0025	0.90	0.1939	0.0021	0.52	OE
33DXFA		0.1093	0.0017	0.63	0.1917	-0.0001	-0.03	OE
366YJC		0.1050	-0.0026	-0.93	0.1863	-0.0055	-1.35	OE
3GXENF		0.1065	-0.0011	-0.38	0.1892	-0.0026	-0.63	OE
3MJ9MY		0.1080	0.0004	0.15	0.1920	0.0002	0.05	OE
3PQWNW		0.1087	0.0011	0.39	0.1960	0.0042	1.04	OE
42G2E9		0.1070	-0.0006	-0.21	0.1880	-0.0038	-0.94	OE
4FGKDK		0.1063	-0.0013	-0.46	0.1948	0.0030	0.73	OE
4QWGAC		0.1064	-0.0012	-0.43	0.1900	-0.0018	-0.44	OE
4UWNV9		0.1067	-0.0009	-0.33	0.1920	0.0002	0.05	OE
4VC8F7		0.1120	0.0044	1.59	0.1987	0.0069	1.69	DR
4Y9T8A		0.1083	0.0007	0.27	0.1903	-0.0015	-0.36	OE
64J9A7		0.1064	-0.0012	-0.42	0.1881	-0.0037	-0.90	OE
6EJYTT		0.1090	0.0014	0.51	0.1950	0.0032	0.79	OE
6H3NJW		0.1083	0.0007	0.27	0.1943	0.0025	0.62	IC
6JB3MW	X	0.1347	0.0271	9.74	0.1947	0.0029	0.71	OE
6L3YMW		0.1130	0.0054	1.95	0.1980	0.0062	1.53	OE
6MU33C		0.1050	-0.0026	-0.93	0.1850	-0.0068	-1.68	OE
6RM3HT		0.1027	-0.0049	-1.76	0.1855	-0.0063	-1.56	OE
6WJNAV		0.1020	-0.0056	-2.01	0.1857	-0.0061	-1.51	XX
772KT9		0.1050	-0.0026	-0.93	0.1961	0.0043	1.07	OE
77H49Y	X	0.1187	0.0111	3.99	0.2137	0.0219	5.39	GD
797BW3		0.1077	0.0001	0.04	0.1864	-0.0054	-1.34	OE
79PDEN		0.1059	-0.0017	-0.62	0.1866	-0.0052	-1.29	OE
7CCTZ6		0.1050	-0.0026	-0.93	0.1863	-0.0055	-1.35	OE
7D6R8B		0.1075	-0.0001	-0.03	0.1919	0.0001	0.02	OE
7NNXFL		0.1090	0.0014	0.51	0.1927	0.0009	0.21	OE
7R4TNH		0.1103	0.0027	0.99	0.1963	0.0045	1.12	OE
7TEC38		0.1050	-0.0026	-0.93	0.1883	-0.0035	-0.85	OE
7VGFG3		0.1097	0.0021	0.76	0.1906	-0.0012	-0.30	OE
7WEL23	X	0.1070	-0.0006	-0.21	0.1283	-0.0635	-15.64	XX
827DM6	X	0.1167	0.0091	3.27	0.1900	-0.0018	-0.44	OE
88C2CC		0.1066	-0.0010	-0.37	0.1928	0.0010	0.25	OE
8BTAN7		0.1053	-0.0023	-0.81	0.1904	-0.0014	-0.34	IC
8BWW6J	X	0.1170	0.0094	3.39	0.2117	0.0199	4.90	GD
8PNVQR		0.1100	0.0024	0.88	0.1902	-0.0016	-0.39	OE
8ZBRVY		0.1124	0.0048	1.74	0.2021	0.0103	2.54	OE
964CE9		0.1021	-0.0055	-1.98	0.1905	-0.0013	-0.32	OE
98LF37		0.1078	0.0002	0.06	0.1945	0.0027	0.67	IC
9AUQYA		0.1059	-0.0016	-0.59	0.1893	-0.0025	-0.61	OE
9E92GJ		0.1067	-0.0009	-0.33	0.1903	-0.0015	-0.36	XX
9EAYM9	X	0.0939	-0.0137	-4.94	0.1647	-0.0271	-6.68	IC

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9L8QRW	X	0.0988	-0.0088	-3.16	0.1913	-0.0005	-0.11	OE
9L9M3R		0.1097	0.0021	0.75	0.1973	0.0055	1.36	OE
9MGUE7	*	0.1030	-0.0046	-1.65	0.1963	0.0045	1.12	OE
9RCKRJ		0.1088	0.0012	0.44	0.1927	0.0009	0.21	OE
9WP8NA		0.1071	-0.0005	-0.16	0.1918	0.0000	0.00	OE
9ZR749		0.1022	-0.0054	-1.95	0.1859	-0.0059	-1.45	OE
A3ALY8	X	0.1360	0.0284	10.22	0.2557	0.0639	15.74	OE
A4MEUA		0.1080	0.0004	0.15	0.1907	-0.0011	-0.28	OE
A6YBYD		0.1034	-0.0042	-1.51	0.1888	-0.0030	-0.75	OE
AJYXCN	*	0.1000	-0.0076	-2.73	0.2000	0.0082	2.02	OE
AWNP76		0.1070	-0.0006	-0.21	0.1903	-0.0015	-0.36	OE
AWPMFZ		0.1060	-0.0016	-0.57	0.1887	-0.0031	-0.77	OE
AXYQWH		0.1090	0.0014	0.51	0.1955	0.0037	0.92	OE
B38BQW		0.1023	-0.0053	-1.89	0.1837	-0.0081	-2.00	OE
B6FQRL		0.1057	-0.0019	-0.69	0.1857	-0.0061	-1.51	OE
B8JHR2		0.1052	-0.0024	-0.86	0.1886	-0.0032	-0.79	OE
B9BJTH		0.1057	-0.0019	-0.69	0.1891	-0.0027	-0.67	OE
BEY7GW		0.1100	0.0024	0.87	0.1920	0.0002	0.05	XX
BPK6NE		0.1080	0.0004	0.15	0.1967	0.0049	1.20	OE
BQRPXM		0.1041	-0.0035	-1.24	0.1921	0.0003	0.07	OE
BVP4R4		0.1080	0.0004	0.15	0.1933	0.0015	0.38	OE
BZ6CF4		0.1063	-0.0013	-0.45	0.1927	0.0009	0.21	OE
CJ7WK3		0.1133	0.0057	2.07	0.1970	0.0052	1.28	OE
CNKR3K		0.1040	-0.0036	-1.30	0.1864	-0.0054	-1.33	XX
CR4QHZ		0.1085	0.0009	0.34	0.1920	0.0002	0.04	OE
CT3N99	X	0.1077	0.0001	0.03	0.2267	0.0349	8.59	OE
CTDT7K		0.1100	0.0024	0.87	0.1963	0.0045	1.12	OE
D8DPH6	X	0.1217	0.0141	5.07	0.2123	0.0205	5.06	GD
D8DUK8		0.1080	0.0004	0.15	0.1907	-0.0011	-0.28	OE
DECACZ		0.1077	0.0001	0.03	0.1883	-0.0035	-0.85	XX
DJ6JEL		0.1123	0.0047	1.71	0.2013	0.0095	2.35	OE
DKEJJT	X	0.0983	-0.0093	-3.33	0.1853	-0.0065	-1.59	OE
DPADGU		0.1043	-0.0033	-1.17	0.1893	-0.0025	-0.61	IC
DZPADK		0.1080	0.0004	0.15	0.1860	-0.0058	-1.43	OE
DZQ2G8		0.1070	-0.0006	-0.21	0.1910	-0.0008	-0.20	OE
E63ACX	X	0.1187	0.0111	3.99	0.2080	0.0162	3.99	GD
EKTCNU		0.1071	-0.0005	-0.19	0.1857	-0.0061	-1.50	GD
F4PY66		0.1060	-0.0016	-0.57	0.1957	0.0039	0.95	OE
F6ZW7F		0.1030	-0.0046	-1.65	0.1900	-0.0018	-0.44	DR
G4FMQK		0.1057	-0.0019	-0.69	0.1913	-0.0005	-0.11	XX
G8HGTV		0.1053	-0.0023	-0.81	0.1880	-0.0038	-0.94	OE
GBHQP4		0.1067	-0.0009	-0.33	0.1897	-0.0021	-0.53	OE
GDLKC3		0.1113	0.0037	1.35	0.1967	0.0049	1.20	IC
GJDRWW		0.1061	-0.0015	-0.54	0.1939	0.0021	0.52	WD
GMAGD4		0.1087	0.0011	0.39	0.1950	0.0032	0.79	WD
GNMTEU		0.1100	0.0024	0.86	0.1939	0.0021	0.52	OE
GQXN38		0.1088	0.0012	0.42	0.1896	-0.0022	-0.55	OE

