Collaborative Testing Services, Inc.

Fasteners & Metals Interlaboratory Testing Program

Summary Report Cycle 137, 1st Qtr 2022

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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.
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Key for Fasteners & Metals Program Web Summary Report

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

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

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

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

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

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

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

Data Flags

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

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

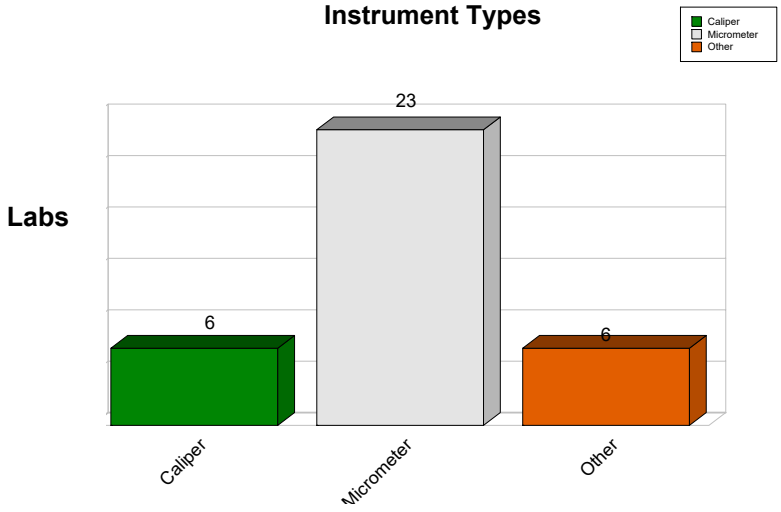
Fasteners and Metals Interlaboratory Testing Program

Analysis 1001

Dimensional: Outside Diameter of Plain Plug Gage
ISO GUM

Cycle 137
1st Qtr 2022

During Cycle 137, CTS conducted the Analysis #101 - Round Dimensional. For this test all participants received two samples I81 and I82 with nominal diameters; 0.4996 in. and 0.5000 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. 35 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 = 0.4996 in.

Xref2 = 0.5000 in.

WebCode	Data Flag (if assigned)	Reference Uncertainty (Uref)	Expanded Uncertainty (Ulab)	Sample I81 Lab Mean (Xlab)	Sample I81 Performance Statistic (En1)	Sample I82 Lab Mean (Xlab)	Sample I82 Performance Statistic (En2)	Instrument
2RECG7	X	0.00004	0.00017	0.49944	-0.90	0.49978	-1.23	Micrometer
2ZM4MU		0.00004	Not Reported	0.49938		0.49978		Micrometer
6EYGU7		0.00004	0.00040	0.49950	-0.25	0.50000	0.00	Micrometer
8Z69LU		0.00004	0.00040	0.49962	0.05	0.49993	-0.17	Micrometer
9AQM7B		0.00004	0.00260	0.49970	0.04	0.49970	-0.12	Caliper
9D6CFM		0.00004	0.11654	0.49921	0.00	0.49976	0.00	Micrometer
BBB8YK		0.00004	0.00010	0.49965	0.50	0.50004	0.41	Other
BFQTUD		0.00004	0.00118	0.49910	-0.42	0.49980	-0.17	Caliper
CLUWHQ		0.00004	0.00030	0.49970	0.33	0.50000	0.00	Micrometer
CPD8DA		0.00004	0.00050	0.49934	-0.52	0.49972	-0.56	Micrometer
CTCH9A		0.00004	0.00010	0.49962	0.19	0.49998	-0.19	Other
D49QM6		0.00004	0.00009	0.49954	-0.63	0.49992	-0.84	Micrometer
EA47J3		0.00004	0.00039	0.49929	-0.78	0.49971	-0.73	Other
FW6GHP		0.00004	0.00201	0.49950	-0.05	0.49995	-0.02	Micrometer
HXKQ9Z		0.00004	0.00258	0.49910	-0.19	0.49950	-0.19	Caliper
JGC68P	X	0.00004	0.00005	0.49995	5.47	0.49990	-1.56	Micrometer
K6CW3D		0.00004	0.00006	0.49954	-0.79	0.49997	-0.44	Micrometer
K6QEVW		0.00004	0.00039	0.49946	-0.36	0.49980	-0.49	Other
M7MF3Z	X	0.00004	0.00073	0.49776	-2.52	0.49714	-3.91	Caliper
MGCNA2		0.00004	120.00000	0.50010	0.00	0.50040	0.00	Other
PRVMAV		0.00004	0.00020	0.49954	-0.30	0.49990	-0.49	Micrometer
Q2DQQU		0.00004	0.00210	0.49900	-0.29	0.50000	0.00	Caliper
T28X8C		0.00004	Not Reported	0.49950		0.50000		Other
T67A4C		0.00004	Not Reported	0.50730		0.49983		Micrometer
TUPMWW		0.00004	Not Reported	0.49936		0.49978		Micrometer
W4XD24		0.00004	0.00030	0.49960	0.00	0.50000	0.00	Caliper
WQRHM8		0.00004	0.00004	0.49958	-0.34	0.49998	-0.34	Micrometer
WTJKK9		0.00004	0.00030	0.49950	-0.33	0.49990	-0.33	Micrometer
WVRN96		0.00004	0.00110	0.49939	-0.19	0.49967	-0.30	Micrometer
X2AE87		0.00004	0.00015	0.49960	0.00	0.49996	-0.26	Micrometer
XNLA4F		0.00004	0.70866	0.49970	0.00	0.49998	0.00	Micrometer
XNPUVP		0.00004	0.00022	0.49961	0.04	0.50000	0.00	Micrometer
YBWW26		0.00004	0.00024	0.49961	0.03	0.49996	-0.16	Micrometer

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

Xref1 = 0.4996 in.

Xref2 = 0.5000 in.

WebCode	Data Flag (if assigned)	Reference Uncertainty (Uref)	Expanded Uncertainty (Ulab)	Sample I81 Lab Mean (Xlab)	Sample I81 Performance Statistic (En1)	Sample I82 Lab Mean (Xlab)	Sample I82 Performance Statistic (En2)	Instrument
ZM4Z4D		0.00004	0.00030	0.49970	0.33	0.50010	0.33	Micrometer
ZXKP3J		0.00004	0.39500	0.49950	0.00	0.50000	0.00	Micrometer

Summary Statistics

	Sample I81		Sample I82	
Grand Means	0.4995	inch	0.4999	inch
Stnd Dev Btwn Labs	0.0002	inch	0.0002	inch

Samples I81, I82 : 52100 Steel, 52100 Steel

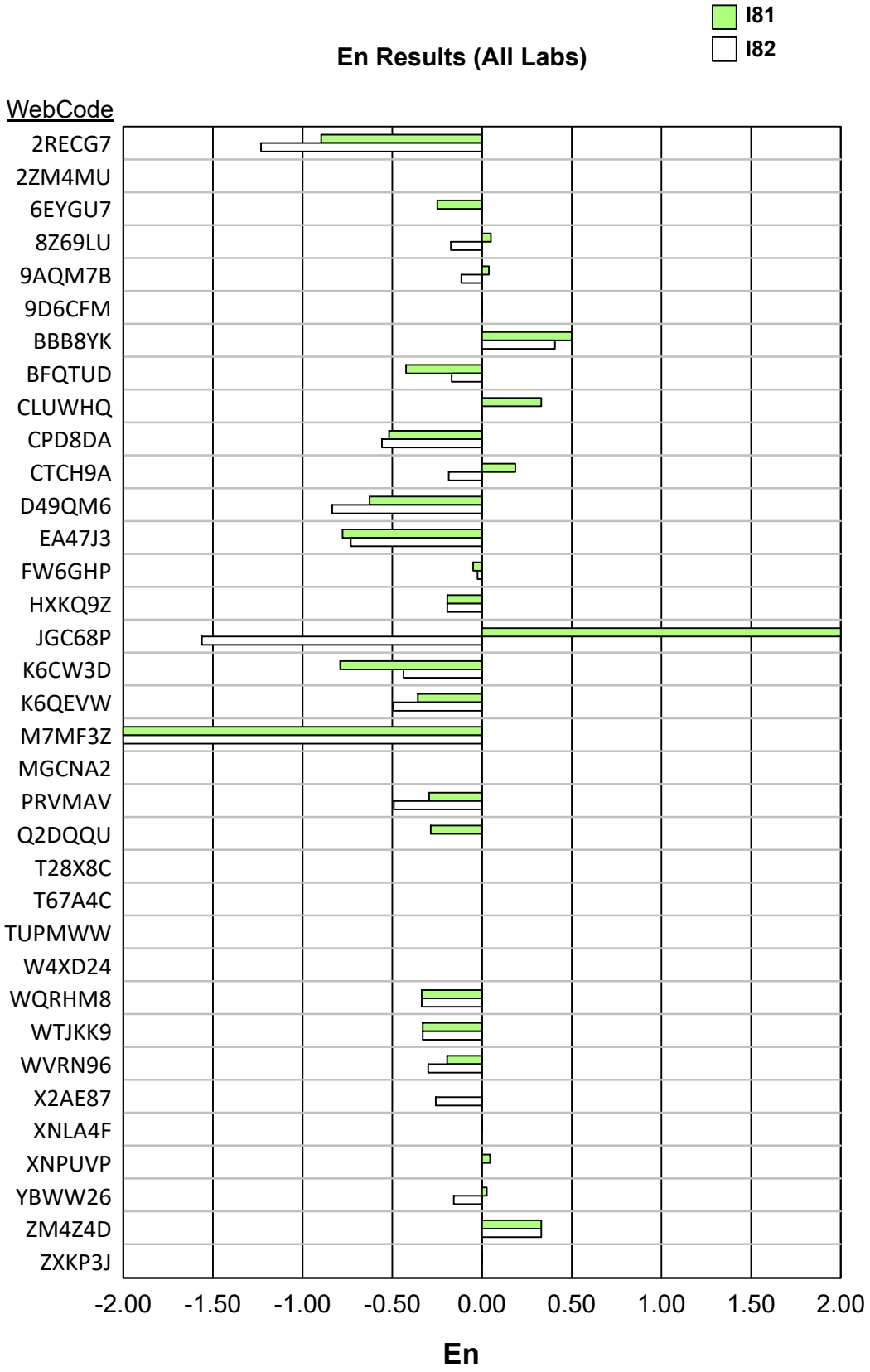
Statistics based on 32 of 35 reporting participants

Comments on Assigned Data Flags for Test #1001

2RECG7 (X) - En value for sample I82 was low.

JGC68P (X) - En value for sample I81 was high. En value for sample I82 was low.

M7MF3Z (X) - En value for both samples was low.



		Sample R81			Sample R82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE		48.50	0.03	0.04	49.80	-0.04	-0.08
39BBRD		48.40	-0.07	-0.13	49.40	-0.44	-0.95
7VBYRV		48.40	-0.07	-0.13	49.70	-0.14	-0.30
8CGC8R	X	1.100	-47.37	-82.09	1.500	-48.34	-104.26
8H3E7G		48.00	-0.47	-0.82	49.30	-0.54	-1.16
8PMELU		48.40	-0.07	-0.13	49.60	-0.24	-0.51
9CV82X		49.30	0.83	1.43	50.30	0.46	1.00
A679QF		47.30	-1.17	-2.04	49.00	-0.84	-1.81
AVFLVD	X	45.63	-2.85	-4.94	48.44	-1.40	-3.03
C46VGT		48.47	-0.01	-0.01	49.76	-0.08	-0.17
D3QNTQ		48.20	-0.27	-0.48	49.50	-0.34	-0.73
D6YZAR		48.40	-0.07	-0.13	49.60	-0.24	-0.51
DJLYN9		49.40	0.93	1.60	50.50	0.66	1.43
DP4JKU		49.90	1.43	2.47	50.40	0.56	1.21
EH2RUB		47.90	-0.57	-1.00	50.60	0.76	1.64
EHLLEL		48.44	-0.03	-0.05	49.31	-0.53	-1.13
ENQCV7		48.40	-0.07	-0.13	49.70	-0.14	-0.30
EPPFML		48.60	0.13	0.22	49.90	0.06	0.13
EWJRA3		49.00	0.53	0.91	49.90	0.06	0.13
EXW6CD		48.00	-0.47	-0.82	49.70	-0.14	-0.30
EZZ3JZ		49.10	0.63	1.08	50.10	0.26	0.56
GJNALM		48.10	-0.37	-0.65	49.20	-0.64	-1.38
GKWL3N		49.40	0.93	1.60	49.70	-0.14	-0.30
HP7ZKM		47.90	-0.57	-1.00	49.80	-0.04	-0.08
J7AURM		47.90	-0.57	-1.00	49.30	-0.54	-1.16
JAT228		48.40	-0.07	-0.13	49.50	-0.34	-0.73
JFVXYL		48.75	0.28	0.48	49.86	0.02	0.05
JK9ZLH		47.90	-0.57	-1.00	50.60	0.76	1.64
JN6LDK		47.80	-0.67	-1.17	50.40	0.56	1.21
KGLLT2		48.20	-0.27	-0.48	49.20	-0.64	-1.38
KV72Z8		47.85	-0.62	-1.08	49.12	-0.72	-1.54
L68649		48.40	-0.07	-0.13	49.70	-0.14	-0.30
LN64QA		48.80	0.33	0.56	49.80	-0.04	-0.08
LPYZ2P		48.44	-0.03	-0.05	49.60	-0.24	-0.51
M8UUA7		48.40	-0.07	-0.13	49.60	-0.24	-0.51
NRVG4A		48.40	-0.07	-0.13	49.60	-0.24	-0.51
NZPFYP		48.20	-0.27	-0.48	49.50	-0.34	-0.73
PCH7BF		48.30	-0.17	-0.30	49.20	-0.64	-1.38
Q83WWG	X	50.74	2.27	3.93	51.74	1.90	4.10
QWLBDF	*	50.00	1.53	2.64	50.40	0.56	1.21
RM9U4L		48.80	0.33	0.56	50.20	0.36	0.78
TTV236		47.20	-1.27	-2.21	49.80	-0.04	-0.08
TX6662		48.50	0.03	0.04	49.70	-0.14	-0.30
UM64VU		48.59	0.12	0.20	49.89	0.05	0.11
UQE9G2		49.03	0.56	0.96	50.20	0.36	0.78
WANTQB		47.90	-0.57	-1.00	50.60	0.76	1.64
YMMNPE		48.40	-0.07	-0.13	49.70	-0.14	-0.30

Fasteners and Metals Interlaboratory Testing Program

Analysis 1101

Tensile Strength: Lab-Machined Flat Aluminum
ASTM B557

		Sample R81			Sample R82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
YPAAAP	X	45.60	-2.87	-4.98	47.50	-2.34	-5.04
YYKCVQ		49.00	0.53	0.91	50.50	0.66	1.43
Z3CZP3		48.10	-0.37	-0.65	50.60	0.76	1.64
ZAW4W6	*	48.40	-0.07	-0.13	51.00	1.16	2.51
ZG2TMP		48.55	0.07	0.12	49.79	-0.05	-0.11
ZUKGWM		49.53	1.05	1.83	49.95	0.11	0.24

Summary Statistics

	Sample R81		Sample R82	
Grand Means	48.47	ksi	49.84	ksi
Stnd Dev Btwn Labs	0.58	ksi	0.46	ksi

Samples R81, R82 : 16G 6061-T6 (A), 14G 6061-T6 (B)

Statistics based on 49 of 53 reporting participants

Comments on Assigned Data Flags for Test #1101

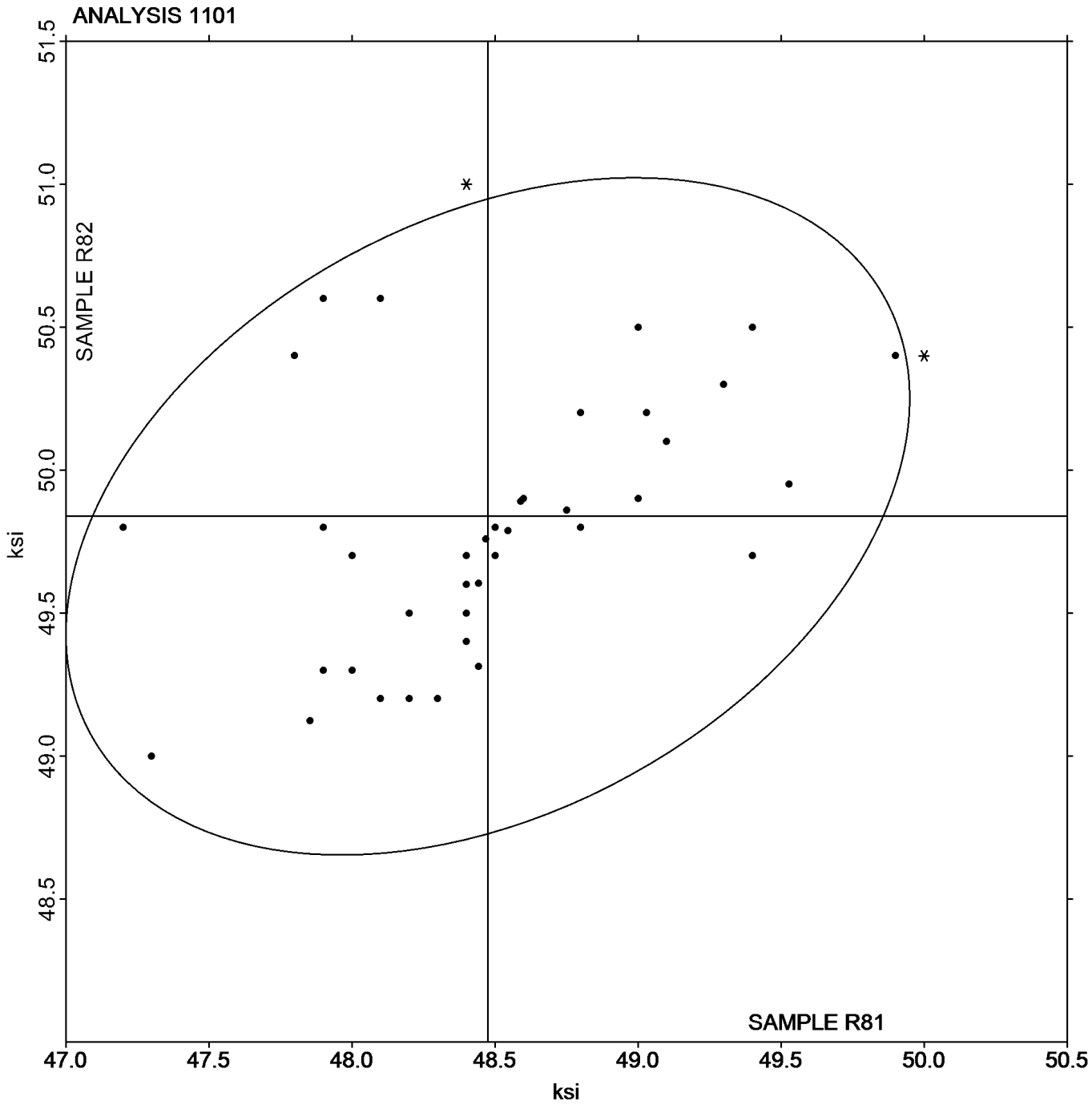
8CGC8R (X) - Extreme data.

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

Q83WWG (X) - Data for both samples are high.

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

SAMPLE R81	SAMPLE R82
48.47 ksi	49.84 ksi



		Sample R81			Sample R82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE		40.30	0.08	0.13	42.10	0.03	0.06
39BBRD	X	40.20	-0.02	-0.03	48.80	6.73	14.56
7VBYRV		40.10	-0.12	-0.19	42.00	-0.07	-0.16
8CGC8R	X	46.90	6.68	10.87	47.70	5.63	12.18
8H3E7G		39.90	-0.32	-0.52	41.40	-0.67	-1.46
8PMELU		40.80	0.58	0.95	42.10	0.03	0.06
9CV82X		40.80	0.58	0.95	42.10	0.03	0.06
A679QF		39.50	-0.72	-1.17	41.80	-0.27	-0.59
AVFLVD	X	37.95	-2.27	-3.69	40.57	-1.50	-3.24
C46VGT		40.51	0.29	0.47	42.31	0.23	0.51
D3QNTQ		40.20	-0.02	-0.03	42.00	-0.07	-0.16
D6YZAR		40.20	-0.02	-0.03	41.80	-0.27	-0.59
DJLYN9		41.00	0.78	1.27	42.60	0.53	1.14
DP4JKU		41.50	1.28	2.08	42.60	0.53	1.14
EH2RUB		39.50	-0.72	-1.17	42.60	0.53	1.14
EHLLEL	*	40.03	-0.19	-0.31	40.90	-1.17	-2.54
ENQCV7		40.40	0.18	0.30	42.20	0.13	0.28
EPPFML		40.30	0.08	0.13	41.40	-0.67	-1.46
EWJRA3		41.00	0.78	1.27	42.80	0.73	1.57
EXW6CD		38.90	-1.32	-2.14	41.40	-0.67	-1.46
EZZ3JZ		40.10	-0.12	-0.19	41.80	-0.27	-0.59
GJNALM		40.10	-0.12	-0.19	41.70	-0.37	-0.81
GKWL3N		41.60	1.38	2.25	42.20	0.13	0.28
HP7ZKM		39.40	-0.82	-1.33	41.90	-0.17	-0.37
J7AURM		39.30	-0.92	-1.49	41.50	-0.57	-1.24
JAT228		40.00	-0.22	-0.36	41.80	-0.27	-0.59
JFVXYL		40.45	0.23	0.38	41.99	-0.08	-0.18
JK9ZLH	*	39.70	-0.52	-0.84	43.10	1.03	2.22
JN6LDK		39.50	-0.72	-1.17	42.30	0.23	0.49
KGLLT2		40.10	-0.12	-0.19	41.60	-0.47	-1.02
KV72Z8		40.19	-0.03	-0.05	42.38	0.31	0.66
L68649		40.30	0.08	0.13	42.10	0.03	0.06
LN64QA		40.40	0.18	0.30	42.20	0.13	0.28
LPYZ2P		40.32	0.10	0.17	42.06	-0.01	-0.03
M8UUA7		40.20	-0.02	-0.03	41.80	-0.27	-0.59
NRVG4A		40.20	-0.02	-0.03	41.90	-0.17	-0.37
NZPFYP		38.90	-1.32	-2.14	42.00	-0.07	-0.16
PCH7BF		40.00	-0.22	-0.36	41.50	-0.57	-1.24
Q83WWG	X	41.75	1.54	2.50	43.76	1.68	3.64
QWLBDF		41.50	1.28	2.08	42.60	0.53	1.14
RM9U4L		40.30	0.08	0.13	42.20	0.13	0.28
TTV236		39.60	-0.62	-1.01	42.00	-0.07	-0.16
TX6662		39.90	-0.32	-0.52	41.50	-0.57	-1.24
UM64VU		40.14	-0.08	-0.13	42.20	0.13	0.28
UQE9G2		40.99	0.77	1.25	42.68	0.61	1.31
WANTQB		39.60	-0.62	-1.01	42.60	0.53	1.14
YMMNPE		40.30	0.08	0.13	42.10	0.03	0.06

		Sample R81			Sample R82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
YPAAAP	X	37.60	-2.62	-4.26	40.10	-1.97	-4.27
YYKCVQ		40.90	0.68	1.11	41.80	-0.27	-0.59
Z3CZP3		39.90	-0.32	-0.52	42.60	0.53	1.14
ZAW4W6	*	40.40	0.18	0.30	43.30	1.23	2.66
ZG2TMP		39.96	-0.26	-0.43	42.03	-0.04	-0.10
ZUKGWM		41.31	1.09	1.77	41.95	-0.12	-0.26

Summary Statistics

	Sample R81		Sample R82	
Grand Means	40.22	ksi	42.07	ksi
Stnd Dev Btwn Labs	0.61	ksi	0.46	ksi

Samples R81, R82 : 16G 6061-T6 (A), 14G 6061-T6 (B)

Statistics based on 48 of 53 reporting participants

Comments on Assigned Data Flags for Test #1102

39BBRD (X) - Data for sample R82 are high.

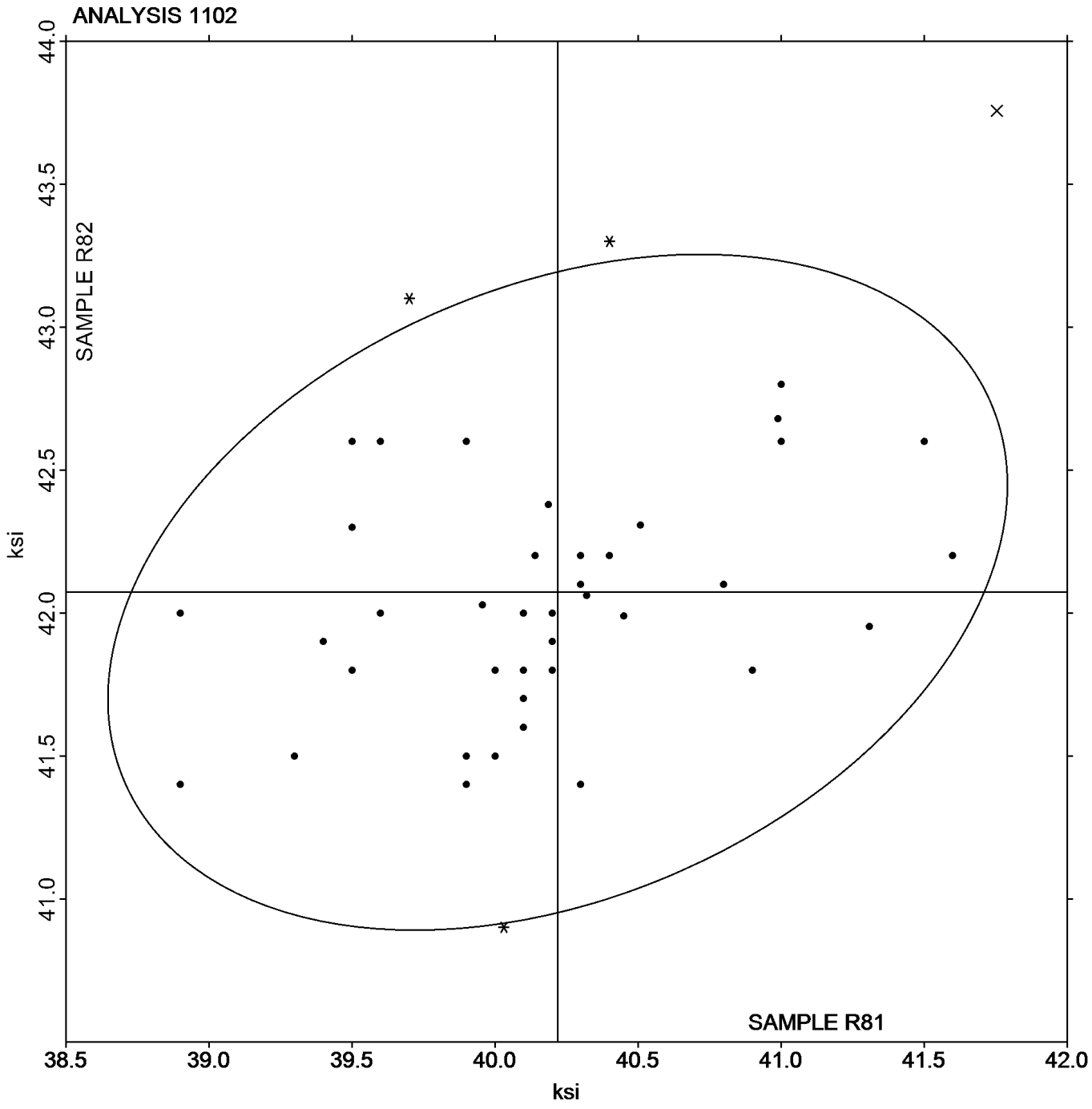
8CGC8R (X) - Data for both samples are high.

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

Q83WWG (X) - Data for sample R82 are high.