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GRPN24		0.1047	-0.0029	-1.05	0.1913	-0.0005	-0.11	IC
GV3UD4	*	0.1100	0.0024	0.87	0.1860	-0.0058	-1.43	GD
GV7CF9		0.1067	-0.0009	-0.33	0.1893	-0.0025	-0.61	OE
HM9X3Y	*	0.1128	0.0052	1.88	0.1869	-0.0049	-1.21	OE
HQP97H		0.1065	-0.0011	-0.39	0.1898	-0.0020	-0.48	OE
JKJT87		0.1090	0.0014	0.51	0.1933	0.0015	0.38	OE
JMMR3M		0.1065	-0.0011	-0.40	0.1887	-0.0031	-0.77	OE
JPEM22	X	0.1107	0.0031	1.11	0.2040	0.0122	3.01	GD
JTRL6V		0.1117	0.0041	1.47	0.1990	0.0072	1.77	OE
KENGFU		0.1053	-0.0023	-0.81	0.1873	-0.0045	-1.10	OE
KMHN2T		0.1100	0.0024	0.87	0.1900	-0.0018	-0.44	OE
KW7HFB		0.1050	-0.0026	-0.93	0.1850	-0.0068	-1.68	XX
KW8KRN		0.1120	0.0044	1.59	0.1987	0.0069	1.69	IC
KYWQCK		0.1017	-0.0059	-2.13	0.1910	-0.0008	-0.20	OE
LFCHQB		0.1090	0.0014	0.51	0.1960	0.0042	1.04	OE
LRTW86		0.1090	0.0014	0.51	0.1853	-0.0065	-1.59	OE
LWK9TF		0.1073	-0.0003	-0.10	0.1946	0.0028	0.69	OE
LZ2TQ2		0.1077	0.0001	0.03	0.1977	0.0059	1.45	OE
MHG64E		0.1090	0.0014	0.51	0.1950	0.0032	0.79	OE
MQVBJH		0.1062	-0.0014	-0.49	0.1888	-0.0030	-0.75	OE
MR64UK	X	0.1193	0.0117	4.23	0.2053	0.0135	3.33	OE
MVAMY8		0.1104	0.0028	1.02	0.1975	0.0057	1.41	XX
MVLQ4J		0.1079	0.0003	0.10	0.1916	-0.0002	-0.05	OE
MXDJDU		0.1073	-0.0003	-0.09	0.1903	-0.0015	-0.36	IC
N3PK7R		0.1067	-0.0009	-0.33	0.1893	-0.0025	-0.61	OE
NEU3F7		0.1030	-0.0046	-1.64	0.1826	-0.0092	-2.27	OE
NN6ACA		0.1103	0.0027	0.99	0.1957	0.0039	0.95	OE
NYJJQZ		0.1080	0.0004	0.15	0.1923	0.0005	0.13	IC
P9K6LR		0.1117	0.0041	1.47	0.1953	0.0035	0.87	OE
PQ6YT9	X	0.0900	-0.0176	-6.33	0.2000	0.0082	2.02	OE
PZQYQ7	X	0.1087	0.0011	0.39	0.2031	0.0113	2.78	AE
QHPEQW		0.1053	-0.0023	-0.81	0.1899	-0.0019	-0.48	IC
QP4J89		0.1147	0.0071	2.55	0.1993	0.0075	1.86	GD
QQ2VXW	*	0.0998	-0.0078	-2.81	0.1854	-0.0064	-1.58	OE
QQL9VV		0.1079	0.0003	0.12	0.1952	0.0034	0.83	OE
QVG3LW		0.1070	-0.0006	-0.21	0.1917	-0.0001	-0.03	IC
QWPHQG		0.1127	0.0051	1.83	0.2011	0.0093	2.28	OE
R3P4CP		0.1040	-0.0036	-1.29	0.1873	-0.0045	-1.10	OE
RGAGR6		0.1059	-0.0017	-0.62	0.1862	-0.0056	-1.38	OE
RW9FTU		0.1070	-0.0006	-0.20	0.1949	0.0031	0.77	OE
T6FHKZ		0.1110	0.0034	1.23	0.1977	0.0059	1.45	OE
TBHVXN	X	0.1150	0.0074	2.67	0.2083	0.0165	4.07	OE
TEG8TN		0.1100	0.0024	0.87	0.1933	0.0015	0.38	IC
TLHFBM		0.1100	0.0024	0.87	0.1900	-0.0018	-0.44	OE
TR8UAG		0.1080	0.0004	0.15	0.1910	-0.0008	-0.20	OE
TTZTJ9	*	0.1013	-0.0063	-2.25	0.1970	0.0052	1.28	OE
TVPUPW		0.1140	0.0064	2.31	0.1987	0.0069	1.69	XX

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
TZH7FM	X	0.0887	-0.0189	-6.81	0.1813	-0.0105	-2.58	OE
U33ATQ		0.1100	0.0024	0.87	0.1930	0.0012	0.30	XX
U6NBHJ		0.1087	0.0011	0.39	0.1950	0.0032	0.79	OE
UAH86P		0.1087	0.0011	0.39	0.1947	0.0029	0.71	OE
UQQXGH		0.1048	-0.0028	-1.02	0.1875	-0.0043	-1.06	OE
UYMUAY		0.1056	-0.0020	-0.73	0.1873	-0.0045	-1.11	OE
VBANYX		0.1100	0.0024	0.87	0.1900	-0.0018	-0.44	OE
VGFXJZ	X	0.1167	0.0091	3.27	0.2167	0.0249	6.13	AA
VJNEB4		0.1073	-0.0003	-0.09	0.1950	0.0032	0.79	OE
VVE9LC		0.1070	-0.0006	-0.21	0.1900	-0.0018	-0.44	OE
WE98M6		0.1073	-0.0003	-0.09	0.1903	-0.0015	-0.36	XX
WHA3KY		0.1057	-0.0019	-0.69	0.1930	0.0012	0.30	OE
WKCZVR		0.1070	-0.0006	-0.21	0.1913	-0.0005	-0.11	OE
WNFYYK		0.1043	-0.0033	-1.17	0.1853	-0.0065	-1.61	XX
WU4LWJ		0.1071	-0.0005	-0.19	0.1923	0.0005	0.12	OE
WZ443B		0.1080	0.0004	0.15	0.1923	0.0005	0.13	OE
WZNHUU		0.1133	0.0057	2.07	0.1986	0.0068	1.68	DR
X86DBN		0.1080	0.0004	0.15	0.1920	0.0002	0.05	OE
XCHE4K		0.1067	-0.0009	-0.33	0.1903	-0.0015	-0.36	OE
XFW3MH	X	0.0995	-0.0081	-2.91	0.1784	-0.0134	-3.31	OE
Y29FTB		0.1090	0.0014	0.51	0.1957	0.0039	0.95	OE
Y9UBUE	X	0.1147	0.0071	2.55	0.2057	0.0139	3.42	GD
YFWDZZ		0.1057	-0.0019	-0.69	0.1907	-0.0011	-0.28	OE
YL2CBQ	X	0.0973	-0.0103	-3.69	0.1780	-0.0138	-3.40	XX
YN8JW4		0.1119	0.0044	1.57	0.1950	0.0032	0.79	OE
YZY4EF		0.1016	-0.0060	-2.17	0.1862	-0.0056	-1.37	OE
Z32HCH		0.1077	0.0001	0.03	0.1920	0.0002	0.05	DR
Z8VFUA		0.1084	0.0008	0.29	0.1917	-0.0001	-0.02	OE
Z9RVCK		0.1123	0.0047	1.70	0.1955	0.0037	0.91	OE
ZA4UYU	X	0.1086	0.0010	0.38	0.2047	0.0129	3.17	AE
ZAZA8K		0.1083	0.0007	0.27	0.1913	-0.0005	-0.11	WD
ZLHLWP		0.1073	-0.0003	-0.09	0.1927	0.0009	0.21	OE
ZRJZHQ		0.1130	0.0054	1.95	0.2017	0.0099	2.43	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.1076	Percent	0.1918	Percent
Stnd Dev Btwn Labs	0.0028	Percent	0.0041	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 146 of 174 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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #177

6JB3MW (X) - Data for sample L45 are high. Very inconsistent within the determinations of sample L45. Inconsistent within the determinations of sample L46.

77H49Y (X) - Data for both samples are high.

7WEL23 (X) - Data for sample L46 are extremely low.

827DM6 (X) - Data for sample L45 are high. Inconsistent within the determinations of sample L45.

8BWW6J (X) - Data for both samples are high.

9EAYM9 (X) - Data for both samples are low.

9L8QRW (X) - Data for sample L45 are low.

A3ALY8 (X) - Data for both samples are extremely high.

CT3N99 (X) - Data for sample L46 are high.

D8DPH6 (X) - Data for both samples are high.

DKEJJT (X) - Data for sample L45 are low.

E63ACX (X) - Data for both samples are high.

JPEM22 (X) - Data for sample L46 are high.

MR64UK (X) - Data for both samples are high.

PQ6YT9 (X) - Data for sample L45 are low.

PZQYQ7 (X) - Data for sample L46 are high.

TBHVXN (X) - Data for sample L46 are high.

TZH7FM (X) - Data for sample L45 are low.

VGFXJZ (X) - Data for both samples are high. Inconsistent within the determinations of sample L46.

XFW3MH (X) - Data for both samples are low.

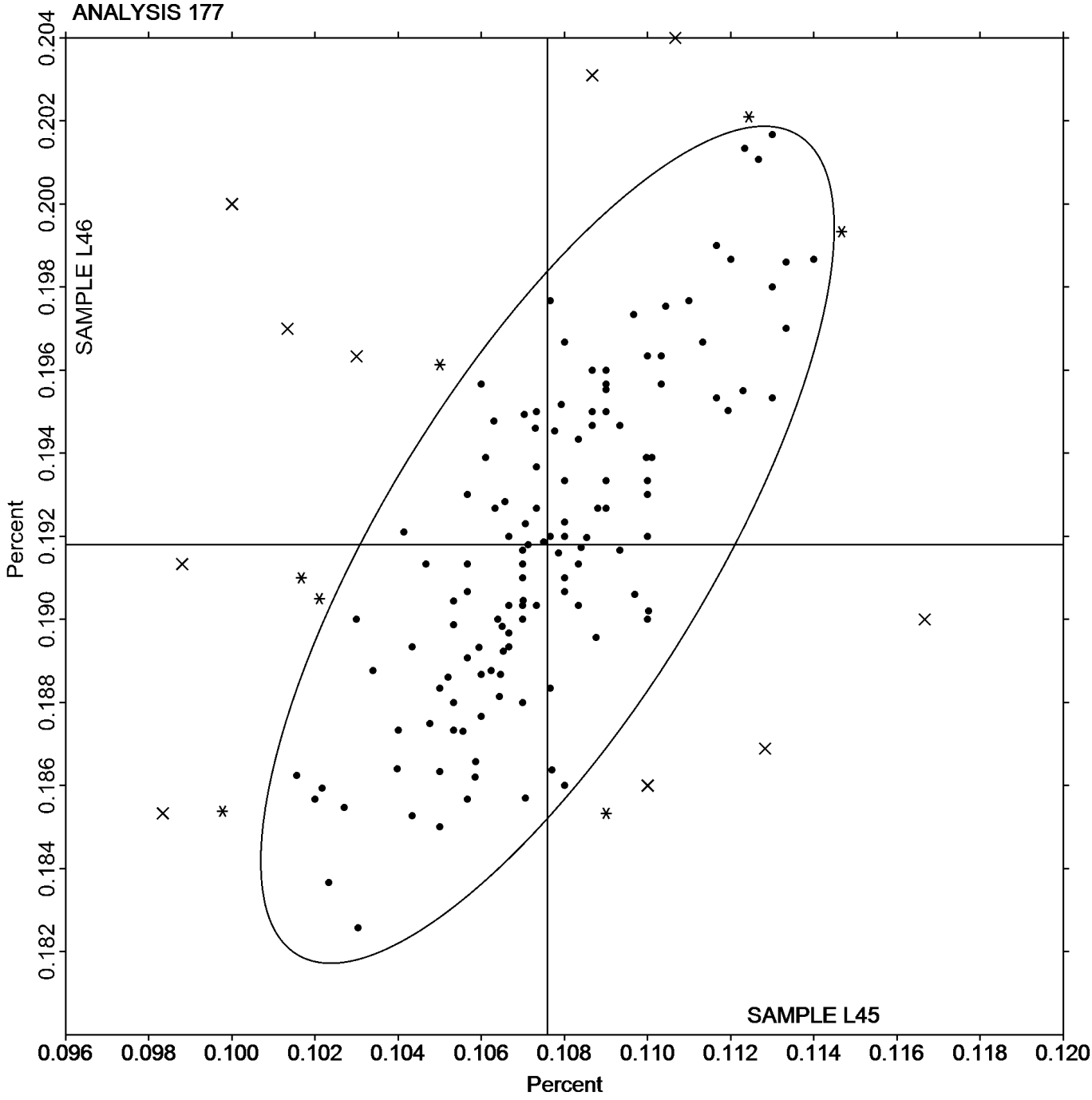
Y9UBUE (X) - Data for sample L46 are high.