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

SAMPLE R81	SAMPLE R82
40.22 ksi	42.07 ksi



		Sample R81			Sample R82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE		14.40	0.09	0.15	15.80	0.26	0.36
39BBRD		14.00	-0.31	-0.48	14.50	-1.04	-1.41
7VBYRV		15.00	0.69	1.08	16.50	0.96	1.30
8CGC8R	X	19.60	5.29	8.26	20.50	4.96	6.73
8H3E7G	X	12.00	-2.31	-3.60	18.00	2.46	3.34
8PMELU		13.00	-1.31	-2.04	14.00	-1.54	-2.09
9CV82X		13.50	-0.81	-1.26	15.00	-0.54	-0.73
A679QF		13.80	-0.51	-0.79	13.90	-1.64	-2.22
AVFLVD		14.00	-0.31	-0.48	16.65	1.11	1.51
C46VGT		14.60	0.29	0.46	15.60	0.06	0.08
D3QNTQ		14.30	-0.01	-0.01	15.50	-0.04	-0.05
D6YZAR		14.00	-0.31	-0.48	16.00	0.46	0.63
DJLYN9		14.90	0.59	0.93	15.70	0.16	0.22
DP4JKU		13.50	-0.81	-1.26	15.00	-0.54	-0.73
EH2RUB		15.10	0.79	1.24	16.20	0.66	0.90
EHLLEL		14.70	0.39	0.62	17.00	1.46	1.98
ENQCV7		13.90	-0.41	-0.63	15.20	-0.34	-0.46
EPPFML	*	13.50	-0.81	-1.26	16.50	0.96	1.30
EWJRA3		15.00	0.69	1.08	15.00	-0.54	-0.73
EXW6CD		14.80	0.49	0.77	16.60	1.06	1.44
EZZ3JZ		15.00	0.69	1.08	15.00	-0.54	-0.73
GJNALM		14.90	0.59	0.93	15.50	-0.04	-0.05
GKWL3N		13.50	-0.81	-1.26	14.50	-1.04	-1.41
HP7ZKM		13.00	-1.31	-2.04	15.50	-0.04	-0.05
J7AURM		15.00	0.69	1.08	16.00	0.46	0.63
JAT228		14.70	0.39	0.62	16.50	0.96	1.30
JFVXYL		13.73	-0.58	-0.90	15.21	-0.33	-0.44
JK9ZLH		13.50	-0.81	-1.26	14.50	-1.04	-1.41
JN6LDK		14.00	-0.31	-0.48	15.50	-0.04	-0.05
KGLLT2		14.60	0.29	0.46	15.80	0.26	0.36
KV72Z8	X	15.00	0.69	1.08	21.00	5.46	7.41
L68649		14.80	0.49	0.77	15.80	0.26	0.36
LN64QA		15.40	1.09	1.71	16.70	1.16	1.58
LPYZ2P		15.40	1.09	1.71	16.10	0.56	0.76
M8UUA7		14.17	-0.14	-0.21	15.35	-0.19	-0.26
NRVG4A		14.00	-0.31	-0.48	15.50	-0.04	-0.05
NZPFYP		13.60	-0.71	-1.10	15.00	-0.54	-0.73
PCH7BF		15.00	0.69	1.08	15.50	-0.04	-0.05
Q83WWG		15.10	0.79	1.24	17.25	1.71	2.32
QWLBDF		15.00	0.69	1.08	15.50	-0.04	-0.05
RM9U4L		15.00	0.69	1.08	15.50	-0.04	-0.05
TTV236	X	10.50	-3.81	-5.94	14.00	-1.54	-2.09
TX6662		14.07	-0.24	-0.37	15.47	-0.07	-0.09
UM64VU		14.35	0.04	0.07	15.10	-0.44	-0.59
UQE9G2		14.60	0.29	0.46	15.90	0.36	0.49
WANTQB		14.00	-0.31	-0.48	15.50	-0.04	-0.05
YMMNPE		13.10	-1.21	-1.88	14.30	-1.24	-1.68

WebCode	Data Flag	Sample R81 Lab Mean	Sample R81 Diff. from Grand Mean	Sample R81 CPV	Sample R82 Lab Mean	Sample R82 Diff. from Grand Mean	Sample R82 CPV
YPAAAP	X	10.80	-3.51	-5.47	10.70	-4.84	-6.56
YYKCVQ		14.40	0.09	0.15	15.70	0.16	0.22
Z3CZP3		14.00	-0.31	-0.48	15.50	-0.04	-0.05
ZAW4W6		14.50	0.19	0.30	15.00	-0.54	-0.73
ZG2TMP		13.75	-0.56	-0.87	14.90	-0.64	-0.87
ZUKGWM		14.50	0.19	0.30	15.60	0.06	0.08

Summary Statistics

	Sample R81		Sample R82	
Grand Means	14.31	Percent	15.54	Percent
Stnd Dev Btwn Labs	0.64	Percent	0.74	Percent

Samples R81, R82 : 16G 6061-T6 (A), 14G 6061-T6 (B)

Statistics based on 48 of 53 reporting participants

Comments on Assigned Data Flags for Test #1103

8CGC8R (X) - Data for both samples are high.

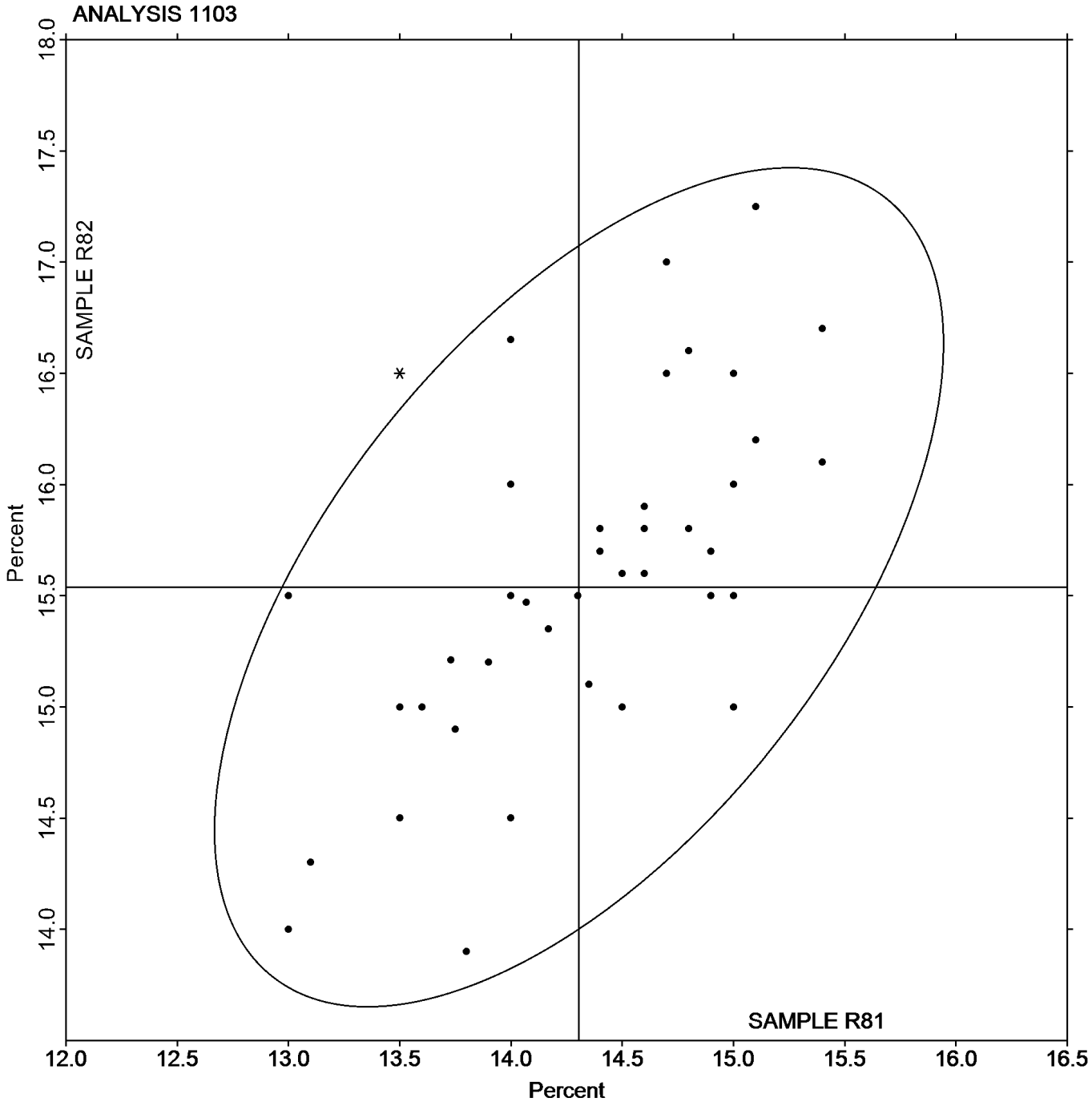
8H3E7G (X) - Data for sample R81 are low and data for sample R82 are high.

KV72Z8 (X) - Data for sample R82 are high.

TTV236 (X) - Data for sample R81 are low.

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

SAMPLE R81	SAMPLE R82
14.31 Percent	15.54 Percent



		Sample A81			Sample A82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2NF2L7		73.00	0.02	0.04	71.00	0.17	0.27
427UYH		72.40	-0.58	-1.01	70.60	-0.23	-0.36
436V3P		72.87	-0.11	-0.19	70.82	0.00	-0.01
6CPPQV		73.00	0.02	0.04	71.00	0.17	0.27
89JQLF		72.30	-0.68	-1.19	70.40	-0.43	-0.67
8CJ2BN		73.10	0.12	0.22	70.40	-0.43	-0.67
8UU3XA		72.50	-0.48	-0.84	70.70	-0.13	-0.20
93BU9U		72.70	-0.28	-0.49	71.50	0.67	1.06
9THKKW		73.10	0.12	0.22	71.07	0.24	0.38
CCHXNE		73.50	0.53	0.93	70.63	-0.20	-0.31
DJE964		73.55	0.57	1.01	71.40	0.58	0.91
DXGKQV		73.90	0.92	1.63	71.60	0.77	1.22
ERZQX3		72.59	-0.38	-0.68	70.58	-0.25	-0.40
EZZ3JZ		73.50	0.52	0.92	71.00	0.17	0.27
FEUTU3	X	70.83	-2.15	-3.77	73.74	2.91	4.59
GC6ZHJ	X	69.80	-3.18	-5.59	72.00	1.17	1.85
K86XUM		73.30	0.32	0.57	71.30	0.47	0.75
KAMXWV		72.77	-0.21	-0.37	70.36	-0.47	-0.74
LJQJR2		73.00	0.02	0.04	71.10	0.27	0.43
LPGU2Y		72.80	-0.18	-0.31	70.60	-0.23	-0.36
NBAQ9G		72.53	-0.44	-0.78	70.71	-0.12	-0.19
QJTUHM		73.89	0.91	1.60	71.63	0.80	1.27
QXWC9E		72.50	-0.48	-0.84	69.70	-1.13	-1.78
R4LYXT		73.70	0.72	1.27	71.20	0.37	0.59
RDJ2VV		73.00	0.02	0.04	70.60	-0.23	-0.36
RM9U4L		73.00	0.02	0.04	70.50	-0.33	-0.52
T6KX3H		72.77	-0.21	-0.37	71.20	0.37	0.59
TQ8ELB		71.92	-1.06	-1.86	70.03	-0.80	-1.26
TX6662		73.90	0.92	1.63	71.70	0.87	1.38
U2HEHV		73.68	0.70	1.24	71.50	0.68	1.07
WAQHV8		72.05	-0.93	-1.63	69.68	-1.15	-1.81
WPHFW3		72.70	-0.28	-0.49	70.40	-0.43	-0.67
XLJA4H	*	72.48	-0.50	-0.87	71.82	0.99	1.57
Y98GYA		72.62	-0.36	-0.63	70.31	-0.52	-0.81
YDJBPE		73.20	0.22	0.39	71.50	0.67	1.06
YJ4NDF		74.38	1.40	2.47	71.63	0.80	1.26
YUKD8J	*	72.50	-0.48	-0.84	69.00	-1.83	-2.88
ZZTYTV		72.45	-0.53	-0.93	70.60	-0.23	-0.36

Summary Statistics

	Sample A81		Sample A82	
Grand Means	72.98	ksi	70.83	ksi
Stnd Dev Btwn Labs	0.57	ksi	0.63	ksi

Samples A81, A82 : AISI 1018 (S), AISI 1018 (L)

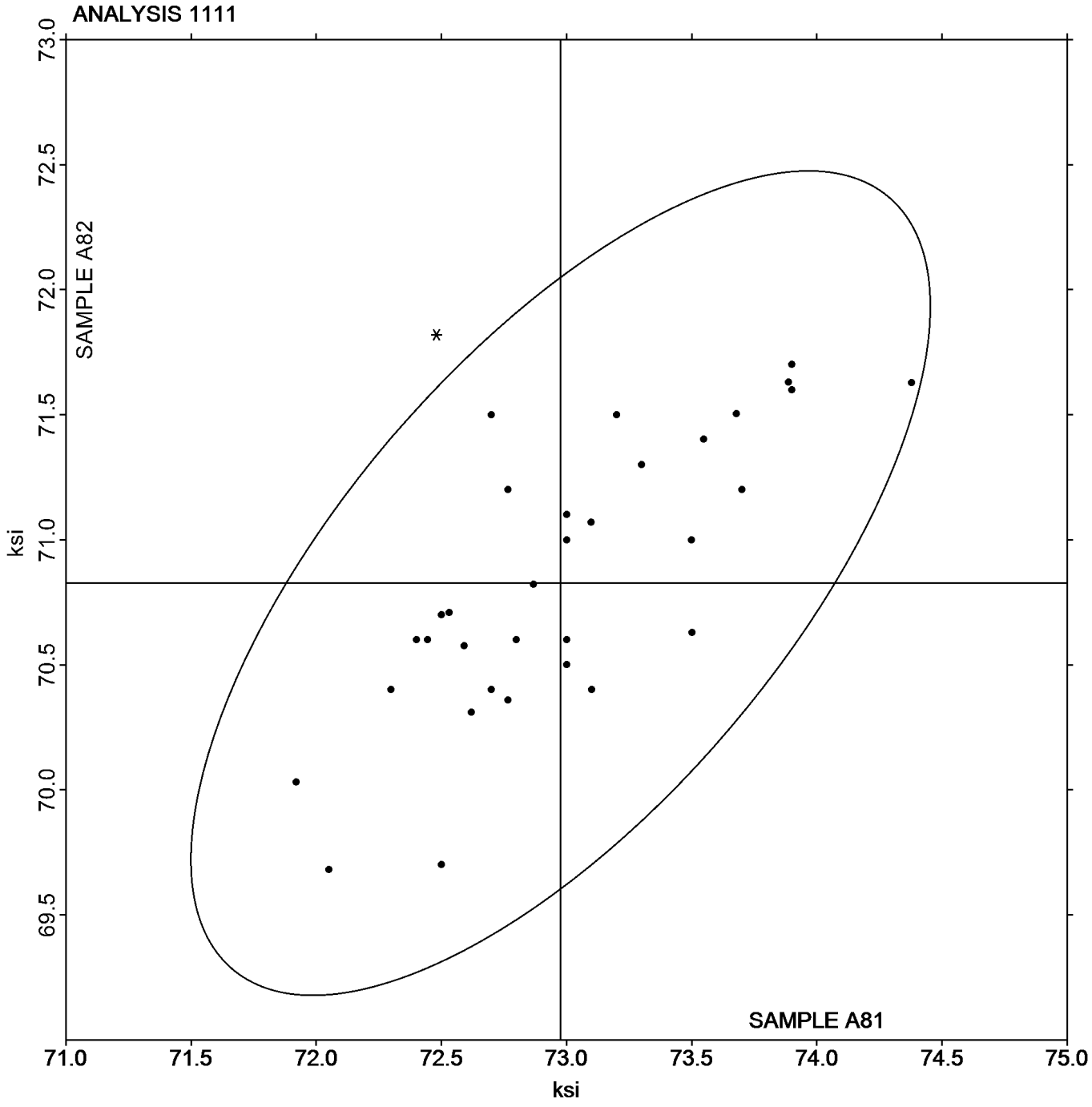
Statistics based on 36 of 38 reporting participants

Comments on Assigned Data Flags for Test #1111

FEUTU3 (X) - Data for sample A81 are low and data for sample A82 are high.

GC6ZHJ (X) - Data for sample A81 are low.

SAMPLE A81	SAMPLE A82
72.98 ksi	70.83 ksi



		Sample A81			Sample A82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2NF2L7		48.00	-1.17	-0.32	48.00	-0.59	-0.17
427UYH		51.50	2.33	0.64	54.80	6.21	1.77
436V3P		47.65	-1.53	-0.42	46.82	-1.77	-0.51
6CPPQV		54.00	4.83	1.33	49.90	1.31	0.37
89JQLF	*	37.80	-11.37	-3.12	38.50	-10.09	-2.88
8CJ2BN		51.10	1.93	0.53	50.90	2.31	0.66
8UU3XA		48.60	-0.57	-0.16	47.00	-1.59	-0.45
93BU9U	*	43.50	-5.67	-1.56	49.50	0.91	0.26
9THKKW		48.15	-1.02	-0.28	46.85	-1.74	-0.50
CCHXNE		47.62	-1.55	-0.43	46.78	-1.81	-0.52
DJE964		52.34	3.17	0.87	49.31	0.72	0.21
DXGKQV		47.50	-1.67	-0.46	46.60	-1.99	-0.57
ERZQX3		51.79	2.62	0.72	46.21	-2.38	-0.68
EZZ3JZ		55.00	5.83	1.60	54.00	5.41	1.54
FEUTU3		45.48	-3.69	-1.01	47.19	-1.40	-0.40
GC6ZHJ		48.00	-1.17	-0.32	49.10	0.51	0.14
K86XUM		53.20	4.03	1.11	53.60	5.01	1.43
KAMXWV	M	No Data Reported			48.33	-0.27	-0.08
LJQJR2		48.40	-0.77	-0.21	47.70	-0.89	-0.25
LPGU2Y		48.60	-0.57	-0.16	48.20	-0.39	-0.11
NBAQ9G		47.27	-1.91	-0.52	46.20	-2.39	-0.68
QJTUHM		51.34	2.17	0.60	48.66	0.07	0.02
QXWC9E		52.90	3.73	1.02	52.30	3.71	1.06
R4LYXT		47.80	-1.37	-0.38	46.30	-2.29	-0.65
RDJ2VV		45.50	-3.67	-1.01	43.10	-5.49	-1.57
RM9U4L		53.50	4.33	1.19	51.50	2.91	0.83
T6KX3H		54.65	5.48	1.50	52.85	4.26	1.22
TQ8ELB		46.07	-3.10	-0.85	50.73	2.14	0.61
TX6662		49.40	0.23	0.06	49.50	0.91	0.26
U2HEHV		46.12	-3.05	-0.84	46.85	-1.74	-0.50
WAQHV8		46.19	-2.98	-0.82	44.52	-4.07	-1.16
WPHFW3		53.50	4.33	1.19	51.10	2.51	0.72
XLJA4H		45.33	-3.84	-1.06	46.26	-2.33	-0.67
Y98GYA		50.44	1.27	0.35	51.61	3.02	0.86
YDJBPE	*	52.60	3.43	0.94	56.80	8.21	2.34
YJ4NDF		47.72	-1.45	-0.40	46.58	-2.01	-0.57
YUKD8J		47.00	-2.17	-0.60	45.00	-3.59	-1.02
ZZTYTV		53.85	4.67	1.28	47.09	-1.50	-0.43

Summary Statistics

	Sample A81		Sample A82	
Grand Means	49.17	ksi	48.59	ksi
Stnd Dev Btwn Labs	3.64	ksi	3.50	ksi

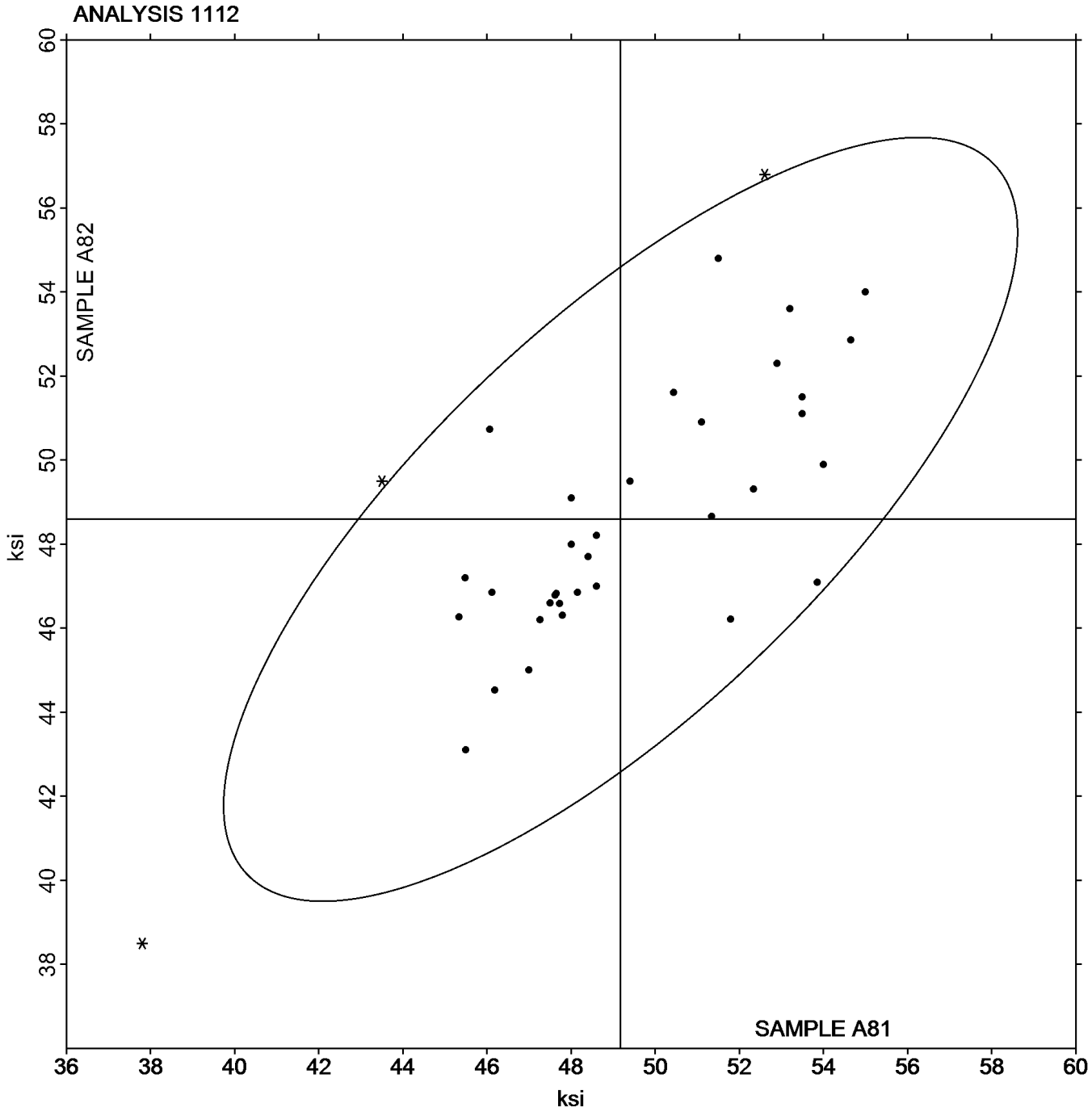
Samples A81, A82 : AISI 1018 (S), AISI 1018 (L)

Statistics based on 37 of 38 reporting participants

Comments on Assigned Data Flags for Test #1112

KAMXWV (M) - Participant did not submit data for sample A81.

SAMPLE A81	SAMPLE A82
49.17 ksi	48.59 ksi



WebCode	Data Flag	Sample A81 Lab Mean	Sample A81 Diff. from Grand Mean	Sample A81 CPV	Sample A82 Lab Mean	Sample A82 Diff. from Grand Mean	Sample A82 CPV
2NF2L7		33.20	-0.11	-0.10	35.10	0.70	0.62
427UYH		35.00	1.69	1.46	37.00	2.60	2.29
436V3P		33.80	0.49	0.42	35.30	0.90	0.79
6CPPQV		33.00	-0.31	-0.27	34.00	-0.40	-0.35
89JQLF		34.00	0.69	0.59	33.00	-1.40	-1.23
8CJ2BN		33.10	-0.21	-0.18	34.40	0.00	0.00
8UU3XA	X	32.00	-1.31	-1.13	39.00	4.60	4.04
93BU9U		33.70	0.39	0.34	34.60	0.20	0.18
9THKKW		33.00	-0.31	-0.27	33.00	-1.40	-1.23
CCHXNE		32.40	-0.91	-0.79	34.20	-0.20	-0.17
DJE964		35.40	2.09	1.80	36.30	1.90	1.67
DXGKQV		34.00	0.69	0.59	34.30	-0.10	-0.08
ERZQX3		34.50	1.19	1.03	36.40	2.00	1.76
EZZ3JZ		33.00	-0.31	-0.27	33.00	-1.40	-1.23
FEUTU3		33.40	0.09	0.08	33.10	-1.30	-1.14
GC6ZHJ		34.10	0.79	0.68	35.40	1.00	0.88
K86XUM		35.50	2.19	1.89	34.10	-0.30	-0.26
KAMXWV		34.70	1.39	1.20	34.90	0.50	0.44
LJQJR2		32.00	-1.31	-1.13	34.20	-0.20	-0.17
LPGU2Y		32.10	-1.21	-1.05	33.40	-1.00	-0.87
NBAQ9G		33.40	0.09	0.08	33.60	-0.80	-0.70
QJTUHM		32.20	-1.11	-0.96	32.70	-1.70	-1.49
QXWC9E		35.60	2.29	1.98	36.80	2.40	2.11
R4LYXT		33.40	0.09	0.08	33.80	-0.60	-0.52
RDJ2VV		31.60	-1.71	-1.48	34.90	0.50	0.44
RM9U4L		33.00	-0.31	-0.27	34.00	-0.40	-0.35
T6KX3H		32.00	-1.31	-1.13	32.30	-2.10	-1.84
TQ8ELB		32.73	-0.58	-0.50	34.75	0.35	0.31
TX6662		32.40	-0.91	-0.79	33.40	-1.00	-0.87
U2HEHV	*	30.40	-2.91	-2.51	33.80	-0.60	-0.52
WAQHV8		33.99	0.68	0.59	34.66	0.26	0.23
WPHFW3		33.00	-0.31	-0.27	34.00	-0.40	-0.35
XLJA4H		32.58	-0.73	-0.63	34.38	-0.02	-0.01
Y98GYA		34.13	0.82	0.71	35.58	1.18	1.04
YDJBPE		32.40	-0.91	-0.79	34.70	0.30	0.27
YJ4NDF		33.98	0.67	0.58	35.94	1.54	1.36
YUKD8J		34.00	0.69	0.59	34.00	-0.40	-0.35
ZZTYTV		31.82	-1.49	-1.29	33.64	-0.76	-0.66

Summary Statistics

	Sample A81		Sample A82	
Grand Means	33.31	Percent	34.40	Percent
Stnd Dev Btwn Labs	1.16	Percent	1.14	Percent

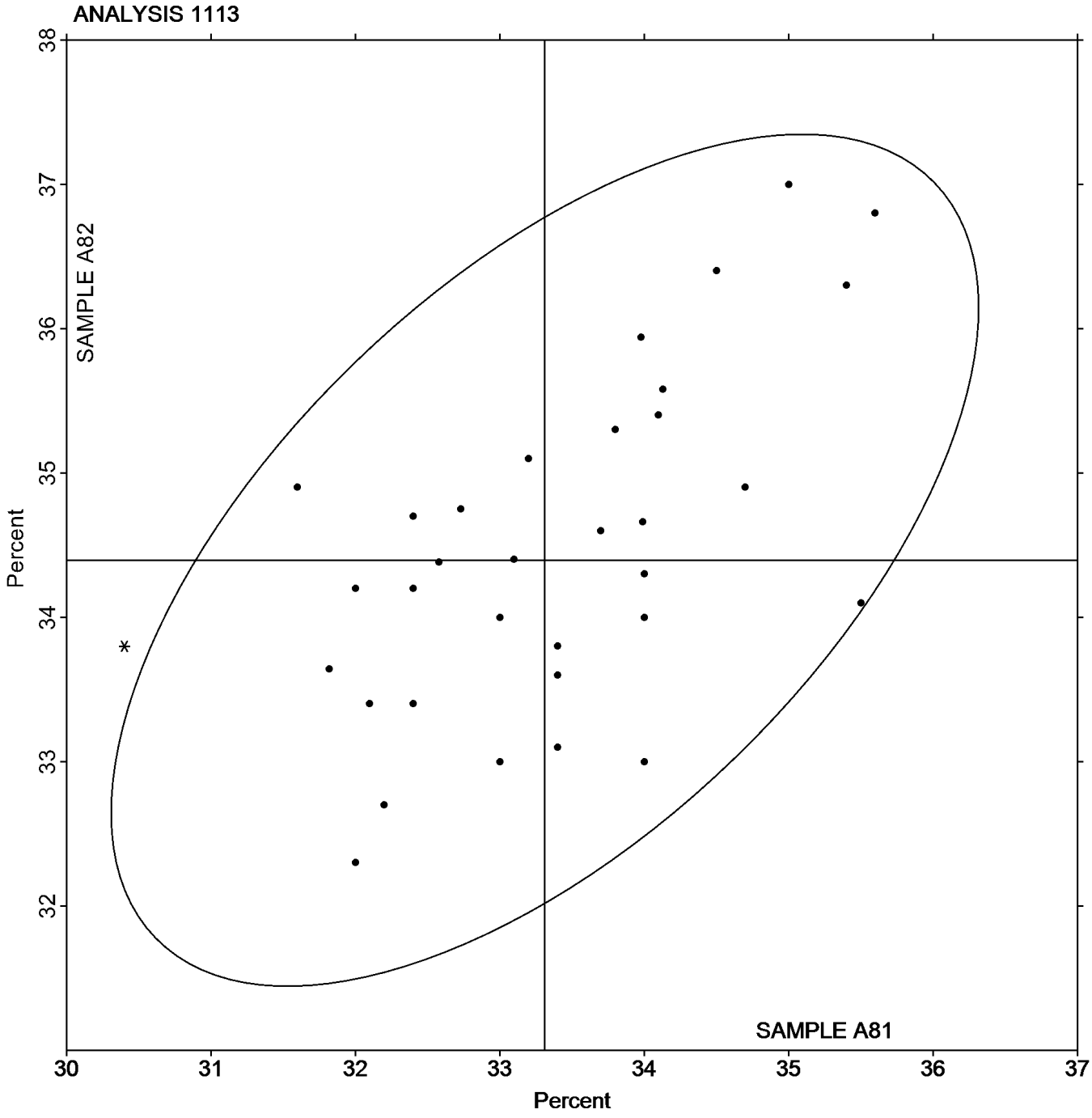
Samples A81, A82 : AISI 1018 (S), AISI 1018 (L)

Statistics based on 37 of 38 reporting participants

Comments on Assigned Data Flags for Test #1113

8UU3XA (X) - Data for sample A82 are high.