YL2CBQ (X) - Data for both samples are low.

ZA4UYU (X) - Data for sample L46 are high. Inconsistent within the determinations of sample L46.

SAMPLE L45
0.1076 Percent

SAMPLE L46
0.1918 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.1123	0.0008	0.25	0.2517	0.0003	0.05	OE
2CKB2K		0.1130	0.0015	0.45	0.2523	0.0010	0.16	IC
2L9AGJ		0.1120	0.0005	0.15	0.2577	0.0063	1.01	OE
2PVUN9		0.1111	-0.0004	-0.13	0.2499	-0.0015	-0.24	XX
2UMWUT		0.1133	0.0018	0.55	0.2560	0.0046	0.74	OE
2XM8N9		0.1128	0.0013	0.40	0.2582	0.0068	1.09	OE
33DXFA		0.1073	-0.0042	-1.28	0.2603	0.0090	1.43	OE
366YJC	X	0.1080	-0.0035	-1.08	0.2690	0.0176	2.82	OE
3GXENF		0.1106	-0.0009	-0.28	0.2531	0.0017	0.28	OE
3MJ9MY	X	0.1007	-0.0109	-3.33	0.2447	-0.0067	-1.07	OE
3PQWNW		0.1123	0.0008	0.25	0.2513	0.0000	0.00	OE
42G2E9		0.1053	-0.0062	-1.90	0.2530	0.0016	0.26	OE
4FGKDK		0.1075	-0.0041	-1.24	0.2546	0.0033	0.52	OE
4QWGAC		0.1130	0.0015	0.45	0.2507	-0.0007	-0.11	OE
4UWNV9		0.1110	-0.0005	-0.16	0.2400	-0.0114	-1.81	XX
4VC8F7		0.1097	-0.0019	-0.57	0.2450	-0.0064	-1.01	DR
4Y9T8A	*	0.1021	-0.0094	-2.88	0.2469	-0.0044	-0.71	OE
64J9A7		0.1122	0.0006	0.20	0.2580	0.0067	1.07	OE
6EJYTT		0.1137	0.0021	0.66	0.2513	0.0000	0.00	OE
6H3NJW		0.1103	-0.0012	-0.36	0.2510	-0.0004	-0.06	IC
6JB3MW	X	0.1300	0.0185	5.66	0.2800	0.0286	4.57	OE
6L3YMW		0.1107	-0.0009	-0.26	0.2463	-0.0050	-0.80	OE
6MU33C		0.1070	-0.0045	-1.39	0.2507	-0.0007	-0.11	OE
6RM3HT		0.1132	0.0017	0.52	0.2610	0.0096	1.53	OE
6WJNAV		0.1123	0.0008	0.25	0.2527	0.0013	0.21	XX
772KT9		0.1115	0.0000	0.00	0.2523	0.0009	0.14	OE
77H49Y		0.1040	-0.0075	-2.30	0.2363	-0.0150	-2.40	GD
797BW3		0.1031	-0.0085	-2.59	0.2422	-0.0091	-1.46	OE
79PDEN		0.1117	0.0002	0.06	0.2542	0.0028	0.45	OE
7CCTZ6		0.1107	-0.0009	-0.26	0.2543	0.0030	0.47	OE
7D6R8B		0.1130	0.0015	0.45	0.2582	0.0068	1.09	OE
7NNXFL		0.1093	-0.0022	-0.67	0.2523	0.0010	0.16	OE
7R4TNH		0.1160	0.0045	1.37	0.2560	0.0046	0.74	OE
7TEC38		0.1117	0.0001	0.04	0.2570	0.0056	0.90	OE
7VGFG3	X	0.1141	0.0026	0.80	0.2148	-0.0365	-5.83	OE
7WEL23		0.1140	0.0025	0.76	0.2570	0.0056	0.90	XX
827DM6	*	0.1040	-0.0075	-2.30	0.2580	0.0066	1.06	OE
88C2CC		0.1103	-0.0013	-0.38	0.2507	-0.0006	-0.10	OE
8BTAN7		0.1132	0.0017	0.51	0.2545	0.0031	0.50	IC
8BWW6J		0.1130	0.0015	0.45	0.2500	-0.0014	-0.22	OE
8PNVQR		0.1101	-0.0015	-0.45	0.2433	-0.0081	-1.29	OE
8ZBRVY		0.1139	0.0024	0.73	0.2513	0.0000	0.00	OE
964CE9		0.1162	0.0047	1.44	0.2535	0.0021	0.34	OE
98LF37		0.1115	0.0000	0.00	0.2508	-0.0005	-0.08	IC
9AUQYA		0.1094	-0.0021	-0.64	0.2478	-0.0035	-0.56	OE
9E92GJ		0.1153	0.0038	1.17	0.2520	0.0006	0.10	XX
9EAYM9	X	0.0911	-0.0204	-6.26	0.1847	-0.0667	-10.64	XX

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
9L8QRW		0.1097	-0.0019	-0.57	0.2507	-0.0007	-0.11	OE
9L9M3R		0.1140	0.0025	0.76	0.2480	-0.0034	-0.54	OE
9MGUE7		0.1158	0.0042	1.30	0.2609	0.0096	1.53	OE
9RCKRJ		0.1102	-0.0014	-0.42	0.2559	0.0045	0.72	OE
9WP8NA		0.1125	0.0010	0.31	0.2573	0.0059	0.94	OE
9ZR749		0.1121	0.0006	0.18	0.2584	0.0070	1.12	OE
A4MEUA		0.1103	-0.0012	-0.36	0.2427	-0.0087	-1.39	OE
A6YBYD		0.1140	0.0025	0.76	0.2560	0.0046	0.73	OE
AJYXCN	X	0.0997	-0.0119	-3.63	0.2760	0.0246	3.93	OE
AWNP76		0.1080	-0.0035	-1.08	0.2530	0.0016	0.26	OE
AWPMFZ		0.1097	-0.0019	-0.57	0.2540	0.0026	0.42	OE
AXYQWH		0.1110	-0.0005	-0.15	0.2551	0.0038	0.60	OE
B38BQW		0.1107	-0.0009	-0.26	0.2533	0.0020	0.32	OE
B6FQRL		0.1187	0.0071	2.19	0.2543	0.0030	0.47	OE
B8JHR2		0.1115	0.0000	-0.01	0.2527	0.0013	0.21	OE
B9BJTH	X	0.0897	-0.0219	-6.70	0.2197	-0.0317	-5.06	OE
BEY7GW	X	0.0950	-0.0165	-5.06	0.2530	0.0016	0.26	XX
BPK6NE		0.1133	0.0018	0.55	0.2450	-0.0064	-1.01	OE
BQRPXM	X	0.0978	-0.0137	-4.19	0.2571	0.0057	0.91	OE
BVP4R4		0.1107	-0.0009	-0.26	0.2357	-0.0157	-2.50	OE
BZ6CF4		0.1137	0.0021	0.66	0.2467	-0.0047	-0.75	OE
CJ7WK3		0.1138	0.0023	0.70	0.2525	0.0011	0.18	OE
CNKR3K		0.1112	-0.0003	-0.10	0.2584	0.0070	1.12	XX
CR4QHZ		0.1037	-0.0078	-2.39	0.2530	0.0016	0.26	OE
CT3N99		0.1100	-0.0015	-0.47	0.2493	-0.0020	-0.32	OE
CTDT7K		0.1140	0.0025	0.76	0.2543	0.0030	0.47	OE
D8DPH6		0.1137	0.0021	0.66	0.2562	0.0048	0.77	GD
D8DUK8		0.1157	0.0041	1.27	0.2527	0.0013	0.21	XX
DECACZ		0.1063	-0.0052	-1.59	0.2507	-0.0007	-0.11	XX
DJ6JEL	X	0.00380	-0.1077	-33.00	0.00707	-0.2443	-38.99	OE
DKEJJT	X	0.0897	-0.0219	-6.70	0.2167	-0.0347	-5.54	OE
DPADGU		0.1110	-0.0005	-0.16	0.2527	0.0013	0.21	IC
DZPADK		0.1100	-0.0015	-0.47	0.2390	-0.0124	-1.97	OE
DZQ2G8		0.1183	0.0068	2.09	0.2503	-0.0010	-0.16	OE
E63ACX		0.1177	0.0061	1.88	0.2517	0.0003	0.05	GD
EKTCNU		0.1076	-0.0040	-1.21	0.2405	-0.0109	-1.74	GD
F4PY66		0.1143	0.0028	0.86	0.2543	0.0030	0.47	OE
F6ZW7F		0.1140	0.0025	0.76	0.2577	0.0063	1.01	DR
G4FMQK		0.1117	0.0002	0.05	0.2391	-0.0122	-1.95	XX
G8HGTV	X	0.1010	-0.0105	-3.22	0.2310	-0.0204	-3.25	OE
GBHQP4		0.1160	0.0045	1.37	0.2620	0.0106	1.70	OE
GDLKC3		0.1110	-0.0005	-0.16	0.2547	0.0033	0.53	IC
GJDRWW		0.1128	0.0013	0.40	0.2515	0.0001	0.02	WD
GMAGD4		0.1123	0.0008	0.25	0.2523	0.0010	0.16	WD
GNMTEU	X	0.1308	0.0192	5.89	0.2561	0.0047	0.75	OE
GQXN38		0.1094	-0.0021	-0.65	0.2579	0.0065	1.04	OE
GRPN24		0.1123	0.0008	0.25	0.2513	0.0000	0.00	IC