SAMPLE A81	SAMPLE A82
33.31 Percent	34.40 Percent



		Sample A81			Sample A82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2NF2L7	X	66.26	1.33	1.07	60.56	-7.65	-11.65
427UYH		63.90	-1.03	-0.83	68.20	-0.01	-0.02
436V3P		65.90	0.97	0.78	67.90	-0.31	-0.48
6CPPQV		65.00	0.07	0.05	68.00	-0.21	-0.32
89JQLF		67.00	2.07	1.66	68.00	-0.21	-0.32
8CJ2BN		64.10	-0.83	-0.67	68.20	-0.01	-0.02
8UU3XA	X	58.29	-6.64	-5.33	64.14	-4.07	-6.20
93BU9U	X	65.00	0.07	0.05	64.50	-3.71	-5.66
9THKKW		66.00	1.07	0.86	68.00	-0.21	-0.32
CCHXNE		65.40	0.47	0.38	68.70	0.49	0.74
DJE964		63.50	-1.43	-1.15	68.00	-0.21	-0.32
DXGKQV		65.80	0.87	0.70	69.10	0.89	1.35
ERZQX3		66.20	1.27	1.02	68.60	0.39	0.59
EZZ3JZ		66.00	1.07	0.86	69.00	0.79	1.20
FEUTU3	X	68.77	3.84	3.08	63.52	-4.69	-7.15
GC6ZHJ		64.60	-0.33	-0.27	66.80	-1.41	-2.15
K86XUM		64.30	-0.63	-0.51	68.80	0.59	0.90
KAMXWV		64.80	-0.13	-0.11	67.70	-0.51	-0.78
LJQJR2		64.00	-0.93	-0.75	68.00	-0.21	-0.32
LPGU2Y		64.00	-0.93	-0.75	67.00	-1.21	-1.85
NBAQ9G		62.20	-2.73	-2.19	67.00	-1.21	-1.85
QJTUHM		64.90	-0.03	-0.03	68.00	-0.21	-0.32
QXWC9E		62.90	-2.03	-1.63	67.90	-0.31	-0.48
R4LYXT		64.80	-0.13	-0.11	68.80	0.59	0.90
RDJ2VV		66.00	1.07	0.86	69.00	0.79	1.20
RM9U4L		65.00	0.07	0.05	69.00	0.79	1.20
T6KX3H		66.50	1.57	1.26	68.50	0.29	0.44
TQ8ELB		66.70	1.77	1.42	68.80	0.59	0.90
TX6662	X	61.00	-3.93	-3.16	64.00	-4.21	-6.42
U2HEHV		65.00	0.07	0.05	67.70	-0.51	-0.78
WAQHV8		66.20	1.27	1.02	68.60	0.39	0.59
WPHFW3		66.00	1.07	0.86	67.00	-1.21	-1.85
XLJA4H	X	65.95	1.02	0.82	65.56	-2.65	-4.04
Y98GYA		64.36	-0.57	-0.46	68.94	0.73	1.11
YDJBPE	X	41.80	-23.13	-18.56	45.20	-23.01	-35.06
YJ4NDF		65.96	1.03	0.82	67.98	-0.23	-0.35
YUKD8J		63.00	-1.93	-1.55	69.00	0.79	1.20
ZZTYTV		62.88	-2.05	-1.65	68.35	0.14	0.22

Summary Statistics

	Sample A81		Sample A82	
Grand Means	64.93	Percent	68.21	Percent
Stnd Dev Btwn Labs	1.25	Percent	0.66	Percent

Samples A81, A82 : AISI 1018 (S), AISI 1018 (L)

Statistics based on 31 of 38 reporting participants

Comments on Assigned Data Flags for Test #1114

2NF2L7 (X) - Data for sample A82 are low.

8UU3XA (X) - Data for both samples are low.

93BU9U (X) - Data for sample A82 are low.

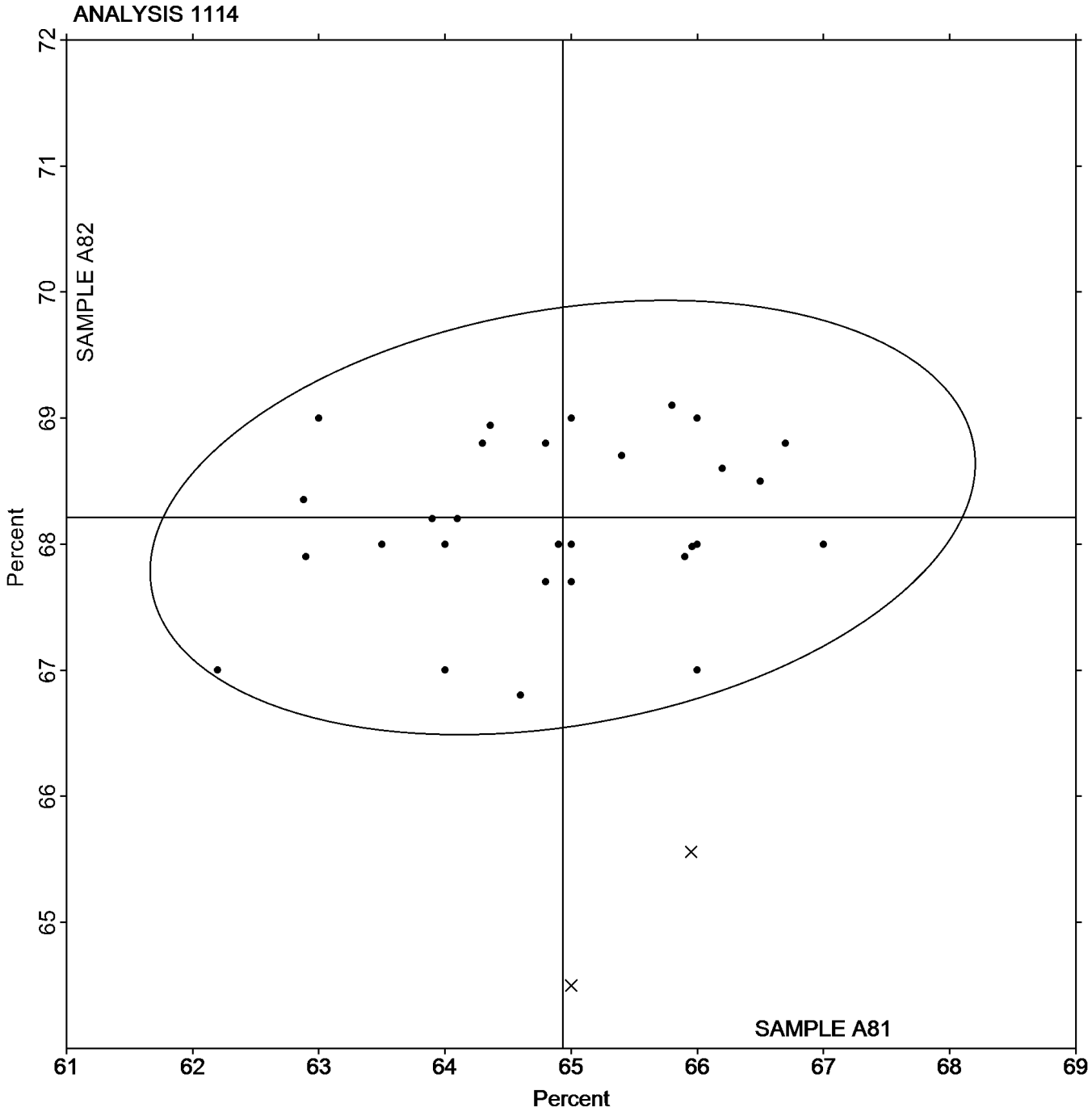
FEUTU3 (X) - Data for sample A81 are high and data for sample A82 are low.

TX6662 (X) - Data for both samples are low.

XLJA4H (X) - Data for sample A82 are low.

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

SAMPLE A81	SAMPLE A82
64.93 Percent	68.21 Percent



		Sample P81			Sample P82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE	M	No Data Reported			72.90	-0.49	-0.50
244AKP		69.95	-0.97	-1.18	73.23	-0.16	-0.17
2FYMJZ		70.40	-0.53	-0.64	72.20	-1.19	-1.21
2NF2L7	X	57.00	-13.93	-16.96	54.00	-19.39	-19.69
3MVLMV		69.80	-1.13	-1.37	71.70	-1.69	-1.71
4A83LX		70.40	-0.53	-0.64	73.30	-0.09	-0.09
4BEJFM		70.49	-0.44	-0.53	72.23	-1.16	-1.18
4MANTU		70.45	-0.48	-0.58	73.07	-0.32	-0.32
6R7HE3	X	70.90	-0.03	-0.03	79.80	6.41	6.51
749HCY		70.43	-0.49	-0.60	72.49	-0.90	-0.91
7EQ2WV		70.90	-0.03	-0.03	73.70	0.31	0.32
7FKPFQ		71.50	0.58	0.71	74.41	1.02	1.03
7RXW8K		70.40	-0.53	-0.64	73.40	0.01	0.01
8ADJB8		71.30	0.37	0.46	73.90	0.51	0.52
AFT2M7		71.85	0.92	1.13	74.41	1.02	1.04
APWBRB	*	68.95	-1.98	-2.40	72.43	-0.96	-0.97
APX7BG		70.23	-0.69	-0.84	72.98	-0.41	-0.41
BEFQ9E		71.10	0.17	0.21	74.10	0.71	0.72
C3B6BE		70.05	-0.87	-1.06	72.81	-0.58	-0.59
C7UCFT		70.49	-0.44	-0.53	72.71	-0.68	-0.69
CCHXNE		72.67	1.74	2.12	75.32	1.93	1.96
CJZHHE		71.40	0.47	0.58	74.00	0.61	0.62
CZA2KC		70.76	-0.17	-0.20	72.08	-1.31	-1.33
D46A4D		71.00	0.07	0.09	73.00	-0.39	-0.39
D9H9KD		70.62	-0.30	-0.37	73.43	0.04	0.04
D9YZX4		71.10	0.17	0.21	73.20	-0.19	-0.19
DGALJC		70.57	-0.36	-0.43	73.09	-0.29	-0.30
DGTB7D		70.67	-0.26	-0.31	73.27	-0.12	-0.12
DMKHNL		71.66	0.74	0.90	74.05	0.66	0.67
DXGKQV		71.40	0.47	0.58	73.60	0.21	0.21
E38JDP	X	72.08	1.16	1.41	79.48	6.09	6.19
E3RZTR		70.70	-0.23	-0.27	73.50	0.11	0.11
EHLLEL		70.40	-0.52	-0.64	72.16	-1.23	-1.25
EN7TRK		71.50	0.57	0.70	74.00	0.61	0.62
EPPFML		70.90	-0.03	-0.03	73.60	0.21	0.21
F33FKX		69.60	-1.33	-1.61	71.80	-1.59	-1.61
GF8XTC	*	71.00	0.07	0.09	75.00	1.61	1.64
H62BG7		71.10	0.17	0.21	74.20	0.81	0.82
HFP286	*	69.10	-1.83	-2.22	72.60	-0.79	-0.80
HXHAWM		70.14	-0.78	-0.96	72.27	-1.12	-1.13
HYY2AD		70.84	-0.09	-0.11	73.01	-0.38	-0.38
K2F8NQ		70.40	-0.53	-0.64	72.40	-0.99	-1.00
KLG8NB		71.60	0.67	0.82	74.30	0.91	0.93
KNPK7C		72.51	1.58	1.93	74.13	0.74	0.75
LUUWNV	X	71.32	0.39	0.48	43.48	-29.91	-30.37
LWXGL3		71.10	0.17	0.21	73.20	-0.19	-0.19
MQ8GVE		70.40	-0.53	-0.64	72.80	-0.59	-0.60

Fasteners and Metals Interlaboratory Testing Program

Analysis 1121

Tensile Strength: Lab-Machined Round Steel
ASTM E8

		Sample P81			Sample P82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
NBAQ9G		70.90	-0.03	-0.03	73.28	-0.11	-0.11
P2ZNHA		70.67	-0.26	-0.32	72.62	-0.77	-0.78
PP83EY		71.30	0.37	0.46	72.90	-0.49	-0.50
Q2DQQU	X	73.80	2.87	3.50	71.00	-2.39	-2.43
Q4GBT9		71.44	0.52	0.63	72.91	-0.48	-0.48
Q83WWG	*	73.22	2.29	2.79	76.28	2.89	2.94
QV8XWX		71.20	0.27	0.33	74.04	0.65	0.66
RQRTEU		70.34	-0.58	-0.71	72.66	-0.72	-0.74
V9G4WE		69.90	-1.03	-1.25	71.90	-1.49	-1.51
VFETF4		70.80	-0.13	-0.15	73.10	-0.29	-0.29
VKQTKH		72.30	1.37	1.67	75.30	1.91	1.94
VZNNCG		70.72	-0.21	-0.25	72.99	-0.40	-0.41
WFEDHX		70.51	-0.41	-0.50	73.00	-0.39	-0.40
WK8HAF		71.50	0.57	0.70	74.50	1.11	1.13
WUVBLD		70.20	-0.73	-0.88	72.80	-0.59	-0.60
WZLKVB		71.79	0.87	1.06	74.26	0.87	0.88
X4XY32	X	73.80	2.87	3.50	71.00	-2.39	-2.43
XLJA4H		71.82	0.89	1.09	74.17	0.78	0.79
XPCKQ2		71.80	0.87	1.07	74.00	0.61	0.62
ZG2TMP	*	72.60	1.67	2.03	76.13	2.74	2.78
ZJLRUT		71.59	0.67	0.81	72.82	-0.56	-0.57

Summary Statistics

	Sample P81		Sample P82	
Grand Means	70.93	ksi	73.39	ksi
Stnd Dev Btwn Labs	0.82	ksi	0.98	ksi

Samples P81, P82 : AISI 1018 (E), AISI 1018 (F)

Statistics based on 61 of 68 reporting participants

Comments on Assigned Data Flags for Test #1121

22GVWE (M) - Participant did not submit data for sample P81.

2NF2L7 (X) - Data for both samples are low.

6R7HE3 (X) - Data for sample P82 are high.

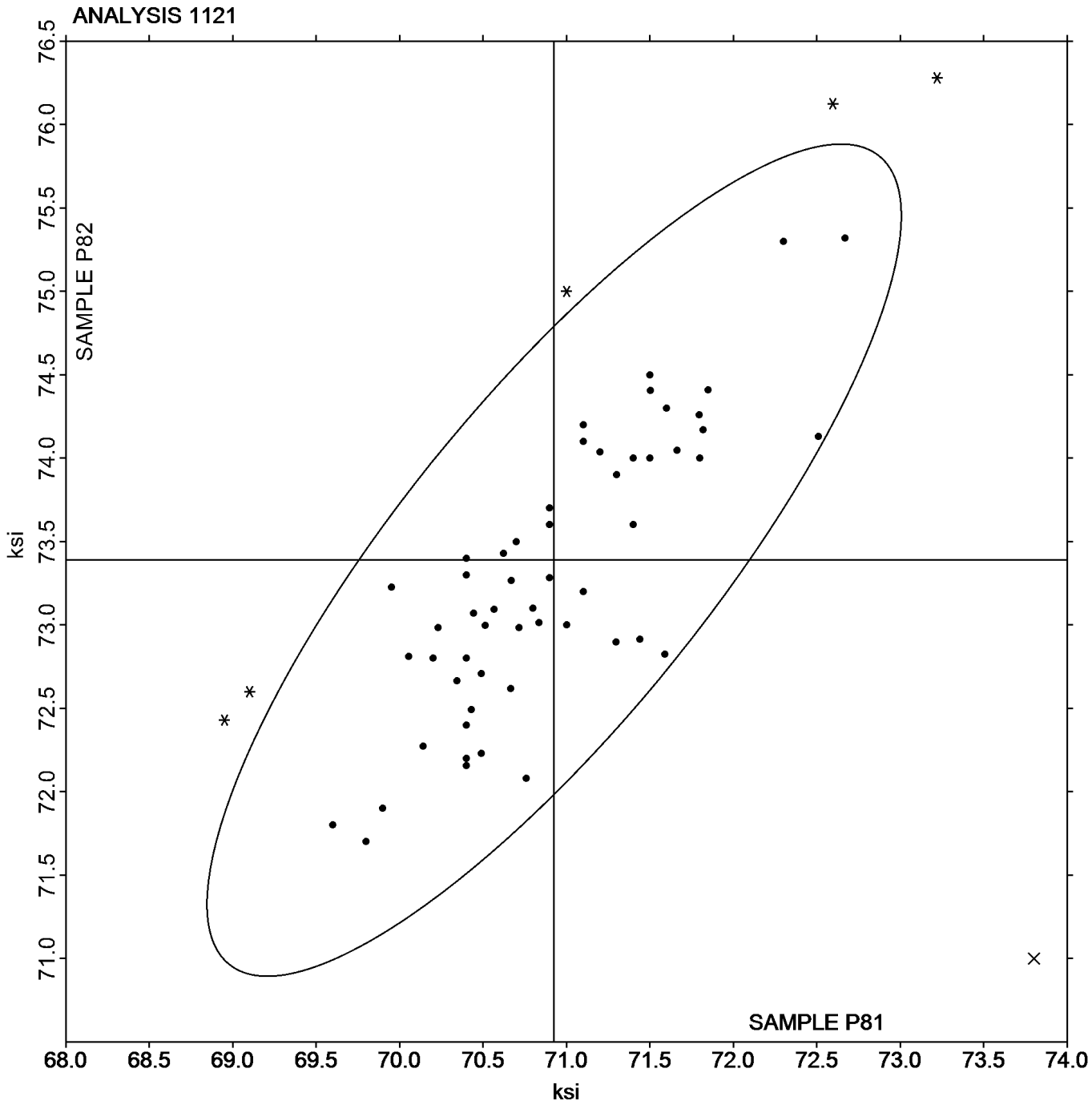
E38JDP (X) - Data for sample P82 are high.

LUUWNV (X) - Data for sample P82 are extremely low.

Q2DQQU (X) - Data appear to be transposed between samples.

X4XY32 (X) - Data appear to be transposed between samples.

SAMPLE P81	SAMPLE P82
70.93 ksi	73.39 ksi



		Sample P81			Sample P82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE	M	No Data Reported			47.40	-1.33	-0.50
244AKP		50.46	2.72	1.10	52.81	4.07	1.54
2FYMJZ		44.90	-2.83	-1.14	47.60	-1.13	-0.43
2NF2L7		47.00	-0.73	-0.30	49.00	0.27	0.10
3MVLMV		50.10	2.37	0.95	53.60	4.87	1.84
4A83LX		44.70	-3.03	-1.22	46.50	-2.23	-0.84
4BEJFM		45.69	-2.05	-0.82	45.83	-2.90	-1.10
4MANTU		47.28	-0.45	-0.18	48.64	-0.10	-0.04
6R7HE3		47.10	-0.63	-0.26	48.60	-0.13	-0.05
749HCY		48.30	0.56	0.23	49.28	0.55	0.21
7EQ2WV		47.00	-0.73	-0.30	48.30	-0.43	-0.16
7FKPFQ	*	48.73	1.00	0.40	46.12	-2.61	-0.99
7RXW8K		44.80	-2.93	-1.18	47.20	-1.53	-0.58
8ADJB8		50.10	2.37	0.95	51.90	3.17	1.19
AFT2M7	X	53.52	5.79	2.33	48.97	0.24	0.09
APWBRB		43.74	-3.99	-1.61	43.97	-4.76	-1.80
APX7BG		50.97	3.24	1.30	52.84	4.11	1.55
BEFQ9E		45.90	-1.83	-0.74	46.40	-2.33	-0.88
C3B6BE	*	53.08	5.35	2.15	55.99	7.25	2.74
C7UCFT		50.37	2.64	1.06	49.12	0.39	0.15
CCHXNE		49.83	2.10	0.84	50.27	1.54	0.58
CJZHHE		46.40	-1.33	-0.54	47.60	-1.13	-0.43
CZA2KC		49.70	1.97	0.79	48.24	-0.49	-0.19
D46A4D		46.00	-1.73	-0.70	46.00	-2.73	-1.03
D9H9KD		52.21	4.47	1.80	52.91	4.18	1.58
D9YZX4		45.60	-2.13	-0.86	46.60	-2.13	-0.81
DGALJC		52.12	4.38	1.76	54.07	5.34	2.02
DGTB7D		52.19	4.45	1.79	53.05	4.31	1.63
DMKHNL		48.16	0.43	0.17	50.14	1.41	0.53
DXGKQV		44.10	-3.63	-1.46	45.60	-3.13	-1.18
E38JDP	X	46.70	-1.03	-0.41	52.36	3.62	1.37
E3RZTR		45.20	-2.53	-1.02	47.00	-1.73	-0.65
EHLLEL		52.34	4.61	1.85	52.66	3.93	1.48
EN7TRK		48.00	0.27	0.11	48.30	-0.43	-0.16
EPPFML		51.20	3.47	1.39	50.90	2.17	0.82
F33FKX		51.30	3.57	1.43	53.30	4.57	1.72
GF8XTC		46.10	-1.63	-0.66	48.40	-0.33	-0.13
H62BG7		45.30	-2.43	-0.98	47.40	-1.33	-0.50
HFP286		46.90	-0.83	-0.34	47.70	-1.03	-0.39
HXHAWM		48.09	0.36	0.15	50.33	1.59	0.60
HYY2AD		50.71	2.97	1.20	49.11	0.38	0.14
K2F8NQ		45.80	-1.93	-0.78	46.60	-2.13	-0.81
KLG8NB		49.50	1.77	0.71	50.60	1.87	0.70
KNPK7C		49.24	1.51	0.61	48.90	0.17	0.06
LUUWNV		44.71	-3.02	-1.22	45.70	-3.03	-1.15
LWXGL3		46.00	-1.73	-0.70	47.30	-1.43	-0.54
MQ8GVE		46.90	-0.83	-0.34	47.20	-1.53	-0.58

Fasteners and Metals Interlaboratory Testing Program

Analysis 1122

Yield Strength: Lab-Machined Round Steel
ASTM E8

		Sample P81			Sample P82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
NBAQ9G		46.18	-1.55	-0.62	46.55	-2.18	-0.82
P2ZNHA		45.97	-1.77	-0.71	47.80	-0.93	-0.35
PP83EY		46.57	-1.17	-0.47	47.12	-1.61	-0.61
Q2DQQU		45.30	-2.43	-0.98	44.60	-4.13	-1.56
Q4GBT9		47.20	-0.53	-0.21	47.98	-0.76	-0.29
Q83WWG		47.46	-0.28	-0.11	49.83	1.10	0.41
QV8XWX		46.64	-1.10	-0.44	49.82	1.09	0.41
RQRTEU		47.62	-0.12	-0.05	47.47	-1.26	-0.48
V9G4WE		43.30	-4.43	-1.78	44.60	-4.13	-1.56
VFETF4		50.60	2.87	1.15	51.00	2.27	0.85
VKQTKH	X	54.10	6.37	2.56	51.00	2.27	0.85
VZNNCG		46.35	-1.38	-0.56	45.54	-3.20	-1.21
WFEDHX		52.24	4.50	1.81	53.73	4.99	1.88
WK8HAF		47.90	0.17	0.07	48.90	0.17	0.06
WUVBLD		45.30	-2.43	-0.98	46.80	-1.93	-0.73
WZLKVB		45.83	-1.90	-0.76	47.43	-1.31	-0.49
X4XY32	X	52.90	5.17	2.08	49.70	0.97	0.36
XLJA4H		45.29	-2.44	-0.98	46.92	-1.81	-0.69
XPCKQ2		47.60	-0.13	-0.05	47.50	-1.23	-0.47
ZG2TMP		46.77	-0.97	-0.39	47.74	-0.99	-0.37
ZJLRUT		49.31	1.58	0.64	49.37	0.64	0.24

Summary Statistics

	Sample P81		Sample P82	
Grand Means	47.73	ksi	48.73	ksi
Stnd Dev Btwn Labs	2.49	ksi	2.65	ksi

Samples P81, P82 : AISI 1018 (E), AISI 1018 (F)

Statistics based on 63 of 68 reporting participants

Comments on Assigned Data Flags for Test #1122

22GVWE (M) - Participant did not submit data for sample P81.