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
GV3UD4	*	0.1060	-0.0055	-1.69	0.2333	-0.0180	-2.88	GD
GV7CF9		0.1060	-0.0055	-1.69	0.2437	-0.0077	-1.23	OE
HM9X3Y	X	0.1285	0.0169	5.19	0.2536	0.0022	0.35	OE
HQP97H		0.1118	0.0003	0.10	0.2515	0.0002	0.03	OE
JKJT87		0.1130	0.0015	0.45	0.2517	0.0003	0.05	OE
JMMR3M		0.1058	-0.0057	-1.75	0.2397	-0.0117	-1.87	OE
JPEM22		0.1153	0.0038	1.17	0.2547	0.0033	0.53	GD
JTRL6V		0.1120	0.0005	0.15	0.2543	0.0030	0.47	OE
KENGFU		0.1067	-0.0049	-1.49	0.2517	0.0003	0.05	OE
KW7HFB		0.1137	0.0021	0.66	0.2507	-0.0007	-0.11	XX
KW8KRN	*	0.1147	0.0031	0.96	0.2697	0.0183	2.92	IC
KYWQCK		0.1163	0.0048	1.47	0.2607	0.0093	1.49	OE
LFCHQB		0.1120	0.0005	0.15	0.2520	0.0006	0.10	OE
LRTW86	X	0.1250	0.0135	4.13	0.2580	0.0066	1.06	OE
LWK9TF		0.1123	0.0008	0.24	0.2413	-0.0101	-1.61	OE
LZ2TQ2	*	0.1200	0.0085	2.60	0.2567	0.0053	0.85	OE
MHG64E		0.1130	0.0015	0.45	0.2520	0.0006	0.10	OE
MQVBJH		0.1105	-0.0011	-0.32	0.2507	-0.0007	-0.11	OE
MR64UK		0.1103	-0.0012	-0.36	0.2407	-0.0107	-1.71	OE
MVAMY8		0.1078	-0.0037	-1.14	0.2467	-0.0047	-0.75	OE
MVLQ4J		0.1118	0.0003	0.10	0.2542	0.0029	0.46	OE
MXDJDU		0.1067	-0.0049	-1.49	0.2460	-0.0054	-0.86	IC
N3PK7R		0.1077	-0.0039	-1.18	0.2507	-0.0007	-0.11	OE
NEU3F7		0.1095	-0.0020	-0.61	0.2497	-0.0016	-0.26	OE
NN6ACA		0.1137	0.0021	0.66	0.2530	0.0016	0.26	OE
NYJJQZ		0.1123	0.0008	0.25	0.2507	-0.0007	-0.11	IC
P9K6LR		0.1120	0.0005	0.15	0.2570	0.0056	0.90	OE
PQ6YT9	X	0.1133	0.0018	0.55	0.2787	0.0273	4.36	OE
PZQYQ7		0.1135	0.0019	0.60	0.2559	0.0046	0.73	AE
QHPEQW		0.1097	-0.0019	-0.57	0.2497	-0.0017	-0.27	IC
QP4J89		0.1120	0.0005	0.15	0.2463	-0.0050	-0.80	GD
QQ2VXW	X	0.0968	-0.0147	-4.52	0.2213	-0.0301	-4.81	OE
QQL9VV		0.1089	-0.0026	-0.80	0.2412	-0.0101	-1.62	OE
QVG3LW		0.1117	0.0001	0.04	0.2537	0.0023	0.37	IC
QWPHQG		0.1105	-0.0011	-0.32	0.2525	0.0011	0.18	OE
R3P4CP	*	0.1057	-0.0059	-1.79	0.2333	-0.0180	-2.88	OE
RGAGR6		0.1152	0.0037	1.13	0.2615	0.0102	1.63	OE
RW9FTU		0.1143	0.0028	0.85	0.2435	-0.0078	-1.25	OE
T6FHKZ	X	0.0847	-0.0269	-8.23	0.1850	-0.0664	-10.59	OE
TBHVXN		0.1163	0.0048	1.47	0.2553	0.0040	0.63	OE
TEG8TN		0.1100	-0.0015	-0.47	0.2467	-0.0047	-0.75	IC
TLHFBM		0.1100	-0.0015	-0.47	0.2500	-0.0014	-0.22	OE
TR8UAG		0.1110	-0.0005	-0.16	0.2483	-0.0030	-0.48	OE
TTZTJ9		0.1070	-0.0045	-1.39	0.2427	-0.0087	-1.39	OE
TVPUPW		0.1027	-0.0089	-2.71	0.2383	-0.0130	-2.08	XX
TZH7FM		0.1120	0.0005	0.15	0.2463	-0.0050	-0.80	OE
U33ATQ		0.1113	-0.0002	-0.06	0.2503	-0.0010	-0.16	IC

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
U6NBHJ		0.1107	-0.0009	-0.26	0.2490	-0.0024	-0.38	OE
UAH86P		0.1067	-0.0049	-1.49	0.2350	-0.0164	-2.61	OE
UQQXGH		0.1149	0.0034	1.04	0.2599	0.0086	1.36	OE
UYMUAY		0.1120	0.0004	0.14	0.2517	0.0004	0.06	OE
VBANYX		0.1100	-0.0015	-0.47	0.2433	-0.0080	-1.28	OE
VGFXJZ		0.1127	0.0011	0.35	0.2563	0.0050	0.79	AA
VJNEB4		0.1123	0.0008	0.25	0.2540	0.0026	0.42	OE
VVE9LC		0.1127	0.0011	0.35	0.2550	0.0036	0.58	OE
WE98M6		0.1123	0.0008	0.25	0.2500	-0.0014	-0.22	XX
WHA3KY		0.1128	0.0013	0.39	0.2555	0.0041	0.66	OE
WKCZVR		0.1037	-0.0079	-2.41	0.2443	-0.0070	-1.12	OE
WNFYYK		0.1134	0.0019	0.58	0.2597	0.0083	1.33	XX
WU4LWJ		0.1142	0.0027	0.83	0.2617	0.0103	1.65	OE
WZ443B		0.1083	-0.0032	-0.98	0.2503	-0.0010	-0.16	OE
WZNHUU	X	0.1217	0.0102	3.12	0.2812	0.0298	4.76	DR
X86DBN		0.1147	0.0031	0.96	0.2533	0.0020	0.32	OE
XCHE4K		0.1157	0.0041	1.27	0.2590	0.0076	1.22	OE
XFW3MH		0.1155	0.0039	1.21	0.2576	0.0062	1.00	OE
Y29FTB		0.1123	0.0008	0.25	0.2510	-0.0004	-0.06	OE
Y9UBUE	X	0.1080	-0.0035	-1.08	0.2703	0.0190	3.03	GD
YFWDZZ		0.1063	-0.0052	-1.59	0.2550	0.0036	0.58	OE
YL2CBQ		0.1150	0.0035	1.07	0.2573	0.0060	0.95	XX
YN8JW4		0.1182	0.0067	2.04	0.2513	0.0000	-0.01	OE
YZY4EF		0.1128	0.0013	0.40	0.2475	-0.0039	-0.62	OE
Z32HCH		0.1140	0.0025	0.76	0.2560	0.0046	0.74	DR
Z8VFUA	X	0.0983	-0.0133	-4.06	0.2524	0.0010	0.17	OE
Z9RVCK		0.1135	0.0020	0.62	0.2601	0.0087	1.40	OE
ZA4UYU		0.1129	0.0014	0.42	0.2584	0.0071	1.13	AE
ZAZA8K		0.1100	-0.0015	-0.47	0.2447	-0.0067	-1.07	WD
ZLHLWP		0.1120	0.0005	0.15	0.2477	-0.0037	-0.59	OE
ZRJZHQ		0.1127	0.0011	0.35	0.2533	0.0020	0.32	OE

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.1115	Percent	0.2514	Percent
Stnd Dev Btwn Labs	0.0033	Percent	0.0063	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 150 of 172 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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #178

366YJC (X) - Data for sample L46 are high.

3MJ9MY (X) - Data for sample L45 are low.

6JB3MW (X) - Data for both samples are high.

7VGFG3 (X) - Data for sample L46 are low.

9EAYM9 (X) - Data for both samples are low.

AJYXCN (X) - Data for sample L45 are low and data for sample L46 are high.

B9BJTH (X) - Data for both samples are low.

BEY7GW (X) - Data for sample L45 are low.

BQRPXM (X) - Data for sample L45 are low. Inconsistent within the determinations of sample L46.

DJ6JEL (X) - Data for both samples are extremely low.

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

G8HGTV (X) - Data for both samples are low.

GNMTEU (X) - Data for sample L45 are high.

HM9X3Y (X) - Data for sample L45 are high.

LRTW86 (X) - Data for sample L45 are high.

PQ6YT9 (X) - Data for sample L46 are high. Inconsistent within the determinations of sample L45.