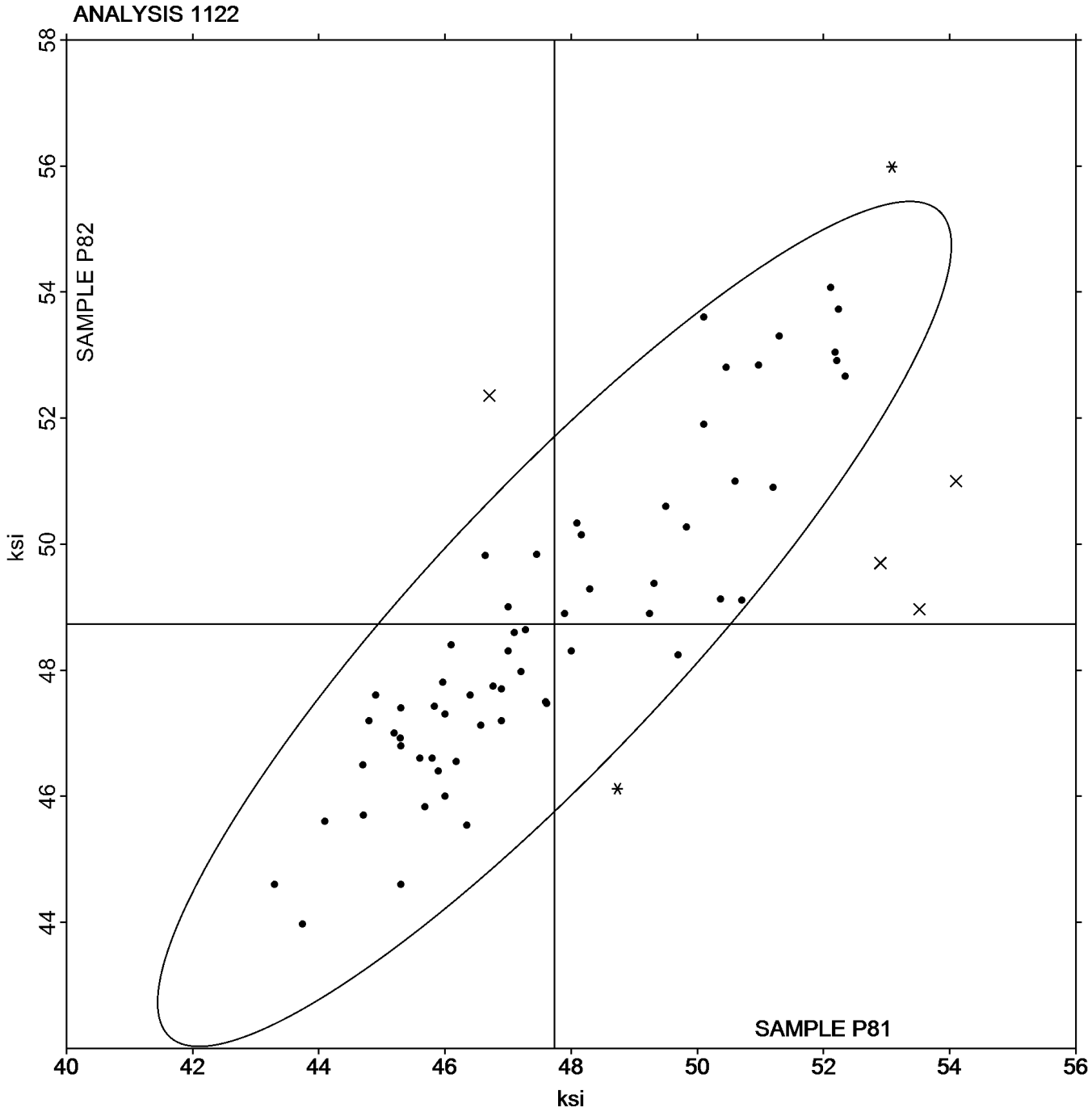
AFT2M7 (X) - Inconsistent in testing between samples.

E38JDP (X) - Inconsistent in testing between samples.

VKQTKH (X) - Inconsistent in testing between samples.

X4XY32 (X) - Data appear to be transposed between samples.

SAMPLE P81	SAMPLE P82
47.73 ksi	48.73 ksi



		Sample P81			Sample P82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE	M	No Data Reported			32.90	-0.78	-0.35
244AKP		34.50	-0.34	-0.16	33.00	-0.68	-0.31
2FYMJZ		35.70	0.86	0.40	32.80	-0.88	-0.40
2NF2L7		33.40	-1.44	-0.67	31.70	-1.98	-0.89
3MVLMV		39.70	4.86	2.24	38.10	4.42	1.98
4A83LX		37.10	2.26	1.04	35.70	2.02	0.90
4BEJFM		38.20	3.36	1.55	35.80	2.12	0.95
4MANTU		32.50	-2.34	-1.08	31.50	-2.18	-0.98
6R7HE3		36.00	1.16	0.53	35.00	1.32	0.59
749HCY		34.20	-0.64	-0.30	32.90	-0.78	-0.35
7EQ2WV		32.40	-2.44	-1.13	31.80	-1.88	-0.84
7FKPFQ	*	40.00	5.16	2.38	40.00	6.32	2.83
7RXW8K	*	31.05	-3.79	-1.75	32.39	-1.29	-0.58
8ADJB8		33.70	-1.14	-0.53	34.20	0.52	0.23
AFT2M7		34.20	-0.64	-0.30	34.00	0.32	0.14
APWBRB	X	36.50	1.66	0.77	38.90	5.22	2.34
APX7BG		34.00	-0.84	-0.39	33.00	-0.68	-0.31
BEFQ9E		35.00	0.16	0.07	33.00	-0.68	-0.31
C3B6BE		36.00	1.16	0.53	34.30	0.62	0.28
C7UCFT		35.60	0.76	0.35	35.10	1.42	0.63
CCHXNE		34.35	-0.49	-0.23	33.30	-0.38	-0.17
CJZHHE		34.20	-0.64	-0.30	31.90	-1.78	-0.80
CZA2KC		36.74	1.90	0.88	34.52	0.84	0.38
D46A4D		36.00	1.16	0.53	35.00	1.32	0.59
D9H9KD		34.00	-0.84	-0.39	32.50	-1.18	-0.53
D9YZX4		35.00	0.16	0.07	33.80	0.12	0.05
DGALJC		34.00	-0.84	-0.39	32.50	-1.18	-0.53
DGTB7D		34.00	-0.84	-0.39	32.50	-1.18	-0.53
DMKHNL		33.90	-0.94	-0.44	32.10	-1.58	-0.71
DXGKQV		33.00	-1.84	-0.85	33.90	0.22	0.10
E38JDP		35.00	0.16	0.07	34.00	0.32	0.14
E3RZTR		33.00	-1.84	-0.85	33.30	-0.38	-0.17
EHLLEL		38.00	3.16	1.46	37.00	3.32	1.49
EN7TRK		33.80	-1.04	-0.48	34.60	0.92	0.41
EPPFML		33.50	-1.34	-0.62	32.00	-1.68	-0.75
F33FKX	X	42.60	7.76	3.58	37.10	3.42	1.53
GF8XTC		32.00	-2.84	-1.31	29.00	-4.68	-2.10
H62BG7		32.10	-2.74	-1.27	30.70	-2.98	-1.34
HFP286		36.10	1.26	0.58	34.60	0.92	0.41
HXHAWM		36.90	2.06	0.95	35.80	2.12	0.95
HYY2AD		35.00	0.16	0.07	34.10	0.42	0.19
K2F8NQ		39.20	4.36	2.01	36.70	3.02	1.35
KLG8NB		33.60	-1.24	-0.57	32.70	-0.98	-0.44
KNPK7C	*	31.83	-3.01	-1.39	28.39	-5.29	-2.37
LUUWNV		36.00	1.16	0.53	35.00	1.32	0.59
LWXGL3		33.80	-1.04	-0.48	31.80	-1.88	-0.84
MQ8GVE		40.00	5.16	2.38	37.50	3.82	1.71

WebCode	Data Flag	Sample P81 Lab Mean	Sample P81 Diff. from Grand Mean	Sample P81 CPV	Sample P82 Lab Mean	Sample P82 Diff. from Grand Mean	Sample P82 CPV
NBAQ9G		32.30	-2.54	-1.18	32.30	-1.38	-0.62
P2ZNHA		37.00	2.16	1.00	37.00	3.32	1.49
PP83EY		35.00	0.16	0.07	33.00	-0.68	-0.31
Q2DQQU		33.50	-1.34	-0.62	35.00	1.32	0.59
Q4GBT9	*	39.48	4.64	2.14	40.04	6.36	2.85
Q83WWG		33.60	-1.24	-0.57	31.40	-2.28	-1.02
QV8XWX		33.95	-0.89	-0.41	32.57	-1.11	-0.50
RQRTEU		36.40	1.56	0.72	34.30	0.62	0.28
V9G4WE		32.20	-2.64	-1.22	31.00	-2.68	-1.20
VFETF4		34.50	-0.34	-0.16	33.00	-0.68	-0.31
VKQTKH		38.30	3.46	1.60	36.90	3.22	1.44
VZNNCG		36.70	1.86	0.86	34.50	0.82	0.37
WFEDHX		34.50	-0.34	-0.16	33.00	-0.68	-0.31
WK8HAF		33.50	-1.34	-0.62	32.00	-1.68	-0.75
WUVBLD		32.90	-1.94	-0.90	31.50	-2.18	-0.98
WZLKVB		31.20	-3.64	-1.68	31.60	-2.08	-0.93
X4XY32	*	33.40	-1.44	-0.67	35.20	1.52	0.68
XPCKQ2		33.40	-1.44	-0.67	32.20	-1.48	-0.66
ZG2TMP		34.60	-0.24	-0.11	31.48	-2.20	-0.99
ZJLRUT		35.28	0.44	0.20	34.21	0.53	0.24

Summary Statistics

	Sample P81		Sample P82	
Grand Means	34.84	Percent	33.68	Percent
Stnd Dev Btwn Labs	2.16	Percent	2.23	Percent

Samples P81, P82 : AISI 1018 (E), AISI 1018 (F)

Statistics based on 64 of 67 reporting participants

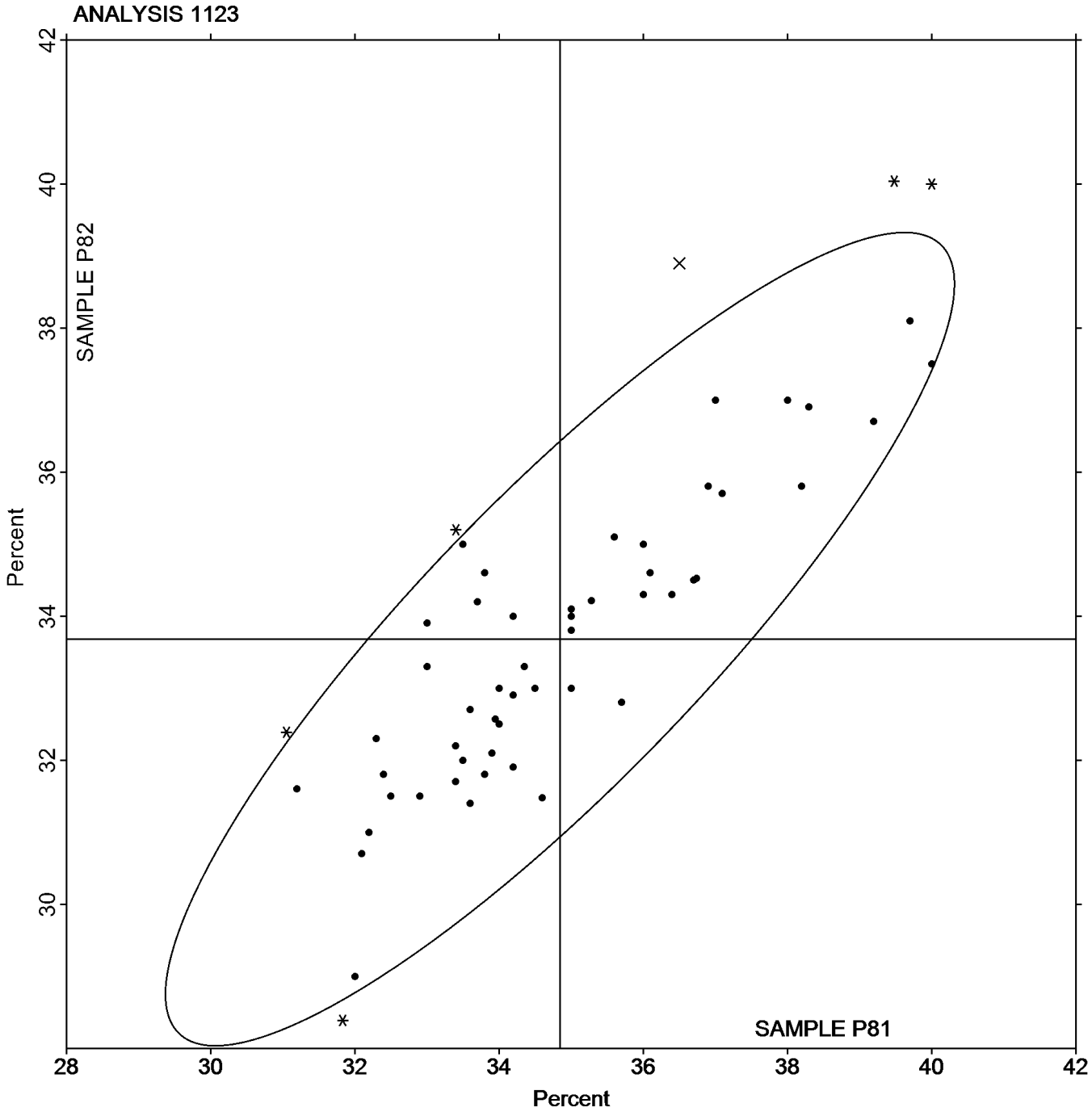
Comments on Assigned Data Flags for Test #1123

22GVWE (M) - Participant did not submit data for sample P81.

APWBRB (X) - Inconsistent in testing between samples.

F33FKX (X) - Data for sample P81 are high.

SAMPLE P81	SAMPLE P82
34.84 Percent	33.68 Percent



		Sample P81			Sample P82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE	M	No Data Reported			65.80	0.44	0.36
244AKP		68.30	0.00	0.00	65.00	-0.36	-0.29
2FYMJZ		67.89	-0.41	-0.48	65.19	-0.17	-0.14
2NF2L7		68.44	0.14	0.16	64.90	-0.46	-0.37
3MVLMV	X	71.50	3.20	3.70	67.00	1.64	1.35
4BEJFM		69.30	1.00	1.15	65.00	-0.36	-0.29
4MANTU		68.25	-0.05	-0.06	64.80	-0.56	-0.46
6R7HE3		68.20	-0.10	-0.12	65.00	-0.36	-0.29
749HCY		68.70	0.40	0.46	66.00	0.64	0.53
7EQ2WV		67.76	-0.54	-0.63	64.30	-1.06	-0.87
7FKPFQ	X	64.00	-4.30	-4.98	63.00	-2.36	-1.94
7RXW8K		70.07	1.77	2.04	67.41	2.05	1.69
8ADJB8		68.90	0.60	0.69	65.60	0.24	0.20
AFT2M7		66.27	-2.03	-2.35	64.49	-0.87	-0.71
APWBRB		68.70	0.40	0.46	65.30	-0.06	-0.05
APX7BG		68.60	0.30	0.34	65.40	0.04	0.03
BEFQ9E		68.50	0.20	0.23	65.00	-0.36	-0.29
C3B6BE		67.50	-0.80	-0.93	66.10	0.74	0.61
C7UCFT		68.80	0.50	0.57	66.60	1.24	1.02
CCHXNE		69.61	1.31	1.51	65.26	-0.10	-0.08
CJZHHE		67.10	-1.20	-1.39	63.70	-1.66	-1.36
CZA2KC		67.80	-0.50	-0.58	62.82	-2.54	-2.08
D46A4D		69.00	0.70	0.80	68.00	2.64	2.17
D9H9KD		68.90	0.60	0.69	65.00	-0.36	-0.29
D9YZX4		68.20	-0.10	-0.12	66.20	0.84	0.69
DGALJC		68.90	0.60	0.69	65.70	0.34	0.28
DGTB7D		69.10	0.80	0.92	65.20	-0.16	-0.13
DMKHNL		67.64	-0.66	-0.77	64.97	-0.39	-0.32
DXGKQV		69.10	0.80	0.92	65.40	0.04	0.03
E38JDP		69.00	0.70	0.80	65.00	-0.36	-0.29
E3RZTR		69.10	0.80	0.92	67.20	1.84	1.51
EHLLEL		68.30	0.00	0.00	65.40	0.04	0.03
EPPFML		68.90	0.60	0.69	65.10	-0.26	-0.21
F33FKX		69.30	1.00	1.15	66.30	0.94	0.77
GF8XTC		69.00	0.70	0.80	65.00	-0.36	-0.29
H62BG7		68.50	0.20	0.23	63.70	-1.66	-1.36
HFP286		68.97	0.67	0.77	63.48	-1.88	-1.54
HXHAWM		68.50	0.20	0.23	65.50	0.14	0.12
HYY2AD	*	65.90	-2.40	-2.78	65.10	-0.26	-0.21
K2F8NQ		68.40	0.10	0.11	66.40	1.04	0.86
KLG8NB		68.10	-0.20	-0.24	64.50	-0.86	-0.70
KNPK7C		68.10	-0.20	-0.24	65.72	0.36	0.30
LUUWNV		68.00	-0.30	-0.35	65.00	-0.36	-0.29
LWXGL3		67.10	-1.20	-1.39	64.20	-1.16	-0.95
MQ8GVE		68.00	-0.30	-0.35	65.90	0.54	0.45
NBAQ9G		67.70	-0.60	-0.70	65.00	-0.36	-0.29
P2ZNHA		69.00	0.70	0.80	66.00	0.64	0.53

		Sample P81			Sample P82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
PP83EY		68.00	-0.30	-0.35	65.00	-0.36	-0.29
Q2DQQU	X	64.80	-3.50	-4.05	67.40	2.04	1.68
Q4GBT9		69.08	0.78	0.90	68.41	3.05	2.51
Q83WWG		67.00	-1.30	-1.51	64.20	-1.16	-0.95
QV8XWX		67.67	-0.63	-0.73	63.93	-1.43	-1.17
RQRTEU		69.10	0.80	0.92	68.20	2.84	2.33
V9G4WE		67.50	-0.80	-0.93	64.60	-0.76	-0.62
VFETF4		68.80	0.50	0.57	65.10	-0.26	-0.21
VKQTKH	*	66.40	-1.90	-2.20	66.00	0.64	0.53
VZNNCG		69.90	1.60	1.85	67.80	2.44	2.01
WFEDHX		69.30	1.00	1.15	66.40	1.04	0.86
WK8HAF		68.80	0.50	0.57	64.00	-1.36	-1.11
WUVBLD		68.40	0.10	0.11	66.10	0.74	0.61
WZLKVB		67.00	-1.30	-1.51	63.00	-2.36	-1.94
X4XY32	X	63.60	-4.70	-5.44	68.20	2.84	2.33
XLJA4H	*	67.45	-0.85	-0.99	67.91	2.55	2.10
XPCKQ2		67.80	-0.50	-0.58	65.00	-0.36	-0.29
ZG2TMP		67.95	-0.35	-0.41	63.81	-1.55	-1.27
ZJLRUT		66.99	-1.31	-1.52	64.50	-0.86	-0.70

Summary Statistics

	Sample P81		Sample P82	
Grand Means	68.30	Percent	65.36	Percent
Stnd Dev Btwn Labs	0.86	Percent	1.22	Percent

Samples P81, P82 : AISI 1018 (E), AISI 1018 (F)

Statistics based on 61 of 66 reporting participants

Comments on Assigned Data Flags for Test #1124

22GVWE (M) - Participant did not submit data for sample P81.

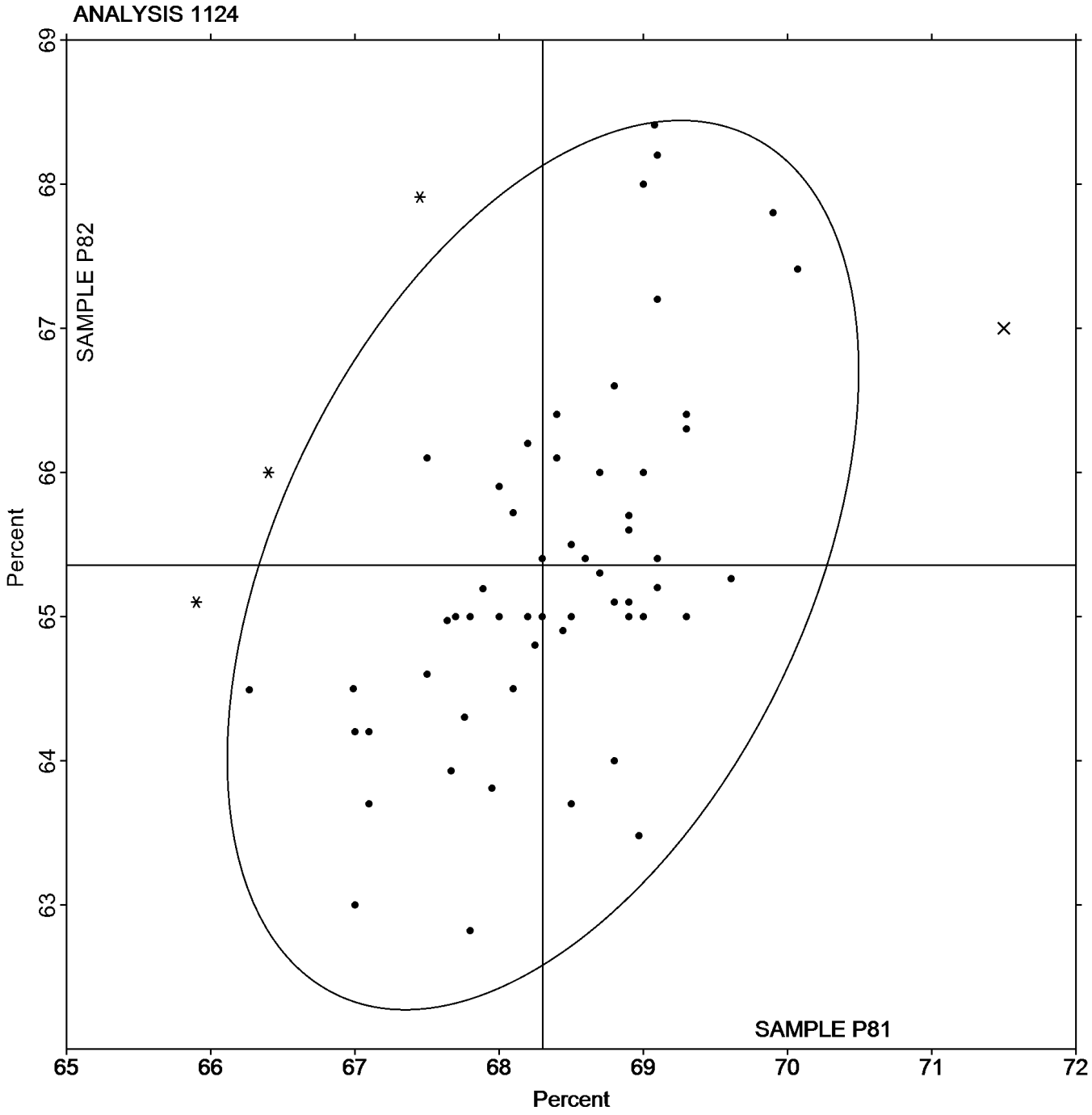
3MVLMV (X) - Data for sample P81 are high.

7FKPFQ (X) - Data for sample P81 are low.

Q2DQQU (X) - Data appear to be transposed between samples.

X4XY32 (X) - Data appear to be transposed between samples.

SAMPLE P81	SAMPLE P82
68.30 Percent	65.36 Percent



		Sample N81			Sample N82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
427UYH		89.20	1.29	1.61	97.10	-0.14	-0.22
4BG2MY		89.40	1.49	1.87	98.84	1.60	2.40
4LYJGQ		86.90	-1.01	-1.27	95.80	-1.44	-2.17
6687KB		87.70	-0.21	-0.27	97.44	0.20	0.30
6CPPQV		88.00	0.09	0.11	97.00	-0.24	-0.37
6EYGU7		87.66	-0.25	-0.32	97.36	0.12	0.18
6NLKXY		88.22	0.31	0.38	96.88	-0.36	-0.55
7FKPFQ		86.99	-0.93	-1.16	96.74	-0.50	-0.75
7GEFL6		88.36	0.45	0.56	97.92	0.68	1.02
7U49AF		88.08	0.17	0.21	97.54	0.30	0.45
9AQM7B		87.26	-0.65	-0.82	96.58	-0.66	-1.00
AK9JTU		87.76	-0.15	-0.19	97.62	0.38	0.57
APWBRB		87.82	-0.09	-0.12	97.10	-0.14	-0.22
B3XFAM		88.52	0.61	0.76	98.16	0.92	1.38
BHGUZ2		87.48	-0.43	-0.55	97.32	0.08	0.12
BTWLJ4		88.70	0.79	0.99	97.42	0.18	0.27
C8QNK9		88.66	0.75	0.94	98.30	1.06	1.59
CWQ3A4		88.56	0.65	0.81	97.72	0.48	0.72
CZUV89		88.00	0.09	0.11	98.00	0.76	1.14
DMKHNL		88.20	0.29	0.36	97.48	0.24	0.36
DXHFD8		87.04	-0.87	-1.10	97.34	0.10	0.15
EBHLYP		87.48	-0.43	-0.55	97.12	-0.12	-0.19
EH2RUB	X	86.94	-0.97	-1.22	94.66	-2.58	-3.88
EWJRA3	X	61.60	-26.31	-33.06	70.04	-27.20	-40.89
EXQ292		88.66	0.75	0.94	97.62	0.38	0.57
F4BETL		87.78	-0.13	-0.17	97.14	-0.10	-0.16
FF468X		88.36	0.45	0.56	97.76	0.52	0.78
GRJ47Z		87.92	0.01	0.01	97.36	0.12	0.18
H7XN86		87.10	-0.81	-1.02	96.16	-1.08	-1.63
HFP286		87.62	-0.29	-0.37	97.52	0.28	0.42
L4ZELT		87.04	-0.87	-1.10	96.22	-1.02	-1.54
LWUWUU		88.04	0.13	0.16	97.00	-0.24	-0.37
MQ8GVE		87.22	-0.69	-0.87	97.10	-0.14	-0.22
N49EAY		87.82	-0.09	-0.12	97.34	0.10	0.15
NXKTLK		88.60	0.69	0.86	97.60	0.36	0.54
QGKU49		87.64	-0.27	-0.35	97.66	0.42	0.63
QXWC9E		87.72	-0.19	-0.24	97.14	-0.10	-0.16
RQRTEU		86.50	-1.41	-1.78	97.02	-0.22	-0.34
RUBWCR		87.16	-0.75	-0.95	96.50	-0.74	-1.12
TUPMWW		87.88	-0.03	-0.04	97.76	0.52	0.78
TVK2MV		89.76	1.85	2.32	97.64	0.40	0.60
V3UDAJ		87.40	-0.51	-0.65	96.86	-0.38	-0.58
V9G4WE		87.26	-0.65	-0.82	97.52	0.28	0.42
VPBKBC		86.50	-1.41	-1.78	96.40	-0.84	-1.27
VQ4FRU	*	89.10	1.19	1.49	96.52	-0.72	-1.09
W4XD24		87.98	0.07	0.08	96.20	-1.04	-1.57
WAQHV8		87.30	-0.61	-0.77	96.10	-1.14	-1.72

WebCode	Data Flag	Sample N81 Lab Mean	Sample N81 Diff. from Grand Mean	Sample N81 CPV	Sample N82 Lab Mean	Sample N82 Diff. from Grand Mean	Sample N82 CPV
WHMB88		87.60	-0.31	-0.40	97.80	0.56	0.84
WUCE8R	*	89.98	2.07	2.59	98.32	1.08	1.62
WUVBLD		88.36	0.45	0.56	98.10	0.86	1.29
X2AE87		87.98	0.07	0.08	96.50	-0.74	-1.12
Y4VK68		88.03	0.12	0.14	98.23	0.99	1.48
Y98GYA	*	89.90	1.99	2.49	97.64	0.40	0.60
YF3B2N		87.20	-0.71	-0.90	96.36	-0.88	-1.33
YJ4NDF		87.80	-0.11	-0.14	97.40	0.16	0.24
Z2YFYD		86.96	-0.95	-1.20	95.82	-1.42	-2.14
Z8PWDC		87.15	-0.77	-0.96	97.28	0.04	0.06