QQ2VXW (X) - Data for both samples are low.

T6FHKZ (X) - Data for both samples are low.

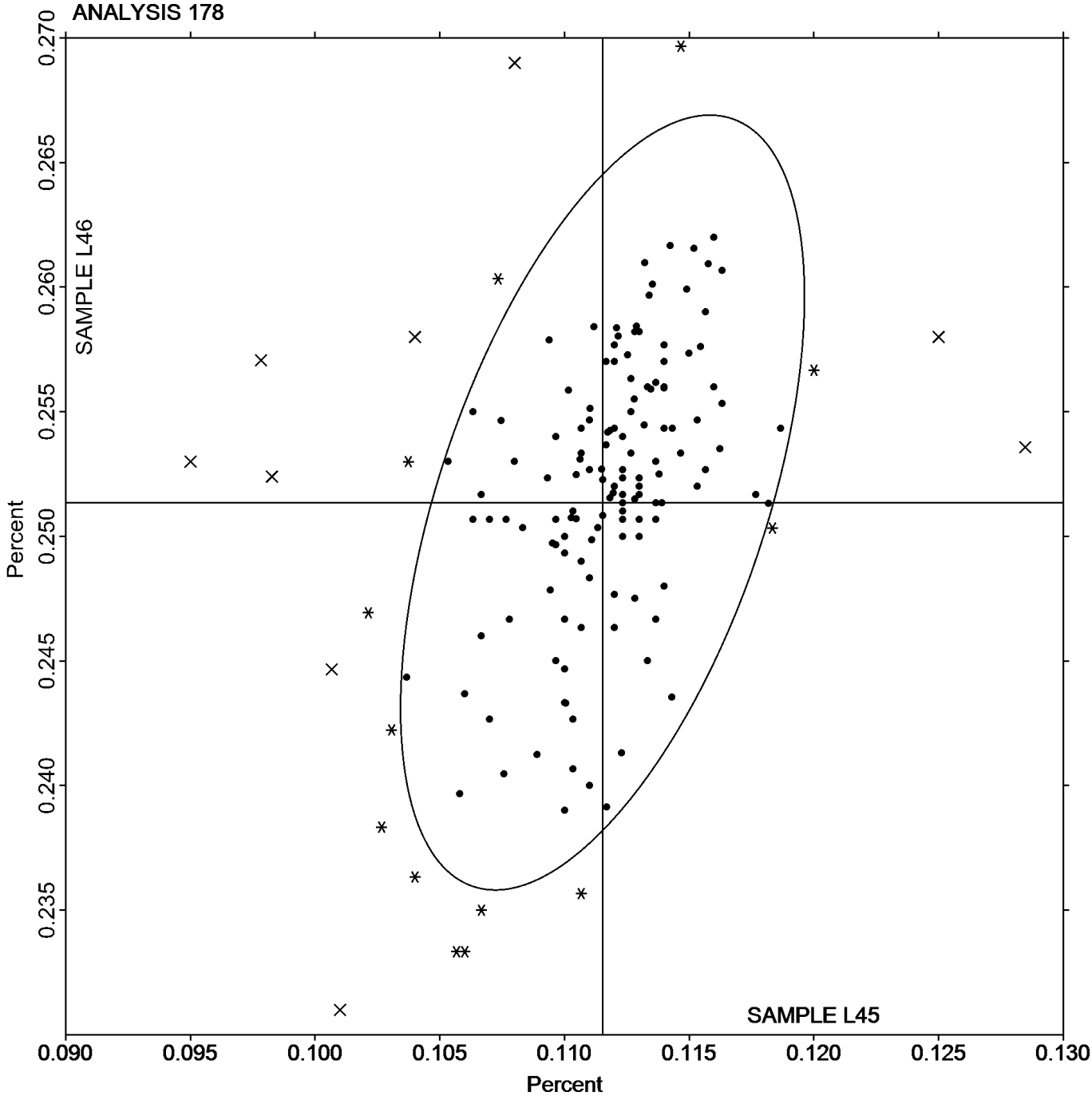
WZNHUU (X) - Data for both samples are high.

Y9UBUE (X) - Data for sample L46 are high.

Z8VFUA (X) - Data for sample L45 are low.

SAMPLE L45
0.1115 Percent

SAMPLE L46
0.2514 Percent



		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
28A92W		0.00650	0.00003	0.04	0.0110	-0.0005	-0.64	OE
2CKB2K		0.00707	0.00059	0.84	0.0120	0.0006	0.75	XX
2XM8N9		0.00610	-0.00037	-0.53	0.0112	-0.0003	-0.41	OE
33DXFA		0.00763	0.00116	1.64	0.0133	0.0018	2.41	OE
3MJ9MY		0.00580	-0.00067	-0.95	0.0116	0.0001	0.12	OE
3PQWNW		0.00680	0.00033	0.46	0.0108	-0.0007	-0.91	OE
42G2E9		0.00577	-0.00071	-1.00	0.0113	-0.0002	-0.28	OE
4FGKDK		0.00693	0.00046	0.65	0.0121	0.0006	0.84	CO
4UWNV9		0.00747	0.00099	1.41	0.0118	0.0003	0.44	OE
4Y9T8A		0.00647	-0.00001	-0.01	0.0115	0.0001	0.08	CO
64J9A7		0.00793	0.00146	2.07	0.0126	0.0012	1.56	OE
6EJYTT		0.00633	-0.00014	-0.20	0.0110	-0.0005	-0.64	OE
6H3NJW		0.00610	-0.00037	-0.53	0.0111	-0.0004	-0.55	CI
6MU33C		0.00577	-0.00071	-1.00	0.0112	-0.0002	-0.32	OE
7D6R8B		0.00673	0.00026	0.37	0.0119	0.0004	0.53	OE
7NNXFL		0.00636	-0.00011	-0.15	0.0120	0.0005	0.71	OE
7R4TNH		0.00683	0.00036	0.51	0.0123	0.0008	1.07	IR
7TEC38		0.00673	0.00026	0.37	0.0115	0.0001	0.08	OE
7VGFG3	X	0.00740	0.00093	1.31	0.00933	-0.0021	-2.88	OE
88C2CC		0.00680	0.00033	0.46	0.0119	0.0004	0.53	CI
8PNVQR		0.00651	0.00004	0.05	0.0116	0.0001	0.12	CO
98LF37		0.00613	-0.00034	-0.48	0.0118	0.0004	0.48	CO
9E92GJ		0.00760	0.00113	1.59	0.0118	0.0003	0.44	XX
9L9M3R	*	0.00820	0.00173	2.44	0.0109	-0.0005	-0.73	OE
9RCKRJ		0.00683	0.00036	0.51	0.0118	0.0003	0.39	CI
9WP8NA		0.00660	0.00013	0.18	0.0118	0.0004	0.48	OE
A4MEUA	*	0.00547	-0.00101	-1.42	0.00930	-0.0022	-2.93	OE
AWNP76		0.00683	0.00036	0.51	0.0115	0.0000	-0.01	CI
B38BQW		0.00583	-0.00064	-0.90	0.0106	-0.0009	-1.18	OE
B6FQRL		0.00567	-0.00081	-1.14	0.0103	-0.0012	-1.63	OE
BZ6CF4		0.00613	-0.00034	-0.48	0.0114	-0.0001	-0.10	CO
CJ7WK3	X	0.00263	-0.00384	-5.43	0.00263	-0.0088	-11.90	OE
CR4QHZ		0.00700	0.00053	0.75	0.0117	0.0003	0.35	OE
CTDT7K	*	0.00803	0.00156	2.21	0.0101	-0.0014	-1.85	OE
DECACZ		0.00603	-0.00044	-0.62	0.0112	-0.0003	-0.41	CO
DKEJJT		0.00767	0.00119	1.69	0.0107	-0.0008	-1.09	OE
DPADGU		0.00647	-0.00001	-0.01	0.0114	0.0000	-0.05	CO
EKTCNU	X	0.00898	0.00251	3.55	0.0144	0.0029	3.94	XX
G8HGTV	X	0.0106	0.00413	5.84	0.0123	0.0008	1.07	OE
GBHQP4		0.00817	0.00169	2.40	0.0128	0.0014	1.83	OE
GDLKC3		0.00657	0.00009	0.13	0.0117	0.0003	0.35	XX
GMAGD4		0.00633	-0.00014	-0.20	0.0113	-0.0002	-0.23	CO
GNMTEU		0.00646	-0.00001	-0.02	0.0115	0.0000	0.04	CO
GQXN38	M	No Data Reported			0.0138	0.0023	3.13	OE
GRPN24		0.00740	0.00093	1.31	0.0127	0.0012	1.61	XX
GV7CF9	X	0.00100	-0.00547	-7.74	0.00100	-0.0105	-14.10	OE
HQP97H		0.00614	-0.00033	-0.47	0.0108	-0.0007	-0.97	CO