Summary Statistics

	Sample N81		Sample N82	
Grand Means	87.91	HRB	97.24	HRB
Stnd Dev Btwn Labs	0.80	HRB	0.67	HRB

Samples N81, N82 : Brass, Steel

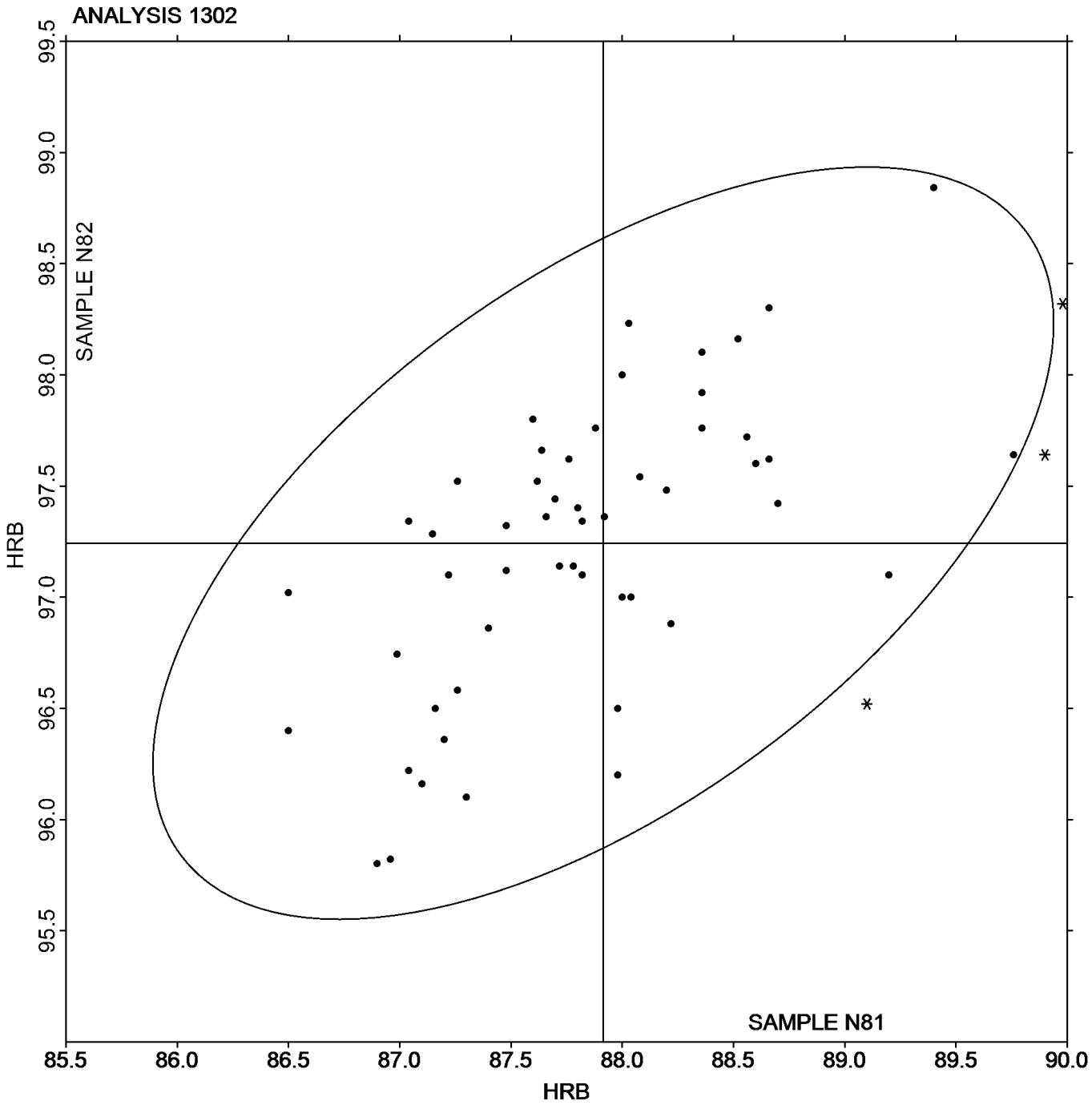
Statistics based on 55 of 57 reporting participants

Comments on Assigned Data Flags for Test #1302

EH2RUB (X) - Data for sample N82 are low. Inconsistent within the determinations of both samples.

EWJRA3 (X) - Data for both samples are extremely low.

SAMPLE N81	SAMPLE N82
87.91 HRB	97.24 HRB



		Sample S81			Sample S82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE		472.60	10.81	0.90	542.20	-2.09	-0.13
2DTXHD		466.40	4.61	0.39	543.60	-0.69	-0.04
2KRMXW		455.47	-6.32	-0.53	546.68	2.38	0.15
2NF2L7		450.42	-11.37	-0.95	532.40	-11.89	-0.73
2PKNYB		461.80	0.01	0.00	546.80	2.51	0.15
2T4QZN		472.20	10.41	0.87	563.40	19.11	1.17
436V3P		477.60	15.81	1.32	579.20	34.91	2.13
4CR7X3		455.60	-6.19	-0.52	532.60	-11.69	-0.71
6687KB	X	485.80	24.01	2.01	438.20	-106.09	-6.48
68CRCG		453.00	-8.79	-0.74	547.00	2.71	0.17
6CPPQV		458.00	-3.79	-0.32	522.00	-22.29	-1.36
8ADJB8		476.22	14.43	1.21	562.16	17.87	1.09
8H3E7G		471.20	9.41	0.79	554.40	10.11	0.62
93BU9U		448.60	-13.19	-1.10	522.40	-21.89	-1.34
9THKKW		461.20	-0.59	-0.05	534.80	-9.49	-0.58
B4F9JW	*	461.20	-0.59	-0.05	575.20	30.91	1.89
CTCH9A		451.40	-10.39	-0.87	529.80	-14.49	-0.89
D49QM6		476.28	14.49	1.21	559.44	15.15	0.93
E4WQUF		447.00	-14.79	-1.24	540.00	-4.29	-0.26
EHLLEL		460.40	-1.39	-0.12	546.40	2.11	0.13
EPGKQT		454.40	-7.39	-0.62	540.14	-4.15	-0.25
FCAUQ7		467.20	5.41	0.45	566.72	22.43	1.37
FDJ2PR		455.02	-6.77	-0.57	522.84	-21.45	-1.31
FEUTU3		460.90	-0.89	-0.07	544.80	0.51	0.03
FR3T88		479.00	17.21	1.44	539.60	-4.69	-0.29
GRJ47Z		462.28	0.49	0.04	544.52	0.23	0.01
K2F8NQ		448.90	-12.89	-1.08	525.78	-18.51	-1.13
K86XUM		457.20	-4.59	-0.38	545.80	1.51	0.09
K8GL6L		456.80	-4.99	-0.42	559.60	15.31	0.94
L3JKJX		439.60	-22.19	-1.86	518.20	-26.09	-1.59
LLZEJK		479.40	17.61	1.47	573.20	28.91	1.77
LN64QA	*	426.00	-35.79	-2.99	519.20	-25.09	-1.53
M9NJR3		461.60	-0.19	-0.02	535.20	-9.09	-0.56
MGHQB8		462.80	1.01	0.08	548.40	4.11	0.25
MQ8GVE		466.40	4.61	0.39	545.00	0.71	0.04
MTUVJN		455.40	-6.39	-0.53	539.20	-5.09	-0.31
N6K898		456.00	-5.79	-0.48	536.60	-7.69	-0.47
NT9YBL		463.64	1.85	0.15	538.70	-5.59	-0.34
NXKTLK		481.80	20.01	1.67	561.40	17.11	1.05
PLN44Q		461.00	-0.79	-0.07	552.60	8.31	0.51
PP83EY	X	513.00	51.21	4.28	576.00	31.71	1.94
PRVMAV		437.26	-24.53	-2.05	535.52	-8.77	-0.54
Q2DQQU		460.00	-1.79	-0.15	538.80	-5.49	-0.34
Q83WWG		489.20	27.41	2.29	563.60	19.31	1.18
QKQDAG		469.20	7.41	0.62	537.00	-7.29	-0.45
QPJ8FU		448.40	-13.39	-1.12	522.40	-21.89	-1.34
QXRVYV		454.20	-7.59	-0.64	540.00	-4.29	-0.26

Fasteners and Metals Interlaboratory Testing Program

Analysis 1321

Microhardness: Knoop Indenters (500 gf)
ASTM E384

		Sample S81			Sample S82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
R76663		458.40	-3.39	-0.28	542.80	-1.49	-0.09
R8ZM74		465.00	3.21	0.27	523.40	-20.89	-1.28
T28X8C		464.00	2.21	0.18	553.44	9.15	0.56
TTV236		461.40	-0.39	-0.03	532.20	-12.09	-0.74
TUPMWW		468.60	6.81	0.57	556.00	11.71	0.72
U26K4F	*	493.88	32.09	2.69	568.88	24.59	1.50
U89RED		476.60	14.81	1.24	575.80	31.51	1.93
UKEKBV		460.60	-1.19	-0.10	559.00	14.71	0.90
V2YQXF		461.60	-0.19	-0.02	542.20	-2.09	-0.13
VVNU2T		469.60	7.81	0.65	569.20	24.91	1.52
WAQHV8		456.40	-5.39	-0.45	522.00	-22.29	-1.36
WCDGNW		458.78	-3.01	-0.25	519.94	-24.35	-1.49
WQRHM8		442.36	-19.43	-1.63	516.84	-27.45	-1.68
WUCE8R		468.00	6.21	0.52	569.60	25.31	1.55
X4XY32		467.80	6.01	0.50	530.00	-14.29	-0.87
YDJBPE		465.96	4.17	0.35	545.34	1.05	0.06
ZRD8JW	X	533.60	71.81	6.01	469.60	-74.69	-4.57

Summary Statistics

	Sample S81		Sample S82	
Grand Means	461.79	HK 500 gf	544.29	HK 500 gf
Stnd Dev Btwn Labs	11.95	HK 500 gf	16.36	HK 500 gf

Samples S81, S82 : Steel, Steel

Statistics based on 61 of 64 reporting participants

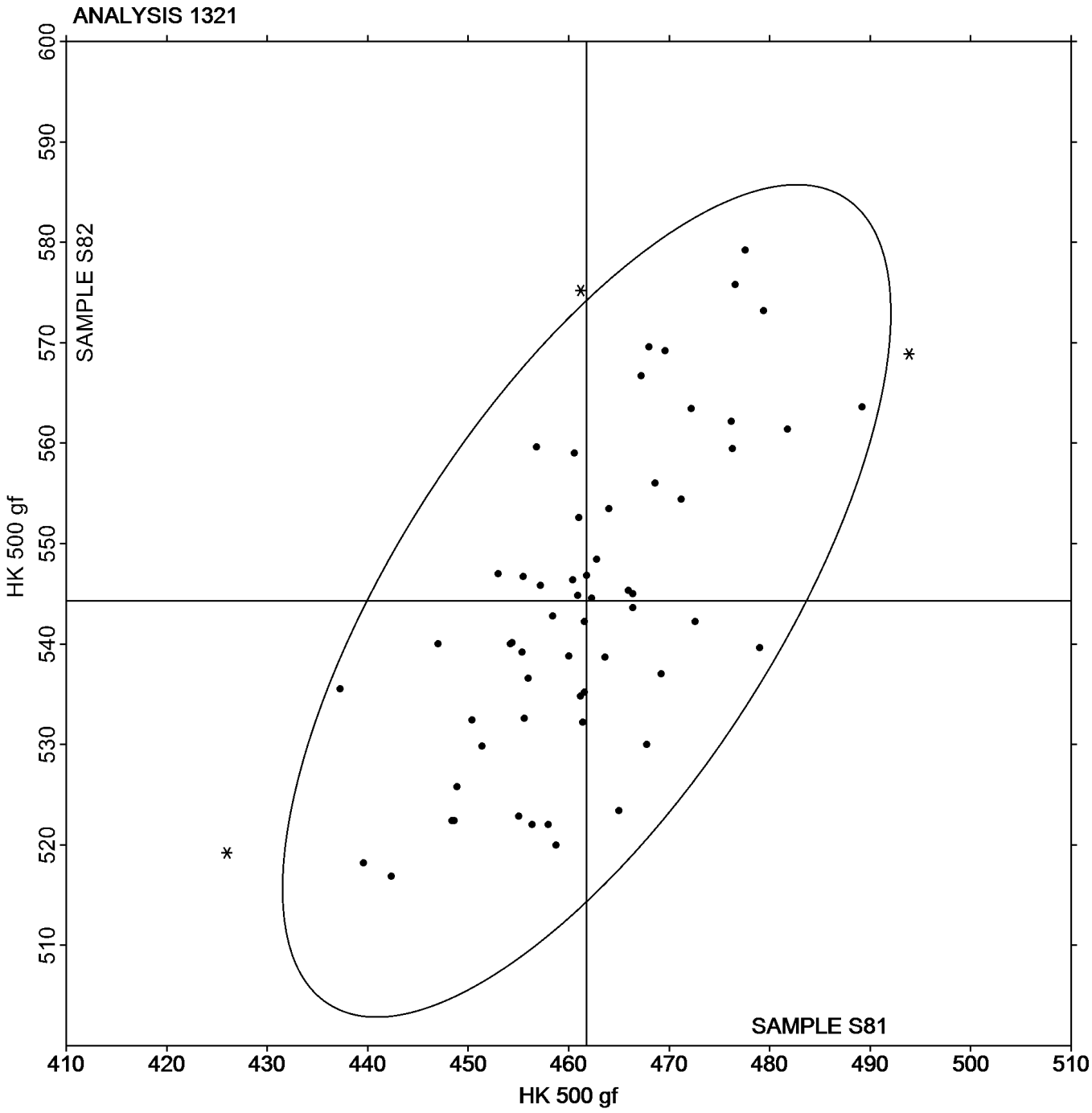
Comments on Assigned Data Flags for Test #1321

6687KB (X) - Data for sample S82 are low. Inconsistent within the determinations of sample S81.

PP83EY (X) - Data for sample S81 are high.

ZRD8JW (X) - Data appear to be transposed between samples.

SAMPLE S81	SAMPLE S82
461.79 HK 500 gf	544.29 HK 500 gf



		Sample S81			Sample S82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE		480.20	6.26	0.42	551.40	-9.15	-0.56
2DTXHD		478.40	4.46	0.30	567.60	7.05	0.43
2NF2L7		455.76	-18.18	-1.21	547.76	-12.79	-0.78
2PKNYB		461.40	-12.54	-0.84	560.40	-0.15	-0.01
436V3P		490.00	16.06	1.07	581.40	20.85	1.27
4CR7X3		466.80	-7.14	-0.48	547.00	-13.55	-0.82
6687KB		496.00	22.06	1.47	579.20	18.65	1.13
68CRCG		467.40	-6.54	-0.44	560.40	-0.15	-0.01
6CPPQV		458.00	-15.94	-1.06	538.00	-22.55	-1.37
8H3E7G		507.80	33.86	2.26	583.80	23.25	1.41
A96KLF		466.57	-7.37	-0.49	568.02	7.48	0.45
B4F9JW		495.00	21.06	1.41	596.20	35.65	2.17
CTCH9A		475.00	1.06	0.07	560.40	-0.15	-0.01
D49QM6		484.60	10.66	0.71	583.80	23.25	1.41
EHLLEL		466.60	-7.34	-0.49	561.20	0.65	0.04
EPGKQT		458.28	-15.66	-1.05	572.20	11.65	0.71
FDJ2PR		464.22	-9.72	-0.65	547.18	-13.37	-0.81
FEUTU3		471.80	-2.14	-0.14	560.16	-0.39	-0.02
FR3T88		485.20	11.26	0.75	565.60	5.05	0.31
GRJ47Z		463.86	-10.08	-0.67	558.52	-2.03	-0.12
K2F8NQ		456.78	-17.16	-1.15	549.52	-11.03	-0.67
K86XUM		469.80	-4.14	-0.28	556.20	-4.35	-0.26
L3JKJX		478.00	4.06	0.27	553.80	-6.75	-0.41
LLZEJK		488.00	14.06	0.94	588.80	28.25	1.72
LN64QA	*	430.60	-43.34	-2.89	521.40	-39.15	-2.38
N6K898		481.00	7.06	0.47	568.00	7.45	0.45
PLN44Q		483.60	9.66	0.64	578.60	18.05	1.10
PP83EY	*	477.20	3.26	0.22	533.40	-27.15	-1.65
Q2DQQU		451.60	-22.34	-1.49	550.00	-10.55	-0.64
Q83WWG		487.00	13.06	0.87	564.00	3.45	0.21
QKQDAG		481.20	7.26	0.48	576.60	16.05	0.98
QPJ8FU		475.60	1.66	0.11	557.40	-3.15	-0.19
QXRVYV	X	474.40	0.46	0.03	640.60	80.05	4.87
R76663		465.60	-8.34	-0.56	551.40	-9.15	-0.56
R8ZM74	*	467.40	-6.54	-0.44	525.20	-35.35	-2.15
T28X8C		471.02	-2.92	-0.20	561.92	1.37	0.08
TTV236		478.60	4.66	0.31	558.00	-2.55	-0.15
TUPMWW		479.20	5.26	0.35	555.60	-4.95	-0.30
U89RED		505.00	31.06	2.07	584.40	23.85	1.45
V2YQXF		453.20	-20.74	-1.39	547.00	-13.55	-0.82
WAQHV8		474.60	0.66	0.04	548.40	-12.15	-0.74
WCDGNW	X	456.40	-17.54	-1.17	502.32	-58.23	-3.54
YDJBPE		483.72	9.78	0.65	562.50	1.95	0.12
ZRD8JW	X	545.40	71.46	4.77	480.80	-79.75	-4.85

Summary Statistics

	Sample S81		Sample S82	
Grand Means	473.94	HK 200 gf	560.55	HK 200 gf
Stnd Dev Btwn Labs	14.97	HK 200 gf	16.45	HK 200 gf

Samples S81, S82 : Steel, Steel

Statistics based on 41 of 44 reporting participants

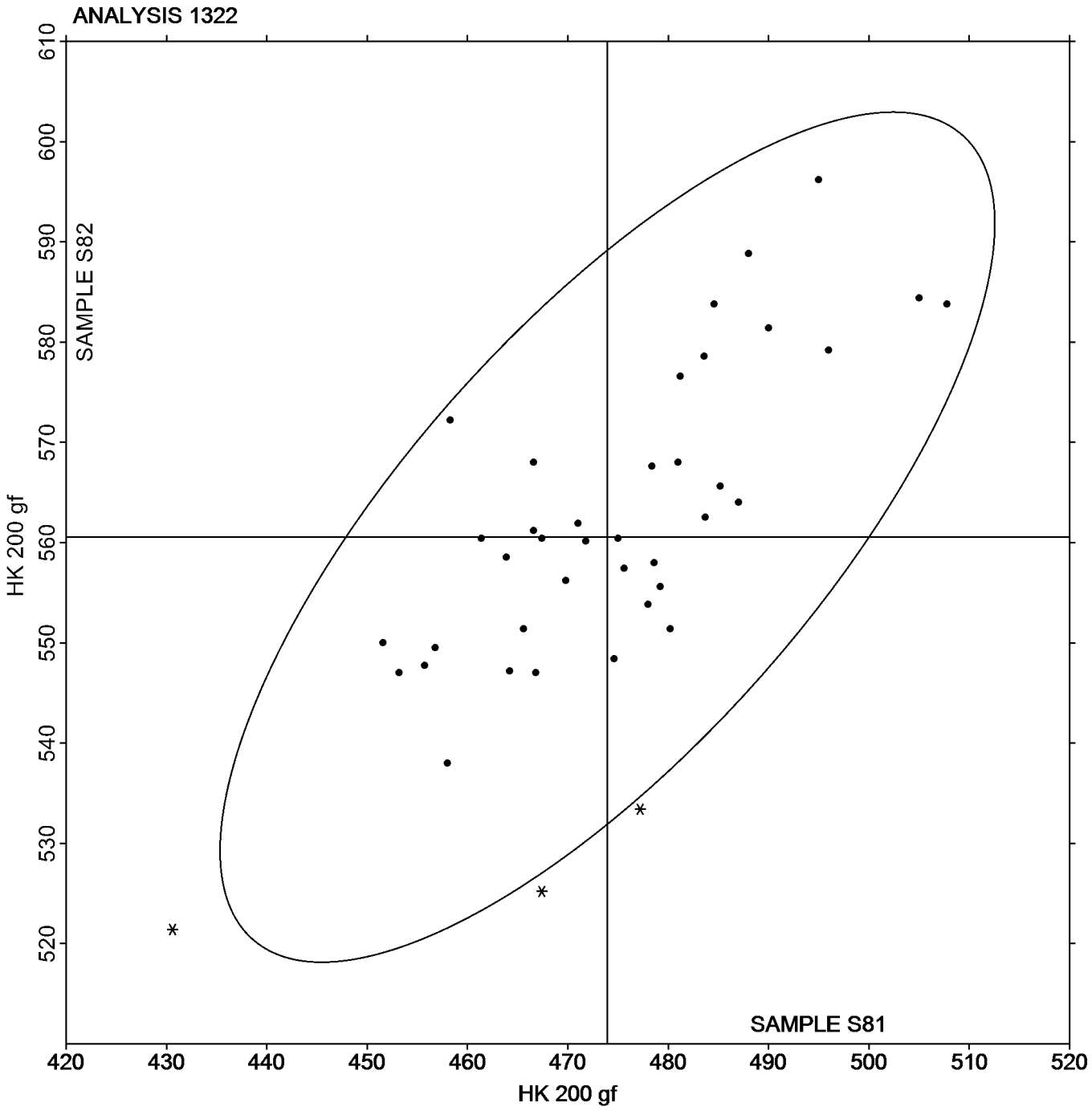
Comments on Assigned Data Flags for Test #1322

QXRVYV (X) - Data for sample S82 are high. Inconsistent within the determinations of sample S82.

WCDGNW (X) - Data for sample S82 are low. Inconsistent within the determinations of sample S82.

ZRD8JW (X) - Data appear to be transposed between samples.

SAMPLE S81	SAMPLE S82
473.94 HK 200 gf	560.55 HK 200 gf



		Sample S81			Sample S82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22GVWE		453.80	10.80	1.07	539.40	8.75	0.69
2DTXHD		458.80	15.80	1.57	535.80	5.15	0.40
2KRMXW		436.64	-6.36	-0.63	528.49	-2.16	-0.17
2L3GPP		422.86	-20.14	-2.00	519.10	-11.55	-0.91
2PKNYB		447.60	4.60	0.46	535.80	5.15	0.40
3E4CDZ		449.00	6.00	0.60	539.00	8.35	0.65
436V3P		456.40	13.40	1.33	547.60	16.95	1.33
4CR7X3		442.00	-1.00	-0.10	527.20	-3.45	-0.27
4LVDMA		443.62	0.62	0.06	522.56	-8.09	-0.63
6687KB		438.20	-4.80	-0.48	523.00	-7.65	-0.60
68CRCG		430.80	-12.20	-1.21	528.40	-2.25	-0.18
6CPPQV		445.00	2.00	0.20	517.00	-13.65	-1.07
6R7HE3		447.60	4.60	0.46	539.80	9.15	0.72
6WEVAF		441.60	-1.40	-0.14	531.00	0.35	0.03
797W7F		451.60	8.60	0.86	559.60	28.95	2.27
7FKPFQ		444.40	1.40	0.14	536.40	5.75	0.45
8H3E7G		448.60	5.60	0.56	519.20	-11.45	-0.90
8X2DZ6		437.20	-5.80	-0.58	530.40	-0.25	-0.02
93BU9U		434.40	-8.60	-0.85	515.00	-15.65	-1.23
9D6CFM		445.94	2.94	0.29	533.38	2.73	0.21
9DLJPB		438.20	-4.80	-0.48	525.60	-5.05	-0.40
9THKKW		438.40	-4.60	-0.46	522.00	-8.65	-0.68
AVFLVD	*	421.96	-21.04	-2.09	498.46	-32.19	-2.52
B4F9JW		449.20	6.20	0.62	541.20	10.55	0.83
BDK6EM	*	458.00	15.00	1.49	521.40	-9.25	-0.73
BDL3PJ		439.36	-3.64	-0.36	529.54	-1.11	-0.09
C2GGRH		437.60	-5.40	-0.54	526.60	-4.05	-0.32
CJZHHE		427.20	-15.80	-1.57	517.00	-13.65	-1.07
CTCH9A		449.20	6.20	0.62	541.80	11.15	0.87
D49QM6		450.80	7.80	0.78	532.60	1.95	0.15
D87AMH		445.00	2.00	0.20	541.20	10.55	0.83
DCDUJ3	X	262.45	-180.55	-17.95	314.64	-216.02	-16.94
EHLLEL		425.80	-17.20	-1.71	516.20	-14.45	-1.13
EPGKQT		445.12	2.12	0.21	535.92	5.27	0.41
EXQ292		452.40	9.40	0.93	540.00	9.35	0.73
EXUL4G		446.52	3.52	0.35	532.96	2.31	0.18
FCAUQ7		447.64	4.64	0.46	543.24	12.59	0.99
FR3T88		443.80	0.80	0.08	540.40	9.75	0.76
G7ZZ3N		432.40	-10.60	-1.05	521.00	-9.65	-0.76
GC6ZHJ		440.40	-2.60	-0.26	520.80	-9.85	-0.77
GF69NF		453.14	10.14	1.01	527.00	-3.65	-0.29
GRJ47Z		428.96	-14.04	-1.40	535.68	5.03	0.39
GWW427		423.20	-19.80	-1.97	508.58	-22.07	-1.73
GZTRJY		444.94	1.94	0.19	542.42	11.77	0.92
H62BG7		440.00	-3.00	-0.30	551.00	20.35	1.60
H8M48E		443.20	0.20	0.02	534.80	4.15	0.33
HYY2AD		464.82	21.82	2.17	543.66	13.01	1.02

		Sample S81			Sample S82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
JQH88F		445.60	2.60	0.26	533.00	2.35	0.18
K2F8NQ		434.56	-8.44	-0.84	520.64	-10.01	-0.79
K6CW3D		449.20	6.20	0.62	533.40	2.75	0.22
K86XUM		444.20	1.20	0.12	528.60	-2.05	-0.16
KV7ZW2		435.60	-7.40	-0.74	537.60	6.95	0.54
L3JKJX		434.00	-9.00	-0.89	522.20	-8.45	-0.66
LLZEJK		432.80	-10.20	-1.01	510.20	-20.45	-1.60
LN64QA		425.20	-17.80	-1.77	507.20	-23.45	-1.84
LV4JLA		426.40	-16.60	-1.65	533.60	2.95	0.23
MGHQB8		441.00	-2.00	-0.20	523.20	-7.45	-0.58
MQ8GVE		446.00	3.00	0.30	527.60	-3.05	-0.24
MTUVJN		438.20	-4.80	-0.48	536.40	5.75	0.45
MXC8MK		439.32	-3.68	-0.37	528.64	-2.01	-0.16
N6K898		443.20	0.20	0.02	532.00	1.35	0.11
NHPDFY		439.78	-3.22	-0.32	531.92	1.27	0.10
NT9YBL		445.54	2.54	0.25	523.80	-6.85	-0.54
PLN44Q		439.80	-3.20	-0.32	530.20	-0.45	-0.04
PP83EY	*	421.20	-21.80	-2.17	499.40	-31.25	-2.45
Q2DQQU		437.80	-5.20	-0.52	527.40	-3.25	-0.26
Q83WWG		458.69	15.69	1.56	536.40	5.75	0.45
QKQDAG		450.40	7.40	0.74	521.00	-9.65	-0.76
QPJ8FU		437.80	-5.20	-0.52	531.20	0.55	0.04
QXWC9E		464.80	21.80	2.17	539.80	9.15	0.72
R76663		448.20	5.20	0.52	522.80	-7.85	-0.62
R8ZM74		427.00	-16.00	-1.59	519.40	-11.25	-0.88
TTV236		450.40	7.40	0.74	540.40	9.75	0.76
TUPMWW		460.80	17.80	1.77	552.00	21.35	1.67
U2HEHV		462.20	19.20	1.91	533.82	3.17	0.25
U89RED		444.00	1.00	0.10	522.40	-8.25	-0.65
UYY6QH		456.40	13.40	1.33	553.00	22.35	1.75
V2YQXF		428.40	-14.60	-1.45	519.20	-11.45	-0.90
W4XD24		437.94	-5.06	-0.50	522.18	-8.47	-0.66
WAQHV8		436.00	-7.00	-0.70	505.80	-24.85	-1.95
WCDGNW	*	440.74	-2.26	-0.22	499.40	-31.25	-2.45
WVRN96		453.40	10.40	1.03	543.40	12.75	1.00
X4XY32		455.40	12.40	1.23	561.40	30.75	2.41
XNLA4F		434.20	-8.80	-0.87	543.60	12.95	1.02
Y98GYA		449.20	6.20	0.62	540.80	10.15	0.80
YDJBPE		442.20	-0.80	-0.08	534.30	3.65	0.29
YKN2J7		456.80	13.80	1.37	553.20	22.55	1.77
YMMNPE		447.80	4.80	0.48	533.48	2.83	0.22
YRYCL6		443.52	0.52	0.05	533.70	3.05	0.24
ZM4Z4D		442.20	-0.80	-0.08	531.64	0.99	0.08
ZRD8JW	X	515.60	72.60	7.22	443.40	-87.25	-6.84
ZZTYTV		458.60	15.60	1.55	558.40	27.75	2.18

Summary Statistics

	Sample S81		Sample S82	
Grand Means	443.00	HV 500 gf	530.65	HV 500 gf
Stnd Dev Btwn Labs	10.06	HV 500 gf	12.75	HV 500 gf

Samples S81, S82 : Steel, Steel

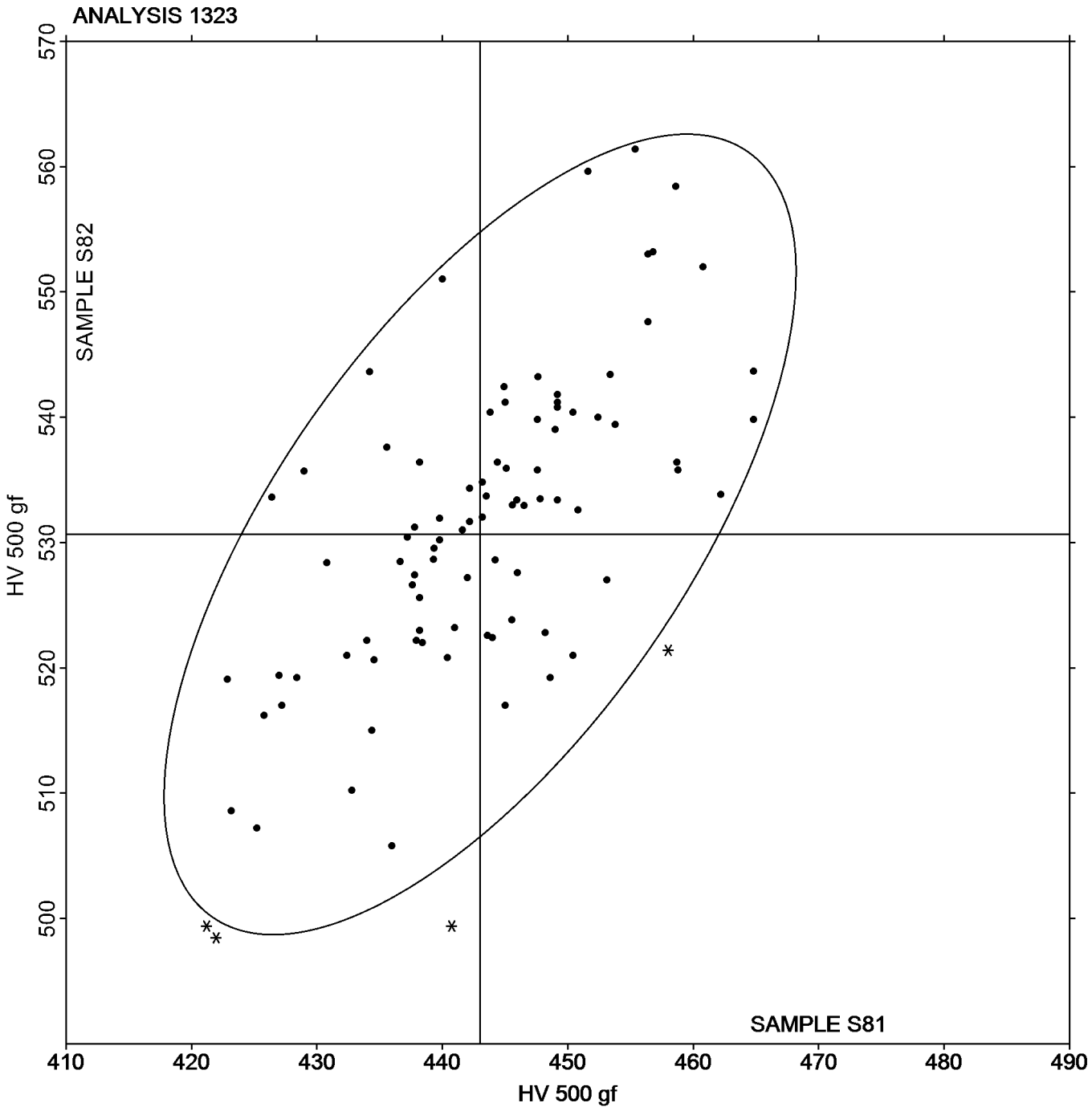
Statistics based on 90 of 92 reporting participants

Comments on Assigned Data Flags for Test #1323

DCDUJ3 (X) - Data for both samples are very low.

ZRD8JW (X) - Data appear to be transposed between samples.

SAMPLE S81	SAMPLE S82
443.00 HV 500 gf	530.65 HV 500 gf



		Sample D81			Sample D82		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2DTXHD		361.00	1.40	0.20	424.20	2.88	0.33
2PKNYB		375.20	15.60	2.22	433.60	12.28	1.41
37R8A8		365.40	5.80	0.82	426.60	5.28	0.61
3BGWKJ		368.20	8.60	1.22	431.20	9.88	1.14
427UYH		361.40	1.80	0.26	418.00	-3.32	-0.38
44CEHC		359.70	0.10	0.01	421.12	-0.20	-0.02
4A83LX		347.80	-11.80	-1.68	413.14	-8.18	-0.94
4BG2MY		363.00	3.40	0.48	429.00	7.68	0.88
7FKPFQ		356.96	-2.64	-0.38	413.54	-7.78	-0.90
7RXW8K		352.40	-7.20	-1.02	417.20	-4.12	-0.47
89JQLF		363.00	3.40	0.48	409.40	-11.92	-1.37
8GPU7K		362.80	3.20	0.46	434.00	12.68	1.46
93BU9U		363.00	3.40	0.48	415.00	-6.32	-0.73
9THKKW		351.40	-8.20	-1.17	413.20	-8.12	-0.94
A96KLF	*	378.60	19.00	2.70	439.20	17.88	2.06
B3XFAM		359.00	-0.60	-0.09	418.60	-2.72	-0.31
CJGCLA		360.60	1.00	0.14	415.00	-6.32	-0.73
CJZHHE		359.60	0.00	0.00	416.60	-4.72	-0.54
CZA2KC	X	348.20	-11.40	-1.62	439.80	18.48	2.13
D9YZX4		356.40	-3.20	-0.45	426.00	4.68	0.54
DCYHMH		365.64	6.04	0.86	437.86	16.54	1.90
E38JDP		354.20	-5.40	-0.77	421.00	-0.32	-0.04
EHLLEL		350.00	-9.60	-1.36	405.60	-15.72	-1.81
EN7TRK		360.80	1.20	0.17	415.00	-6.32	-0.73
EPPFML	*	375.00	15.40	2.19	444.00	22.68	2.61
ERZQX3		362.26	2.66	0.38	429.04	7.72	0.89
EXQ292		363.00	3.40	0.48	415.00	-6.32	-0.73
EZZ3JZ		353.20	-6.40	-0.91	415.20	-6.12	-0.70
F33FKX		352.00	-7.60	-1.08	415.00	-6.32	-0.73
FR3T88		356.60	-3.00	-0.43	417.00	-4.32	-0.50
GKMEBG		354.00	-5.60	-0.80	405.20	-16.12	-1.86
HBN8WG		363.00	3.40	0.48	415.00	-6.32	-0.73
HFP286		362.60	3.00	0.43	416.40	-4.92	-0.57
JAT228		351.82	-7.78	-1.11	409.00	-12.32	-1.42
K2F8NQ		361.00	1.40	0.20	425.40	4.08	0.47
KLG8NB		375.00	15.40	2.19	441.60	20.28	2.33
KNPK7C		350.60	-9.00	-1.28	412.80	-8.52	-0.98
L3JKJX		355.16	-4.44	-0.63	422.32	1.00	0.11
LUUWNV		367.40	7.80	1.11	432.20	10.88	1.25
MLUUYN		363.00	3.40	0.48	420.60	-0.72	-0.08
MQ8GVE	X	365.60	6.00	0.85	276.00	-145.32	-16.73
MU6VKP		360.00	0.40	0.06	424.00	2.68	0.31
N6K898	*	343.80	-15.80	-2.25	416.60	-4.72	-0.54
NBAQ9G		366.20	6.60	0.94	436.20	14.88	1.71
NT9YBL		354.97	-4.63	-0.66	417.77	-3.55	-0.41
NUKGPK		359.20	-0.40	-0.06	429.00	7.68	0.88
PBNF62	X	415.00	55.40	7.88	347.20	-74.12	-8.53

WebCode	Data Flag	Sample D81 Lab Mean	Sample D81 Diff. from Grand Mean	Sample D81 CPV	Sample D82 Lab Mean	Sample D82 Diff. from Grand Mean	Sample D82 CPV
PLN44Q		349.00	-10.60	-1.51	414.00	-7.32	-0.84
Q2DQQU		359.80	0.20	0.03	421.60	0.28	0.03
Q4GBT9		364.54	4.94	0.70	424.88	3.56	0.41
Q83WWG		352.00	-7.60	-1.08	424.80	3.48	0.40
QXWC9E		352.80	-6.80	-0.97	420.00	-1.32	-0.15
TTV236	X	423.48	63.88	9.08	356.60	-64.72	-7.45
U2HEHV		354.36	-5.24	-0.74	419.60	-1.72	-0.20
V9G4WE		354.80	-4.80	-0.68	421.60	0.28	0.03
VFETF4		363.00	3.40	0.48	415.00	-6.32	-0.73
VN8BLZ		355.20	-4.40	-0.63	419.40	-1.92	-0.22
WK8HAF		354.40	-5.20	-0.74	415.00	-6.32	-0.73
WUVBLD		359.40	-0.20	-0.03	419.20	-2.12	-0.24
WZLKVB		365.60	6.00	0.85	428.60	7.28	0.84
X4XY32		361.00	1.40	0.20	425.00	3.68	0.42
XGKVGT		350.72	-8.88	-1.26	413.72	-7.60	-0.88
XLJA4H		363.20	3.60	0.51	414.60	-6.72	-0.77
YMMNPE	X	384.80	25.20	3.58	446.40	25.08	2.89
YV3AVC		352.00	-7.60	-1.08	415.00	-6.32	-0.73
Z89P9V		369.00	9.40	1.34	436.60	15.28	1.76
ZE88TY		365.00	5.40	0.77	415.40	-5.92	-0.68
ZRD8JW		363.00	3.40	0.48	426.00	4.68	0.54

Summary Statistics

	Sample D81		Sample D82	
Grand Means	359.60	HBW	421.32	HBW
Stnd Dev Btwn Labs	7.03	HBW	8.69	HBW

Samples D81, D82 : Steel, Steel

Statistics based on 63 of 68 reporting participants

Samples D81, D82 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 #1341

CZA2KC (X) - Inconsistent in testing between samples.

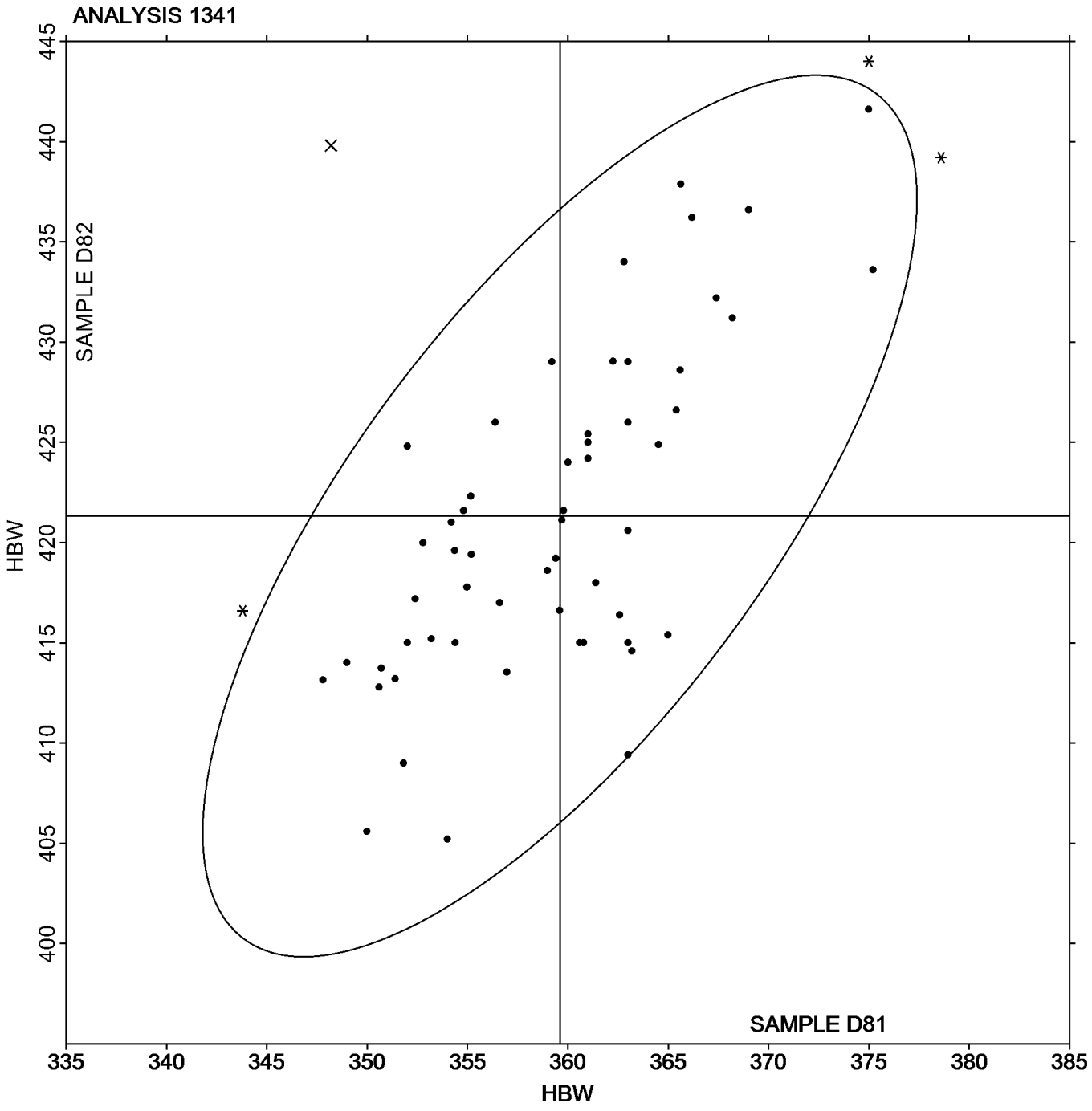
MQ8GVE (X) - Data for sample D82 are very low.

PBNF62 (X) - Data appear to be transposed between samples.

TTV236 (X) - Data appear to be transposed between samples.

YMMNPE (X) - Data for both samples are high. Inconsistent within the determinations of sample D82.

SAMPLE D81	SAMPLE D82
359.60 HBW	421.32 HBW



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.4067	-0.0063	-0.80	0.4167	-0.0029	-0.37	OE
37R8A8		0.4133	0.0004	0.05	0.4260	0.0064	0.82	OE
4BG2MY		0.4153	0.0023	0.29	0.4164	-0.0031	-0.40	OE
4MANTU		0.4133	0.0004	0.05	0.4267	0.0071	0.91	CO
62AKT8		0.4130	0.0000	0.00	0.4301	0.0105	1.35	CI
6687KB		0.4062	-0.0068	-0.86	0.4103	-0.0093	-1.19	OE
6CPPQV	*	0.4190	0.0060	0.77	0.4070	-0.0126	-1.60	OE
6KJN7J		0.3948	-0.0182	-2.32	0.4034	-0.0162	-2.06	OE
7LPLYQ		0.4110	-0.0020	-0.25	0.4203	0.0008	0.10	CO
7NJD9C		0.4201	0.0071	0.91	0.4276	0.0081	1.03	OE
83CBMR	X	0.5063	0.0933	11.92	0.5353	0.1157	14.79	WD
8AF7U8		0.4310	0.0180	2.30	0.4343	0.0148	1.89	OE
8CGC8R		0.4113	-0.0016	-0.21	0.4157	-0.0039	-0.50	OE
8KP72K		0.4157	0.0027	0.35	0.4190	-0.0006	-0.07	OE
93BU9U		0.4100	-0.0030	-0.38	0.4217	0.0021	0.27	CO
9DLJPB		0.4095	-0.0035	-0.45	0.4282	0.0087	1.11	CI
9KK3W8		0.4168	0.0039	0.49	0.4228	0.0032	0.42	OE
A96KLF		0.4157	0.0027	0.35	0.4197	0.0001	0.01	OE
AM9NBG		0.4140	0.0010	0.13	0.4171	-0.0024	-0.31	OE
BEFQ9E	X	0.3837	-0.0293	-3.74	0.4193	-0.0002	-0.03	CO
BV38CB		0.4123	-0.0007	-0.09	0.4158	-0.0037	-0.48	OE
C2GGRH		0.4319	0.0189	2.42	0.4376	0.0181	2.31	CI
C7UCFT		0.4138	0.0008	0.10	0.4246	0.0050	0.64	CI
CCHXNE		0.4084	-0.0046	-0.59	0.4092	-0.0103	-1.32	OE
CZUV89		0.4172	0.0042	0.54	0.4241	0.0045	0.58	OE
D7TPTM	X	0.3819	-0.0311	-3.97	0.3749	-0.0447	-5.71	OE
D9YZX4		0.4097	-0.0033	-0.42	0.4117	-0.0079	-1.01	OE
DACW39	*	0.3933	-0.0196	-2.51	0.4257	0.0061	0.78	CO
DMKHNL		0.4157	0.0027	0.35	0.4207	0.0011	0.14	OE
E38JDP		0.4157	0.0027	0.35	0.4275	0.0079	1.02	OE
EBHLYP		0.4147	0.0017	0.22	0.4110	-0.0086	-1.09	XX
EJVJH3		0.4063	-0.0067	-0.86	0.4149	-0.0046	-0.59	OE
ENL3PR		0.4160	0.0030	0.39	0.4172	-0.0024	-0.30	OE
EXUL4G	X	0.3740	-0.0390	-4.98	0.3750	-0.0446	-5.69	OE
FEUTU3		0.4257	0.0127	1.62	0.4257	0.0061	0.78	OE
FUDMC8		0.4127	-0.0003	-0.04	0.4177	-0.0019	-0.24	OE
G33G6V	X	0.4033	-0.0096	-1.23	0.3967	-0.0229	-2.92	OE
G7ZZ3N		0.4073	-0.0056	-0.72	0.4183	-0.0012	-0.16	OE
GZE3GL		0.4100	-0.0030	-0.38	0.4260	0.0064	0.82	OE
HBN8WG		0.4203	0.0074	0.94	0.4227	0.0031	0.40	OE
JGC68P	*	0.3957	-0.0173	-2.21	0.4193	-0.0002	-0.03	GD
JP6FGK		0.4123	-0.0006	-0.08	0.4260	0.0064	0.82	CI
JQH88F		0.4097	-0.0033	-0.42	0.4163	-0.0032	-0.41	OE
K6CW3D		0.4096	-0.0034	-0.43	0.4093	-0.0103	-1.32	OE
K86XUM		0.4262	0.0133	1.70	0.4317	0.0121	1.55	OE
KNPK7C	*	0.4205	0.0075	0.96	0.3994	-0.0202	-2.57	OE
L4ZELT	X	0.4383	0.0254	3.24	0.4260	0.0064	0.82	XX

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LEXLWH		0.3936	-0.0194	-2.47	0.4022	-0.0174	-2.22	OE
LJQJR2		0.4177	0.0047	0.60	0.4170	-0.0026	-0.33	OE
LPGU2Y		0.4137	0.0007	0.09	0.4240	0.0044	0.57	OE
LWUWUU		0.4187	0.0057	0.73	0.4150	-0.0046	-0.58	OE
MXC8MK		0.3933	-0.0196	-2.51	0.4033	-0.0162	-2.07	OE
N49EAY	X	0.3933	-0.0196	-2.51	0.3817	-0.0379	-4.84	XX
N6K898		0.4070	-0.0060	-0.76	0.4220	0.0024	0.31	CO
NBAQ9G		0.4014	-0.0116	-1.48	0.4072	-0.0124	-1.58	OE
NC3MT4	X	0.3500	-0.0630	-8.05	0.3600	-0.0596	-7.61	AE
NDCUUC		0.4072	-0.0058	-0.74	0.4106	-0.0089	-1.14	OE
NHPDFY		0.4057	-0.0073	-0.93	0.4160	-0.0036	-0.45	OE
NUKGPK		0.4133	0.0004	0.05	0.4267	0.0071	0.91	OE
NX32AE		0.4180	0.0050	0.64	0.4240	0.0044	0.57	OE
PP83EY	X	0.3707	-0.0423	-5.40	0.4167	-0.0029	-0.37	CO
PXZFCD		0.4220	0.0090	1.15	0.4260	0.0064	0.82	OE
Q83WWG		0.4167	0.0037	0.47	0.4237	0.0041	0.53	XX
QGKU49		0.4133	0.0004	0.05	0.4308	0.0112	1.43	OE
QXWC9E		0.4150	0.0020	0.26	0.4203	0.0008	0.10	OE
R4LYXT		0.4067	-0.0063	-0.80	0.4187	-0.0009	-0.11	OE
R8ZM74		0.4027	-0.0103	-1.32	0.4210	0.0014	0.19	CO
RDJ2VV		0.4147	0.0017	0.22	0.4163	-0.0032	-0.41	OE
TX6662	*	0.3907	-0.0223	-2.85	0.3960	-0.0236	-3.01	OE
U23VYJ		0.4095	-0.0035	-0.45	0.4094	-0.0102	-1.30	XX
U2HEHV		0.4180	0.0050	0.64	0.4184	-0.0012	-0.15	CO
UYY6QH		0.4180	0.0050	0.64	0.4223	0.0028	0.36	OE
VCFHHJ		0.4214	0.0085	1.08	0.4257	0.0061	0.79	OE
VFETF4		0.4057	-0.0073	-0.93	0.4157	-0.0039	-0.50	OE
VFYGTR		0.4243	0.0114	1.45	0.4297	0.0101	1.29	OE
VPBKBC		0.4243	0.0114	1.45	0.4263	0.0068	0.87	OE
WA8P3B		0.4125	-0.0005	-0.06	0.4211	0.0016	0.20	OE
WHMB88		0.4130	0.0000	0.00	0.4163	-0.0032	-0.41	XX
WZLKVB		0.4210	0.0080	1.03	0.4293	0.0098	1.25	XX
X2AE87		0.4099	-0.0031	-0.39	0.4161	-0.0035	-0.44	OE
X42BYK		0.4181	0.0051	0.65	0.4239	0.0043	0.55	OE
X4XY32		0.4033	-0.0096	-1.23	0.4067	-0.0129	-1.65	OE
XGKVGT		0.4283	0.0154	1.96	0.4323	0.0128	1.63	OE
XPCKQ2		0.4170	0.0040	0.52	0.4250	0.0054	0.70	OE
XRGBVW		0.4185	0.0056	0.71	0.4180	-0.0016	-0.20	OE
Y2RPL6		0.4180	0.0050	0.64	0.4230	0.0034	0.44	CO
Y8AAEH		0.4067	-0.0062	-0.80	0.4152	-0.0044	-0.56	OE
YDJBPE		0.4077	-0.0053	-0.68	0.4127	-0.0069	-0.88	OE
Z4NTNB		0.4196	0.0066	0.84	0.4236	0.0041	0.52	OE
ZUKGWM		0.4070	-0.0060	-0.76	0.4220	0.0024	0.31	OE
ZXKP3J		0.4060	-0.0070	-0.89	0.4103	-0.0092	-1.18	OE
ZZTYTV		0.4123	-0.0006	-0.08	0.4170	-0.0026	-0.33	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.4130	Percent	0.4196	Percent
Stnd Dev Btwn Labs	0.0078	Percent	0.0078	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 79 of 92 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	CI	Combustion / IR
CO	Combustion	GD	Spectrometry - Glow Discharge (GDS)
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 #1600

83CBMR (X) - Data for both samples are high. Possible Systematic Error.

BEFQ9E (X) - Data for sample L81 are low.

D7TPTM (X) - Data for both samples are low. Possible Systematic Error.

EXUL4G (X) - Data for both samples are low. Possible Systematic Error.

G33G6V (X) - Data for sample L82 are low.

L4ZELT (X) - Data for sample L81 are high.