		Sample L45			Sample L46			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
JKJT87	X	0.00483	-0.00164	-2.32	0.00843	-0.0030	-4.09	OE
JTRL6V		0.00643	-0.00004	-0.06	0.0112	-0.0003	-0.37	OE
KW7HFB		0.00567	-0.00081	-1.14	0.0100	-0.0015	-1.98	XX
LFCHQB	X	0.0790	0.07253	102.58	0.0110	-0.0005	-0.64	CI
LRTW86		0.00677	0.00029	0.42	0.0108	-0.0007	-0.91	CI
LZ2TQ2	X	0.00380	-0.00267	-3.78	0.00370	-0.0078	-10.47	OE
MR64UK	X	0.00987	0.00339	4.80	0.0383	0.0268	36.07	XX
MVAMY8		0.00513	-0.00134	-1.89	0.0122	0.0007	0.93	OE
MXDJDU		0.00663	0.00016	0.23	0.0117	0.0002	0.30	CI
N3PK7R		0.00623	-0.00024	-0.34	0.0109	-0.0005	-0.73	OE
NEU3F7	*	0.00443	-0.00204	-2.88	0.0104	-0.0010	-1.40	OE
NN6ACA		0.00660	0.00013	0.18	0.0120	0.0005	0.71	CO
NYJJQZ		0.00647	-0.00001	-0.01	0.0115	0.0000	-0.01	CO
P9K6LR		0.00660	0.00013	0.18	0.0123	0.0009	1.16	OE
QHPEQW		0.00477	-0.00171	-2.41	0.0102	-0.0013	-1.72	OE
QWPHQG		0.00580	-0.00067	-0.95	0.0113	-0.0001	-0.19	OE
R3P4CP	*	0.00740	0.00093	1.31	0.0107	-0.0008	-1.09	OE
RW9FTU		0.00723	0.00076	1.08	0.0127	0.0012	1.65	OE
TLHFBM		0.00600	-0.00047	-0.67	0.0120	0.0005	0.71	CO
TZH7FM		0.00570	-0.00077	-1.09	0.0107	-0.0008	-1.04	OE
U33ATQ		0.00700	0.00053	0.75	0.0120	0.0005	0.71	CI
UAH86P	X	0.00250	-0.00397	-5.62	0.00273	-0.0087	-11.77	OE
UQQXGH		0.00639	-0.00008	-0.11	0.0120	0.0005	0.70	CO
UYMUAY	*	0.00690	0.00043	0.60	0.0101	-0.0013	-1.81	OE
VBANYX		0.00650	0.00003	0.04	0.0114	0.0000	-0.05	CO
WHA3KY		0.00647	-0.00001	-0.01	0.0122	0.0007	0.98	CO
WKCZVR	X	0.000300	-0.00617	-8.73	0.000300	-0.0112	-15.05	OE
WZ443B		0.00527	-0.00121	-1.71	0.0115	0.0000	-0.01	IR
WZNHUU		0.00710	0.00063	0.89	0.0124	0.0010	1.29	DR
X86DBN	X	0.00253	-0.00394	-5.57	0.00947	-0.0020	-2.70	OE
YFWDZZ		0.00577	-0.00071	-1.00	0.0108	-0.0007	-0.91	OE
Z8VFUA		0.00625	-0.00023	-0.32	0.0106	-0.0009	-1.18	CO
Z9RVCK		0.00673	0.00026	0.37	0.0118	0.0004	0.48	OE
ZAZA8K		0.00697	0.00049	0.70	0.0121	0.0007	0.89	XX

Summary Statistics

	Sample L45		Sample L46	
Grand Means	0.00647	Percent	0.0115	Percent
Stnd Dev Btwn Labs	0.00071	Percent	0.0007	Percent

Samples L45, L46 : AISI 1045, AISI 1040

Statistics based on 66 of 81 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #179

7VGFG3 (X) - Data for sample L46 are low.

CJ7WK3 (X) - Data for both samples are low. Inconsistent within the determinations of sample L45.

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

G8HGTV (X) - Data for sample L45 are high. Inconsistent within the determinations of both samples.

GQXN38 (M) - Participant did not submit data for sample L45.

GV7CF9 (X) - Data for both samples are low.

JKJT87 (X) - Data for sample L46 are low.

LFCHQB (X) - Data for sample L45 are extremely high appear to be off by a factor of ten.

LZ2TQ2 (X) - Data for both samples are low. Inconsistent within the determinations of sample L45.

MR64UK (X) - Data for both samples are high.

UAH86P (X) - Data for both samples are low.

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

X86DBN (X) - Data for sample L45 are low.

SAMPLE L45
0.00647 Percent

SAMPLE L46
0.0115 Percent