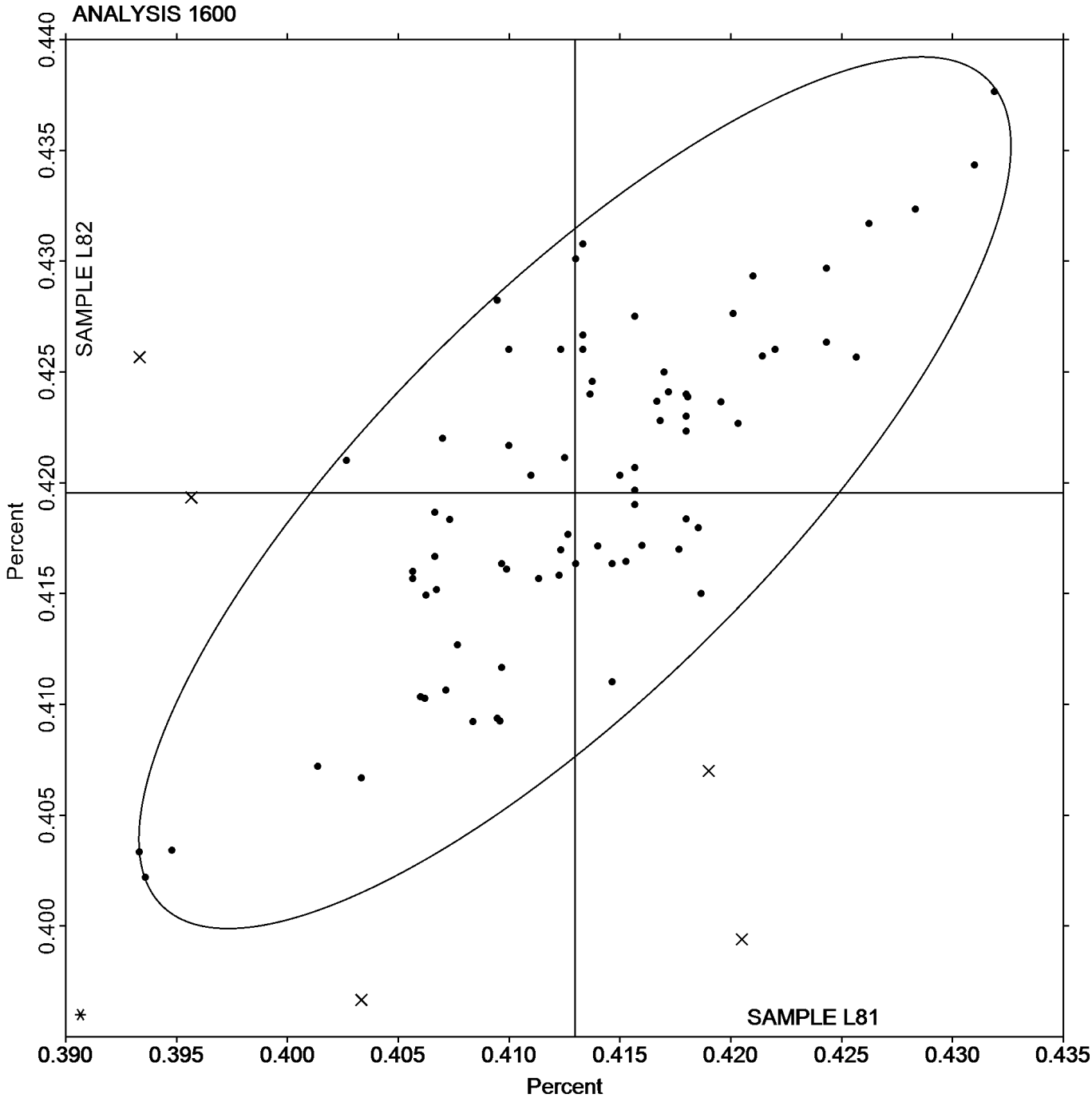
N49EAY (X) - Data for sample L82 are low. Inconsistent within the determinations of sample L82.

NC3MT4 (X) - Data for both samples are low. Possible Systematic Error.

PP83EY (X) - Data for sample L81 are low.

SAMPLE L81
0.4130 Percent

SAMPLE L82
0.4196 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.7237	-0.0061	-0.62	0.7373	-0.0001	-0.01	OE
37R8A8		0.7293	-0.0004	-0.04	0.7397	0.0022	0.24	OE
4BG2MY		0.7331	0.0033	0.34	0.7377	0.0002	0.02	OE
4CUKWW		0.7107	-0.0191	-1.94	0.7310	-0.0064	-0.68	IC
4MANTU		0.7300	0.0002	0.02	0.7300	-0.0074	-0.79	DR
62AKT8		0.7312	0.0015	0.15	0.7373	-0.0001	-0.01	OE
6687KB		0.7152	-0.0146	-1.49	0.7295	-0.0079	-0.84	OE
6CPPQV		0.7250	-0.0048	-0.48	0.7310	-0.0064	-0.68	OE
6KJN7J		0.7135	-0.0163	-1.65	0.7217	-0.0157	-1.67	OE
7LPLYQ		0.7303	0.0006	0.06	0.7247	-0.0128	-1.35	OE
7NJD9C		0.7314	0.0016	0.17	0.7355	-0.0019	-0.21	XX
83CBMR		0.7388	0.0091	0.92	0.7411	0.0037	0.39	WD
8AF7U8		0.7317	0.0019	0.19	0.7407	0.0032	0.34	OE
8CGC8R		0.7340	0.0042	0.43	0.7387	0.0012	0.13	OE
8KP72K		0.7390	0.0092	0.94	0.7377	0.0002	0.02	OE
93BU9U		0.7367	0.0069	0.70	0.7423	0.0049	0.52	OE
9DLJPB		0.7321	0.0023	0.23	0.7398	0.0024	0.25	IC
9KK3W8		0.7304	0.0006	0.07	0.7381	0.0007	0.07	OE
A96KLF		0.7140	-0.0158	-1.60	0.7167	-0.0208	-2.20	OE
AM9NBG		0.7335	0.0038	0.38	0.7429	0.0055	0.58	OE
BEFQ9E		0.7247	-0.0051	-0.52	0.7313	-0.0061	-0.65	IC
BV38CB		0.7303	0.0005	0.05	0.7370	-0.0005	-0.05	OE
C7UCFT		0.7307	0.0009	0.09	0.7390	0.0016	0.16	WD
CCHXNE		0.7326	0.0028	0.29	0.7381	0.0006	0.07	OE
CZUV89	*	0.7192	-0.0106	-1.08	0.7391	0.0016	0.17	OE
D7TPTM		0.7154	-0.0143	-1.46	0.7173	-0.0201	-2.13	OE
D9YZX4		0.7410	0.0112	1.14	0.7383	0.0009	0.09	OE
DACW39		0.7187	-0.0111	-1.13	0.7310	-0.0064	-0.68	AE
DMKHNL		0.7343	0.0046	0.47	0.7467	0.0092	0.98	OE
E38JDP		0.7457	0.0159	1.62	0.7529	0.0154	1.63	OE
EBHLYP	*	0.7523	0.0226	2.30	0.7640	0.0266	2.81	XX
EJVJH3		0.7236	-0.0062	-0.63	0.7290	-0.0085	-0.90	OE
ENL3PR		0.7222	-0.0076	-0.77	0.7319	-0.0056	-0.59	OE
EXUL4G		0.7333	0.0036	0.36	0.7400	0.0026	0.27	OE
FEUTU3		0.7340	0.0042	0.43	0.7423	0.0049	0.52	OE
FUDMC8		0.7283	-0.0014	-0.15	0.7347	-0.0028	-0.29	OE
G33G6V		0.7100	-0.0198	-2.01	0.7200	-0.0174	-1.85	OE
G7ZZ3N		0.7347	0.0049	0.50	0.7397	0.0022	0.24	IC
GZE3GL		0.7270	-0.0028	-0.28	0.7390	0.0016	0.16	OE
HBN8WG		0.7317	0.0019	0.19	0.7380	0.0006	0.06	OE
JGC68P		0.7483	0.0186	1.89	0.7583	0.0209	2.21	GD
JP6FGK		0.7370	0.0072	0.74	0.7437	0.0062	0.66	IC
JQH88F		0.7183	-0.0114	-1.16	0.7283	-0.0091	-0.96	OE
K6CW3D		0.7197	-0.0100	-1.02	0.7282	-0.0093	-0.98	OE
K86XUM		0.7437	0.0139	1.42	0.7517	0.0142	1.51	OE
KNPK7C	X	0.7074	-0.0224	-2.28	0.7050	-0.0324	-3.43	OE
L4ZELT		0.7503	0.0206	2.09	0.7570	0.0196	2.07	XX

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LEXLWH		0.7391	0.0093	0.95	0.7469	0.0094	1.00	OE
LJQJR2	X	0.7360	0.0062	0.64	0.7747	0.0372	3.94	OE
LPGU2Y		0.7263	-0.0034	-0.35	0.7373	-0.0001	-0.01	OE
LWUWUU		0.7293	-0.0004	-0.04	0.7353	-0.0021	-0.22	OE
MXC8MK		0.7100	-0.0198	-2.01	0.7233	-0.0141	-1.49	OE
N49EAY		0.7460	0.0162	1.65	0.7427	0.0052	0.55	XX
N6K898		0.7276	-0.0022	-0.22	0.7438	0.0064	0.68	OE
NBAQ9G		0.7183	-0.0114	-1.16	0.7296	-0.0078	-0.83	OE
NC3MT4	X	0.7667	0.0369	3.76	0.7700	0.0326	3.45	AE
NDCUUC		0.7183	-0.0114	-1.16	0.7210	-0.0164	-1.74	OE
NHPDFY		0.7423	0.0126	1.28	0.7467	0.0092	0.98	OE
NUKGPK		0.7300	0.0002	0.02	0.7467	0.0092	0.98	OE
NX32AE		0.7360	0.0062	0.64	0.7393	0.0019	0.20	OE
PP83EY		0.7303	0.0006	0.06	0.7327	-0.0048	-0.51	XR
PXZFCD		0.7190	-0.0108	-1.09	0.7320	-0.0054	-0.58	OE
Q83WWG		0.7320	0.0022	0.23	0.7380	0.0006	0.06	XX
QGKU49		0.7311	0.0014	0.14	0.7383	0.0009	0.09	OE
QXWC9E		0.7283	-0.0014	-0.15	0.7390	0.0016	0.16	OE
R4LYXT		0.7393	0.0096	0.97	0.7523	0.0149	1.58	OE
R8ZM74		0.7300	0.0002	0.02	0.7300	-0.0074	-0.79	GD
RDJ2VV		0.7307	0.0009	0.09	0.7437	0.0062	0.66	OE
TX6662		0.7190	-0.0108	-1.09	0.7277	-0.0098	-1.04	OE
U23VYJ		0.7228	-0.0070	-0.71	0.7339	-0.0035	-0.38	XX
U2HEHV		0.7310	0.0012	0.13	0.7453	0.0079	0.84	IC
UYY6QH		0.7437	0.0139	1.42	0.7490	0.0116	1.22	OE
VCFHHJ		0.7229	-0.0068	-0.69	0.7317	-0.0057	-0.60	OE
VFETF4		0.7317	0.0019	0.19	0.7433	0.0059	0.62	OE
VFYGTR		0.7337	0.0039	0.40	0.7447	0.0072	0.76	OE
VPBKBC		0.7400	0.0102	1.04	0.7440	0.0066	0.69	OE
WA8P3B		0.7267	-0.0030	-0.31	0.7367	-0.0007	-0.08	OE
WHMB88		0.7133	-0.0164	-1.67	0.7200	-0.0174	-1.85	XX
WZLKVB		0.7280	-0.0018	-0.18	0.7387	0.0012	0.13	XX
X2AE87		0.7211	-0.0087	-0.88	0.7346	-0.0028	-0.30	OE
X42BYK		0.7305	0.0007	0.07	0.7353	-0.0022	-0.23	OE
X4XY32	X	0.4033	-0.3264	-33.22	0.4100	-0.3274	-34.66	OE
XGKVGT		0.7370	0.0072	0.74	0.7380	0.0006	0.06	OE
XPCKQ2		0.7287	-0.0011	-0.11	0.7370	-0.0004	-0.05	OE
XRGBVW		0.7384	0.0086	0.88	0.7505	0.0130	1.38	OE
Y2RPL6		0.7290	-0.0008	-0.08	0.7373	-0.0001	-0.01	OE
Y8AAEH	*	0.7077	-0.0220	-2.24	0.7112	-0.0263	-2.78	OE
YDJBPE		0.7270	-0.0028	-0.28	0.7323	-0.0051	-0.54	OE
Z4NTNB		0.7311	0.0013	0.14	0.7423	0.0048	0.51	OE
ZUKGWM	*	0.7583	0.0286	2.91	0.7587	0.0212	2.25	OE
ZXKP3J		0.7277	-0.0021	-0.21	0.7327	-0.0048	-0.51	OE
ZZTYTV		0.7350	0.0053	0.53	0.7419	0.0045	0.47	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.7298	Percent	0.7374	Percent
Stnd Dev Btwn Labs	0.0098	Percent	0.0094	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 88 of 92 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #1601

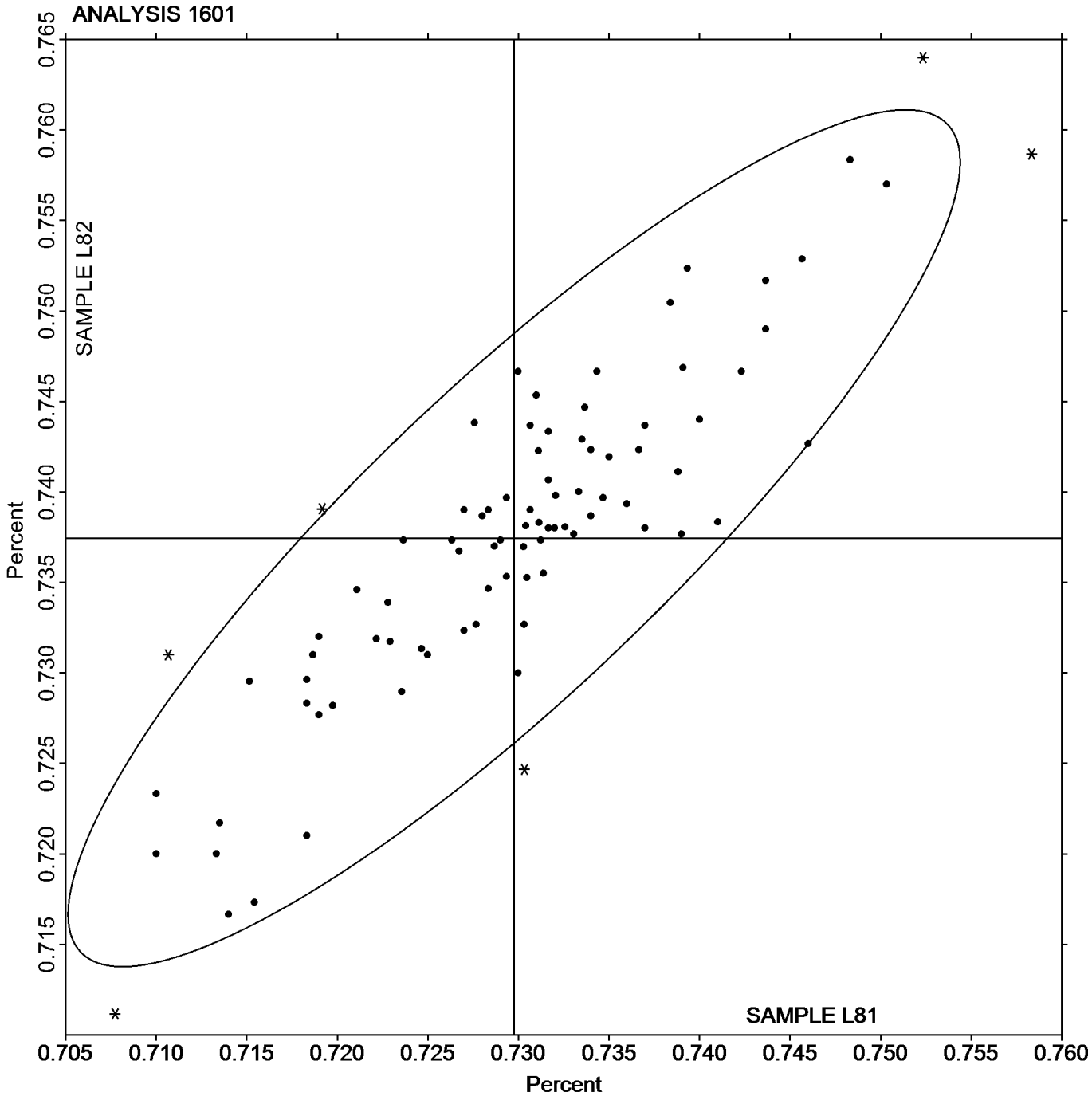
KNPK7C (X) - Data for sample L82 are low.

LJQJR2 (X) - Data for sample L82 are high. Inconsistent within the determinations of sample L82.

NC3MT4 (X) - Data for both samples are high. Possible Systematic Error.

X4XY32 (X) - Extreme data. Possibly reporting C instead of Mn.

SAMPLE L81	SAMPLE L82
0.7298 Percent	0.7374 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.0150	0.0006	0.51	0.0110	-0.0001	-0.16	OE
37R8A8		0.0167	0.0022	2.07	0.0130	0.0019	2.09	OE
4BG2MY		0.0145	0.0000	0.02	0.0110	-0.0001	-0.12	OE
4CUKWW		0.0142	-0.0002	-0.20	0.0122	0.0010	1.15	IC
4MANTU		0.0153	0.0009	0.82	0.0130	0.0019	2.09	DR
62AKT8		0.0154	0.0010	0.89	0.0122	0.0010	1.15	OE
6687KB		0.0139	-0.0005	-0.48	0.0117	0.0006	0.63	OE
6CPPQV		0.0146	0.0002	0.14	0.0110	-0.0001	-0.16	OE
6KJN7J	X	0.0176	0.0032	2.96	0.0145	0.0034	3.78	OE
7LPLYQ		0.0140	-0.0004	-0.42	0.0110	-0.0001	-0.16	OE
7NJD9C		0.0144	0.0000	-0.01	0.0109	-0.0002	-0.24	XX
83CBMR		0.0159	0.0015	1.38	0.0126	0.0015	1.68	WD
8AF7U8		0.0135	-0.0009	-0.88	0.0103	-0.0008	-0.91	OE
8CGC8R		0.0141	-0.0003	-0.29	0.0105	-0.0006	-0.72	OE
8KP72K		0.0130	-0.0014	-1.35	0.0100	-0.0011	-1.29	OE
93BU9U		0.0163	0.0019	1.76	0.0128	0.0017	1.90	OE
9DLJPB		0.0134	-0.0011	-1.01	0.0101	-0.0010	-1.17	IC
9KK3W8		0.0140	-0.0005	-0.45	0.0105	-0.0007	-0.76	OE
A96KLF		0.0136	-0.0008	-0.79	0.0105	-0.0007	-0.76	OE
AM9NBG	X	0.000267	-0.0142	-13.19	0.00157	-0.0096	-10.78	OE
BEFQ9E		0.0136	-0.0009	-0.82	0.0109	-0.0003	-0.31	IC
BV38CB		0.0151	0.0006	0.56	0.0113	0.0002	0.18	OE
C7UCFT		0.0138	-0.0007	-0.63	0.0107	-0.0004	-0.46	WD
CCHXNE		0.0144	0.0000	-0.03	0.0112	0.0001	0.07	OE
CZUV89		0.0148	0.0003	0.30	0.0114	0.0003	0.33	OE
D7TPTM		0.0134	-0.0010	-0.97	0.00970	-0.0014	-1.62	OE
D9YZX4	X	0.00873	-0.0057	-5.32	0.00713	-0.0040	-4.51	OE
DACW39		0.0147	0.0002	0.20	0.0110	-0.0001	-0.16	AE
DMKHNL	*	0.0173	0.0029	2.65	0.0136	0.0024	2.73	OE
E38JDP	X	0.0130	-0.0014	-1.35	0.00863	-0.0025	-2.83	OE
EBHLYP		0.0140	-0.0004	-0.42	0.0110	-0.0001	-0.16	XX
EJVJH3		0.0142	-0.0002	-0.20	0.0105	-0.0007	-0.76	OE
ENL3PR		0.0148	0.0003	0.30	0.0112	0.0001	0.10	OE
EXUL4G		0.0133	-0.0011	-1.04	0.0113	0.0002	0.21	OE
FEUTU3	*	0.0175	0.0031	2.87	0.0135	0.0024	2.65	OE
FUDMC8	X	0.0110	-0.0034	-3.21	0.00810	-0.0030	-3.43	OE
G33G6V	X	0.0111	-0.0034	-3.15	0.00710	-0.0040	-4.55	OE
G7ZZ3N		0.0134	-0.0010	-0.97	0.0100	-0.0011	-1.29	IC
GZE3GL	X	0.0114	-0.0030	-2.84	0.0117	0.0006	0.63	OE
HBN8WG		0.0145	0.0001	0.05	0.0105	-0.0006	-0.69	OE
JGC68P		0.0138	-0.0007	-0.63	0.0108	-0.0003	-0.39	GD
JP6FGK		0.0143	-0.0001	-0.11	0.0111	0.0000	-0.01	IC
JQH88F		0.0118	-0.0026	-2.43	0.00927	-0.0019	-2.11	OE
K6CW3D		0.0144	0.0000	-0.04	0.0114	0.0002	0.26	OE
K86XUM		0.0137	-0.0007	-0.66	0.0105	-0.0006	-0.69	OE
KNPK7C		0.0136	-0.0009	-0.82	0.0107	-0.0004	-0.46	OE
L4ZELT	*	0.0150	0.0006	0.51	0.0133	0.0022	2.47	XX

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LEXLWH		0.0135	-0.0010	-0.91	0.0104	-0.0008	-0.87	OE
LJQJR2		0.0137	-0.0007	-0.66	0.0103	-0.0008	-0.95	OE
LPGU2Y		0.0141	-0.0003	-0.32	0.0106	-0.0005	-0.57	OE
LWUWUU		0.0147	0.0002	0.20	0.0117	0.0005	0.59	OE
MXC8MK		0.0160	0.0016	1.44	0.0121	0.0009	1.04	OE
N49EAY	X	0.00200	-0.0124	-11.58	0.00967	-0.0015	-1.66	XX
N6K898		0.0142	-0.0002	-0.20	0.0113	0.0002	0.18	OE
NBAQ9G		0.0133	-0.0011	-1.07	0.0103	-0.0008	-0.91	OE
NC3MT4	X	0.0105	-0.0039	-3.67	0.00843	-0.0027	-3.05	AE
NDCUUC		0.0130	-0.0014	-1.35	0.00967	-0.0015	-1.66	OE
NHPDFY		0.0139	-0.0005	-0.51	0.0106	-0.0006	-0.65	OE
NUKGPK		0.0147	0.0002	0.20	0.0120	0.0009	0.96	OE
NX32AE		0.0134	-0.0010	-0.97	0.0104	-0.0007	-0.84	OE
PP83EY	X	0.0130	-0.0014	-1.35	0.0123	0.0012	1.34	XR
PXZFCD		0.0160	0.0016	1.44	0.0120	0.0009	0.96	OE
Q83WWG		0.0133	-0.0011	-1.04	0.0110	-0.0001	-0.16	XX
QGKU49		0.0134	-0.0010	-0.94	0.0102	-0.0010	-1.10	OE
QXWC9E		0.0155	0.0011	1.01	0.0114	0.0003	0.29	OE
R4LYXT		0.0137	-0.0007	-0.66	0.0112	0.0001	0.10	OE
R8ZM74		0.0153	0.0009	0.82	0.0110	-0.0001	-0.16	GD
RDJ2VV		0.0141	-0.0003	-0.29	0.0110	-0.0002	-0.20	OE
TX6662	X	0.0253	0.0109	10.13	0.0197	0.0085	9.60	OE
U23VYJ		0.0162	0.0018	1.63	0.0126	0.0014	1.60	XX
U2HEHV		0.0137	-0.0008	-0.73	0.0110	-0.0001	-0.16	IC
UYY6QH		0.0163	0.0019	1.76	0.0120	0.0009	0.96	OE
VCFHHJ		0.0146	0.0002	0.17	0.0109	-0.0002	-0.24	OE
VFETF4		0.0140	-0.0004	-0.42	0.00987	-0.0013	-1.44	OE
VFYGTR		0.0134	-0.0011	-1.01	0.0112	0.0001	0.10	OE
VPBKBC		0.0167	0.0022	2.07	0.0123	0.0012	1.34	OE
WA8P3B		0.0142	-0.0002	-0.20	0.0110	-0.0001	-0.12	OE
WHMB88		0.0130	-0.0014	-1.35	0.0100	-0.0011	-1.29	XX
WZLKVB		0.0146	0.0002	0.14	0.0113	0.0002	0.18	XX
X2AE87		0.0154	0.0010	0.89	0.0116	0.0005	0.51	OE
X42BYK		0.0147	0.0002	0.20	0.0112	0.0001	0.10	OE
X4XY32		0.0147	0.0002	0.20	0.0117	0.0005	0.59	OE
XGKVGT		0.0140	-0.0004	-0.42	0.0100	-0.0011	-1.29	OE
XPCKQ2	X	0.0137	-0.0008	-0.73	0.0130	0.0019	2.09	OE
XRGBVW		0.0161	0.0017	1.57	0.0121	0.0009	1.04	OE
Y2RPL6		0.0143	-0.0001	-0.14	0.0106	-0.0005	-0.61	OE
Y8AAEH		0.0151	0.0007	0.64	0.0112	0.0001	0.10	OE
YDJBPE	X	0.0158	0.0014	1.29	0.0140	0.0029	3.22	OE
Z4NTNB		0.0140	-0.0005	-0.45	0.0105	-0.0006	-0.72	OE
ZUKGWM	X	0.0150	0.0006	0.51	0.00667	-0.0045	-5.04	OE
ZXKP3J		0.0140	-0.0004	-0.42	0.0117	0.0005	0.59	OE
ZZTYTV		0.0153	0.0008	0.75	0.0121	0.0009	1.06	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.0144	Percent	0.0111	Percent
Stnd Dev Btwn Labs	0.0011	Percent	0.0009	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 77 of 92 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #1602

6KJN7J (X) - Data for both samples are high.

AM9NBG (X) - Data for both samples are low.

D9YZX4 (X) - Data for both samples are low.

E38JDP (X) - Data for sample L82 are low.

FUDMC8 (X) - Data for both samples are low.

G33G6V (X) - Data for both samples are low.

GZE3GL (X) - Data for sample L81 are low.

N49EAY (X) - Data for sample L81 are low.

NC3MT4 (X) - Data for both samples are low. Inconsistent within the determinations of sample L82.

PP83EY (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L82.

TX6662 (X) - Data for both samples are high.

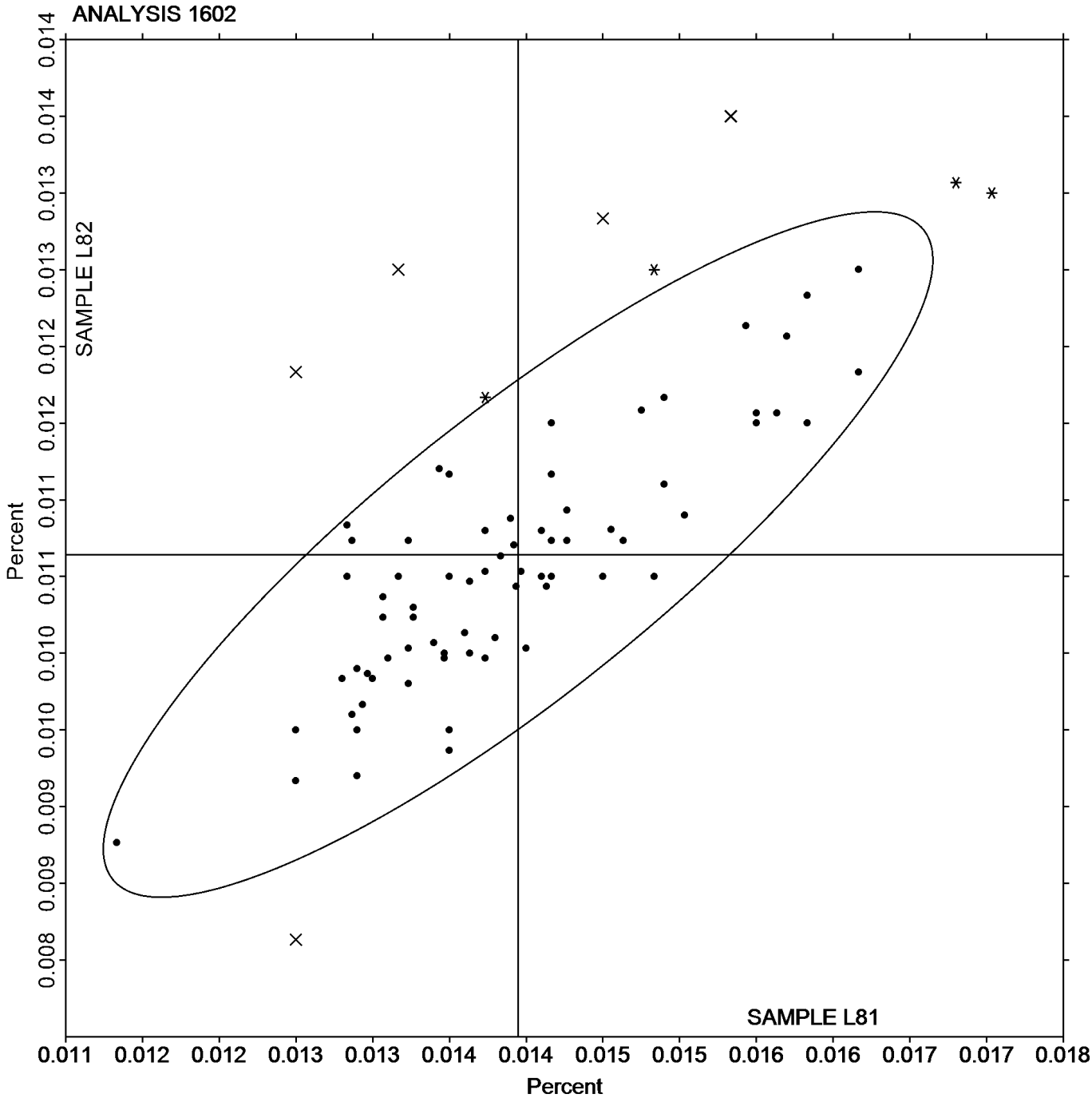
XPCKQ2 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L82.

YDJBPE (X) - Data for sample L82 are high.

ZUKGWM (X) - Data for sample L82 are low. Inconsistent within the determinations of both samples.

SAMPLE L81
0.0144 Percent

SAMPLE L82
0.0111 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.00300	0.00023	0.19	0.0177	-0.0017	-0.99	OE
37R8A8		0.00360	0.00083	0.70	0.0194	0.0001	0.03	OE
4BG2MY		0.00267	-0.00010	-0.09	0.0180	-0.0013	-0.79	OE
4MANTU		0.00100	-0.00177	-1.49	0.0197	0.0003	0.19	CO
62AKT8		0.00210	-0.00067	-0.56	0.0183	-0.0010	-0.62	CI
6687KB		0.00537	0.00260	2.18	0.0181	-0.0012	-0.73	OE
6CPPQV		0.00260	-0.00017	-0.14	0.0203	0.0010	0.56	OE
6KJN7J	X	0.00703	0.00426	3.58	0.0201	0.0008	0.44	OE
7LPLYQ		0.00300	0.00023	0.19	0.0198	0.0005	0.27	OE
7NJD9C		0.00280	0.00003	0.02	0.0195	0.0002	0.11	XX
83CBMR		0.00290	0.00013	0.11	0.0223	0.0030	1.74	WD
8AF7U8		0.000233	-0.00254	-2.13	0.0171	-0.0023	-1.34	OE
8CGC8R		0.00207	-0.00070	-0.59	0.0173	-0.0020	-1.19	OE
8KP72K		0.00300	0.00023	0.19	0.0180	-0.0013	-0.79	OE
93BU9U		0.00173	-0.00104	-0.87	0.0185	-0.0008	-0.50	CO
9DLJPB		0.00180	-0.00097	-0.81	0.0190	-0.0003	-0.20	CI
9KK3W8		0.00190	-0.00087	-0.73	0.0207	0.0014	0.80	OE
A96KLF		0.00507	0.00230	1.93	0.0183	-0.0010	-0.62	OE
AM9NBG		0.00223	-0.00054	-0.45	0.0203	0.0009	0.54	OE
BEFQ9E	M	No Data Reported			0.0222	0.0029	1.68	CI
BV38CB		0.00294	0.00017	0.14	0.0187	-0.0006	-0.37	OE
C7UCFT		0.00211	-0.00066	-0.55	0.0195	0.0001	0.08	CI
CCHXNE	*	0.00627	0.00350	2.94	0.0196	0.0003	0.17	OE
CZUV89	X	0.00230	-0.00047	-0.39	0.0256	0.0063	3.70	OE
D7TPTM		0.00237	-0.00040	-0.34	0.0193	-0.0001	-0.05	OE
D9YZX4		0.00340	0.00063	0.53	0.0173	-0.0020	-1.19	OE
DACW39		0.00250	-0.00027	-0.23	0.0183	-0.0010	-0.60	CO
DMKHNL		0.00520	0.00243	2.04	0.0186	-0.0007	-0.42	OE
E38JDP		0.00367	0.00090	0.75	0.0200	0.0007	0.38	OE
EBHLYP		0.00500	0.00223	1.87	0.0207	0.0013	0.78	XX
EJVJH3		0.00403	0.00126	1.06	0.0209	0.0016	0.93	OE
ENL3PR		0.00253	-0.00024	-0.20	0.0197	0.0004	0.23	OE
EXUL4G	X	0.0120	0.00923	7.74	0.0180	-0.0013	-0.79	XX
FEUTU3	M	No Data Reported			0.0233	0.0040	2.33	OE
FUDMC8		0.00100	-0.00177	-1.49	0.0178	-0.0016	-0.93	OE
G33G6V		0.000267	-0.00250	-2.10	0.0189	-0.0005	-0.28	OE
G7ZZ3N		0.00203	-0.00074	-0.62	0.0181	-0.0013	-0.75	OE
GZE3GL		0.00320	0.00043	0.36	0.0218	0.0025	1.45	OE
HBN8WG		0.00287	0.00010	0.08	0.0193	0.0000	-0.01	OE
JGC68P		0.00130	-0.00147	-1.23	0.0183	-0.0010	-0.60	GD
JP6FGK		0.00197	-0.00080	-0.67	0.0182	-0.0011	-0.68	CI
JQH88F		0.00480	0.00203	1.70	0.0212	0.0018	1.07	OE
K6CW3D		0.00371	0.00094	0.79	0.0215	0.0022	1.29	OE
K86XUM		0.00157	-0.00120	-1.01	0.0190	-0.0003	-0.18	OE
KNPK7C		0.00230	-0.00047	-0.39	0.0162	-0.0032	-1.87	OE
L4ZELT	X	0.00267	-0.00010	-0.09	0.0247	0.0053	3.13	XX
LEXLWH		0.000833	-0.00194	-1.62	0.0169	-0.0025	-1.46	OE

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LJQJR2		0.00223	-0.00054	-0.45	0.0182	-0.0012	-0.70	OE
LPGU2Y		0.00263	-0.00014	-0.11	0.0201	0.0008	0.44	OE
LWUWUU		0.00280	0.00003	0.02	0.0220	0.0027	1.56	OE
MXC8MK		0.00300	0.00023	0.19	0.0200	0.0007	0.38	OE
N49EAY		0.00433	0.00156	1.31	0.0165	-0.0029	-1.70	XX
N6K898		0.00320	0.00043	0.36	0.0207	0.0014	0.82	OE
NBAQ9G		0.00200	-0.00077	-0.65	0.0198	0.0005	0.27	OE
NC3MT4		0.00287	0.00010	0.08	0.0173	-0.0020	-1.19	AE
NDCUUC		0.00230	-0.00047	-0.39	0.0206	0.0012	0.72	OE
NHPDFY		0.00287	0.00010	0.08	0.0213	0.0020	1.17	OE
NUKGPK		0.00567	0.00290	2.43	0.0203	0.0010	0.58	OE
NX32AE		0.00237	-0.00040	-0.34	0.0171	-0.0022	-1.30	OE
PP83EY	X	0.00867	0.00590	4.95	0.00767	-0.0117	-6.88	XR
PXZFCD		0.00200	-0.00077	-0.65	0.0200	0.0007	0.38	OE
Q83WWG		0.00250	-0.00027	-0.23	0.0192	-0.0002	-0.11	XX
QGKU49		0.00260	-0.00017	-0.14	0.0176	-0.0018	-1.05	OE
QXWC9E		0.00233	-0.00044	-0.37	0.0188	-0.0005	-0.32	OE
R4LYXT		0.00260	-0.00017	-0.14	0.0174	-0.0020	-1.17	OE
R8ZM74		0.00247	-0.00030	-0.25	0.0187	-0.0007	-0.40	CO
RDJ2VV		0.00220	-0.00057	-0.48	0.0203	0.0009	0.54	OE
TX6662	*	0.00387	0.00110	0.92	0.0247	0.0053	3.13	OE
U23VYJ		0.00263	-0.00014	-0.11	0.0206	0.0013	0.76	XX
U2HEHV		0.00210	-0.00067	-0.56	0.0188	-0.0006	-0.34	CO
UYY6QH		0.00400	0.00123	1.03	0.0210	0.0017	0.97	OE
VCFHHJ		0.00257	-0.00020	-0.17	0.0205	0.0012	0.68	OE
VFETF4		0.00226	-0.00051	-0.43	0.0191	-0.0002	-0.13	CI
VFYGTR	X	0.0250	0.02223	18.65	0.0217	0.0023	1.37	OE
VPBKBC		0.00100	-0.00177	-1.49	0.0177	-0.0017	-0.99	OE
WA8P3B		0.00237	-0.00040	-0.34	0.0187	-0.0006	-0.36	OE
WHMB88		0.00500	0.00223	1.87	0.0230	0.0037	2.15	XX
WZLKVB		0.00227	-0.00050	-0.42	0.0194	0.0000	0.01	XX
X2AE87		0.000200	-0.00257	-2.16	0.0147	-0.0046	-2.74	OE
X42BYK		0.00173	-0.00104	-0.87	0.0203	0.0010	0.58	OE
X4XY32	X	0.00300	0.00023	0.19	0.00197	-0.0174	-10.24	OE
XGKVGT		0.00300	0.00023	0.19	0.0203	0.0010	0.58	OE
XPCKQ2		0.00433	0.00156	1.31	0.0217	0.0023	1.37	OE
XRGBVW	X	0.0176	0.01483	12.44	0.0221	0.0028	1.62	OE
Y2RPL6		0.00303	0.00026	0.22	0.0193	-0.0001	-0.05	CO
Y8AAEH		0.00343	0.00066	0.56	0.0208	0.0015	0.88	OE
YDJBPE		0.00270	-0.00007	-0.06	0.0226	0.0033	1.92	OE
Z4NTNB		0.00243	-0.00034	-0.28	0.0208	0.0015	0.88	OE
ZUKGWM		0.00333	0.00056	0.47	0.0187	-0.0007	-0.40	OE
ZXKP3J		0.00300	0.00023	0.19	0.0163	-0.0030	-1.78	OE
ZZTYTV		0.00324	0.00047	0.39	0.0201	0.0008	0.47	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.00277	Percent	0.0193	Percent
Stnd Dev Btwn Labs	0.00119	Percent	0.0017	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 81 of 91 reporting participants

Key to Method Codes Reported by Participants

AE	Spectrometry - Atomic Emission (AES)	CI	Combustion / IR
CO	Combustion	GD	Spectrometry - Glow Discharge (GDS)
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 #1603

6KJN7J (X) - Data for sample L81 are high.

BEFQ9E (M) - Participant did not submit data for sample L81.

CZUV89 (X) - Data for sample L82 are high.

EXUL4G (X) - Data for sample L81 are high.

FEUTU3 (M) - Participant did not submit data for sample L81.

L4ZELT (X) - Data for sample L82 are high.

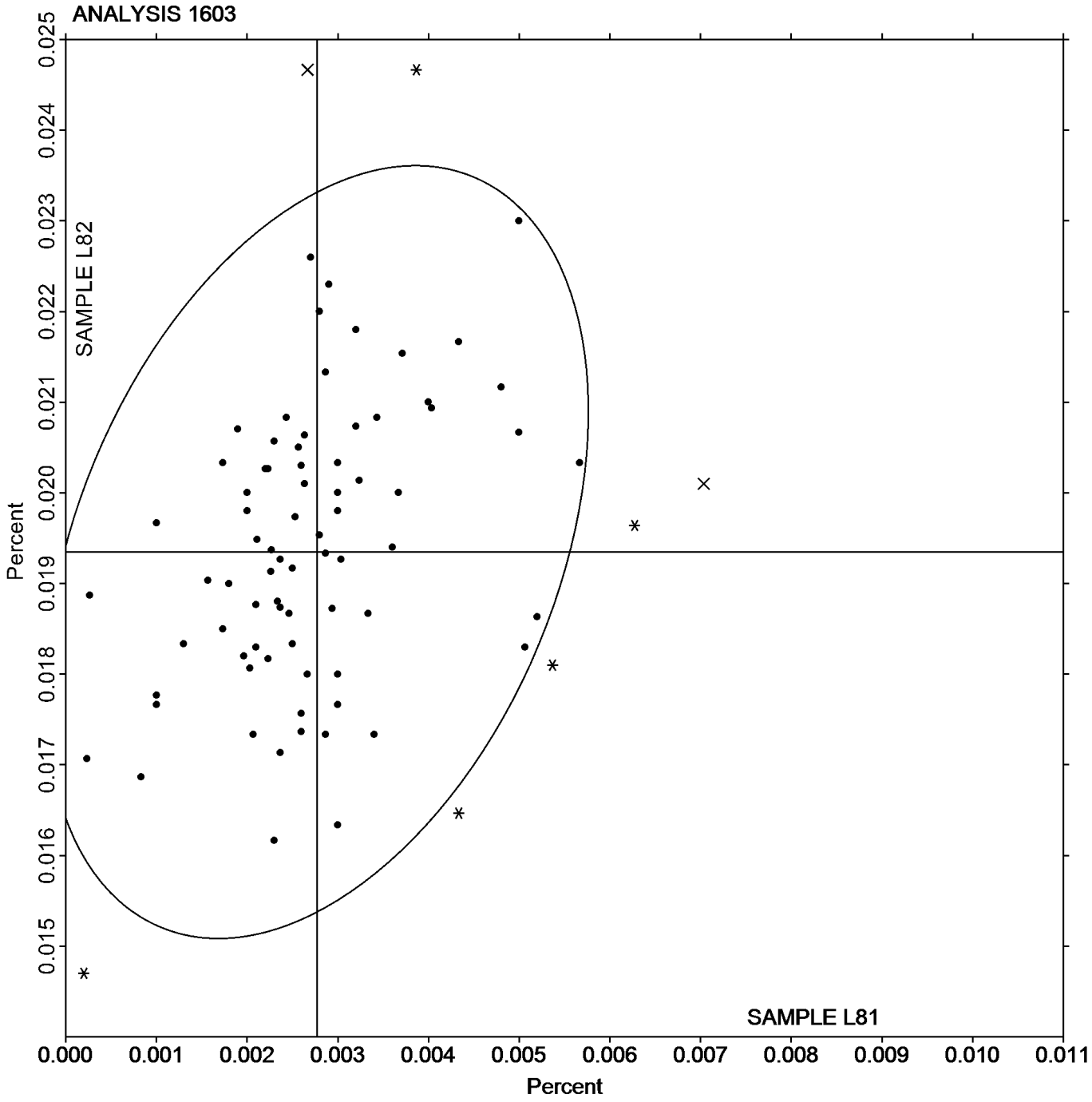
PP83EY (X) - Data for sample L81 are high and data for sample L82 are low. Inconsistent within the determinations of sample L81.

VFYGTR (X) - Data for sample L81 appear to be off by a factor of ten.

X4XY32 (X) - Data for sample L82 are low.

XRGBVW (X) - Data for sample L81 appear to be off by a factor of ten.

SAMPLE L81	SAMPLE L82
0.00277 Percent	0.0193 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.2483	-0.0071	-1.34	0.2243	-0.0013	-0.25	OE
37R8A8		0.2638	0.0084	1.60	0.2337	0.0081	1.57	OE
4BG2MY		0.2568	0.0014	0.27	0.2257	0.0000	0.01	OE
4CUKWW		0.2453	-0.0101	-1.91	0.2177	-0.0080	-1.54	IC
4MANTU		0.2467	-0.0087	-1.65	0.2200	-0.0056	-1.09	DR
62AKT8		0.2572	0.0018	0.34	0.2320	0.0064	1.24	OE
6687KB		0.2491	-0.0063	-1.19	0.2158	-0.0098	-1.90	OE
6CPPQV		0.2590	0.0036	0.69	0.2290	0.0034	0.65	OE
6KJN7J		0.2586	0.0032	0.61	0.2289	0.0033	0.63	OE
7LPLYQ		0.2550	-0.0004	-0.07	0.2230	-0.0026	-0.51	OE
7NJD9C		0.2598	0.0044	0.83	0.2294	0.0037	0.72	XX
83CBMR		0.2511	-0.0043	-0.81	0.2264	0.0008	0.15	WD
8AF7U8	*	0.2537	-0.0017	-0.33	0.2347	0.0090	1.75	OE
8CGC8R		0.2623	0.0069	1.32	0.2307	0.0050	0.97	OE
8KP72K		0.2513	-0.0041	-0.77	0.2190	-0.0066	-1.28	OE
93BU9U		0.2603	0.0049	0.94	0.2317	0.0060	1.17	OE
9DLJPB		0.2587	0.0033	0.63	0.2220	-0.0037	-0.71	GR
9KK3W8		0.2603	0.0049	0.94	0.2322	0.0065	1.26	OE
A96KLF		0.2497	-0.0057	-1.08	0.2217	-0.0040	-0.77	OE
AM9NBG		0.2550	-0.0004	-0.07	0.2273	0.0017	0.33	OE
BEFQ9E		0.2507	-0.0047	-0.89	0.2157	-0.0100	-1.93	IC
BV38CB		0.2584	0.0030	0.56	0.2310	0.0053	1.03	OE
C7UCFT		0.2580	0.0026	0.50	0.2257	0.0000	0.01	WD
CCHXNE		0.2543	-0.0011	-0.20	0.2244	-0.0013	-0.25	OE
CZUV89		0.2475	-0.0079	-1.50	0.2201	-0.0055	-1.07	OE
D7TPTM		0.2455	-0.0099	-1.87	0.2179	-0.0077	-1.50	OE
D9YZX4		0.2520	-0.0034	-0.64	0.2207	-0.0050	-0.96	OE
DACW39		0.2463	-0.0091	-1.72	0.2200	-0.0056	-1.09	AE
DMKHNL		0.2630	0.0076	1.44	0.2320	0.0064	1.23	OE
E38JDP		0.2523	-0.0031	-0.58	0.2288	0.0031	0.61	OE
EBHLYP		0.2443	-0.0111	-2.10	0.2177	-0.0080	-1.54	XX
EJVJH3		0.2585	0.0031	0.58	0.2276	0.0020	0.39	OE
ENL3PR		0.2556	0.0002	0.04	0.2252	-0.0005	-0.09	OE
EXUL4G		0.2660	0.0106	2.01	0.2317	0.0060	1.17	OE
FEUTU3		0.2667	0.0113	2.14	0.2327	0.0070	1.36	OE
FUDMC8		0.2583	0.0029	0.56	0.2270	0.0014	0.26	OE
G33G6V		0.2500	-0.0054	-1.02	0.2200	-0.0056	-1.09	OE
G7ZZ3N		0.2560	0.0006	0.12	0.2207	-0.0050	-0.96	IC
GZE3GL		0.2570	0.0016	0.31	0.2290	0.0034	0.65	OE
HBN8WG		0.2587	0.0033	0.62	0.2277	0.0020	0.39	OE
JGC68P		0.2507	-0.0047	-0.89	0.2173	-0.0083	-1.61	GD
JP6FGK		0.2513	-0.0041	-0.77	0.2240	-0.0016	-0.32	IC
JQH88F		0.2537	-0.0017	-0.33	0.2233	-0.0023	-0.45	OE
K6CW3D		0.2589	0.0035	0.67	0.2316	0.0060	1.16	OE
K86XUM		0.2643	0.0089	1.70	0.2353	0.0097	1.88	OE
KNPK7C		0.2553	-0.0001	-0.02	0.2227	-0.0029	-0.56	OE
L4ZELT		0.2547	-0.0007	-0.14	0.2220	-0.0036	-0.70	XX

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LEXLWH		0.2525	-0.0029	-0.54	0.2198	-0.0059	-1.14	XX
LJQJR2		0.2523	-0.0031	-0.58	0.2250	-0.0006	-0.12	OE
LPGU2Y		0.2550	-0.0004	-0.07	0.2287	0.0030	0.59	OE
LWUWUU		0.2483	-0.0071	-1.34	0.2183	-0.0073	-1.41	OE
MXC8MK		0.2500	-0.0054	-1.02	0.2200	-0.0056	-1.09	OE
N49EAY		0.2550	-0.0004	-0.07	0.2227	-0.0030	-0.58	XX
N6K898		0.2546	-0.0008	-0.15	0.2260	0.0004	0.07	OE
NBAQ9G		0.2562	0.0008	0.16	0.2273	0.0017	0.32	OE
NC3MT4		0.2457	-0.0097	-1.84	0.2180	-0.0076	-1.48	AE
NDCUUC		0.2453	-0.0101	-1.91	0.2147	-0.0110	-2.12	OE
NHPDFY		0.2610	0.0056	1.07	0.2303	0.0047	0.91	OE
NUKGPK		0.2600	0.0046	0.88	0.2300	0.0044	0.84	OE
NX32AE		0.2547	-0.0007	-0.14	0.2263	0.0007	0.13	OE
PP83EY	X	0.2350	-0.0204	-3.87	0.2340	0.0084	1.62	XR
PXZFCD	X	0.2760	0.0206	3.91	0.2470	0.0214	4.14	OE
Q83WWG		0.2517	-0.0037	-0.70	0.2213	-0.0043	-0.83	XX
QGKU49		0.2571	0.0017	0.32	0.2312	0.0055	1.07	OE
QXWC9E		0.2587	0.0033	0.62	0.2290	0.0034	0.65	XX
R4LYXT		0.2587	0.0033	0.62	0.2300	0.0044	0.84	OE
R8ZM74		0.2567	0.0013	0.24	0.2200	-0.0056	-1.09	GD
RDJ2VV		0.2557	0.0003	0.05	0.2280	0.0024	0.46	OE
TX6662	X	0.2230	-0.0324	-6.14	0.1957	-0.0300	-5.80	OE
U23VYJ		0.2533	-0.0021	-0.39	0.2203	-0.0053	-1.03	XX
U2HEHV	*	0.2507	-0.0047	-0.89	0.2320	0.0064	1.23	IC
UYY6QH		0.2623	0.0069	1.32	0.2307	0.0050	0.97	OE
VCFHHJ		0.2543	-0.0011	-0.20	0.2272	0.0016	0.31	OE
VFETF4		0.2570	0.0016	0.31	0.2270	0.0014	0.26	OE
VFYGTR		0.2490	-0.0064	-1.21	0.2230	-0.0026	-0.51	OE
VPBKBC		0.2533	-0.0021	-0.39	0.2220	-0.0036	-0.70	OE
WA8P3B		0.2586	0.0032	0.62	0.2321	0.0065	1.26	OE
WHMB88		0.2580	0.0026	0.50	0.2273	0.0017	0.33	XX
WZLKVB		0.2530	-0.0024	-0.45	0.2290	0.0034	0.65	XX
X2AE87		0.2564	0.0010	0.19	0.2301	0.0045	0.86	XX
X42BYK		0.2660	0.0106	2.02	0.2329	0.0073	1.41	OE
X4XY32		0.2533	-0.0021	-0.39	0.2233	-0.0023	-0.45	OE
XGKVGT		0.2643	0.0089	1.70	0.2320	0.0064	1.23	OE
XPCKQ2	*	0.2550	-0.0004	-0.07	0.2383	0.0127	2.46	OE
XRGBVW		0.2650	0.0096	1.82	0.2360	0.0104	2.01	OE
Y2RPL6		0.2567	0.0013	0.24	0.2240	-0.0016	-0.32	OE
Y8AAEH		0.2520	-0.0034	-0.65	0.2256	-0.0001	-0.01	OE
YDJBPE		0.2567	0.0013	0.24	0.2270	0.0014	0.26	OE
Z4NTNB		0.2613	0.0059	1.12	0.2338	0.0082	1.58	OE
ZUKGWM	X	0.2590	0.0036	0.69	0.2183	-0.0073	-1.41	OE
ZXKP3J		0.2543	-0.0011	-0.20	0.2207	-0.0050	-0.96	OE
ZZTYTV		0.2572	0.0019	0.35	0.2266	0.0009	0.18	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.2554	Percent	0.2256	Percent
Stnd Dev Btwn Labs	0.0053	Percent	0.0052	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 85 of 92 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)	XR	X-Ray Fluorescence - ED or WD not specified
XX	Please Indicate Method Used for Current Element		

Comments on Assigned Data Flags for Test #1604

PP83EY (X) - Data for sample L81 are low.

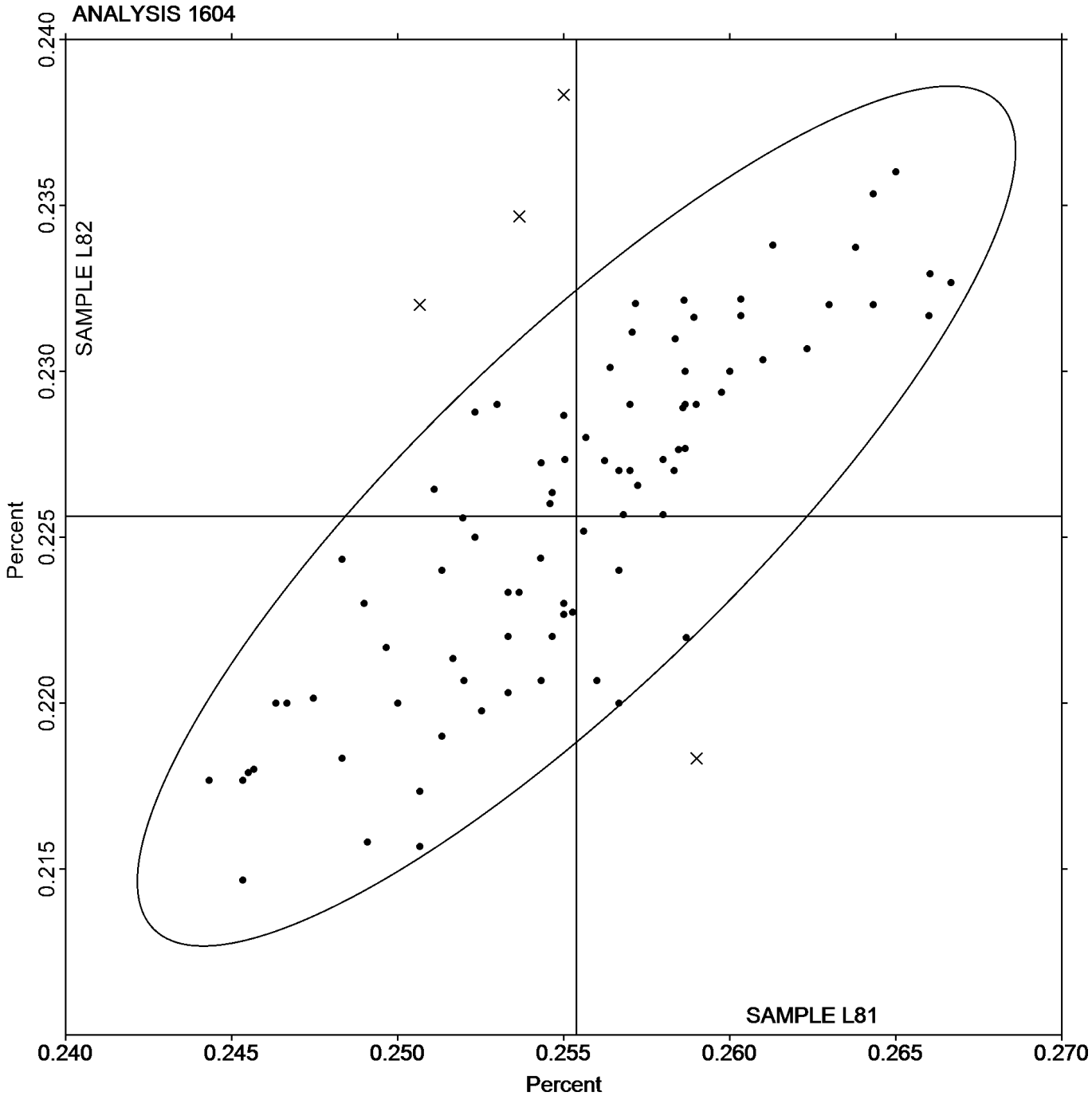
PXZFCD (X) - Data for both samples are high. Possible Systematic Error.

TX6662 (X) - Data for both samples are low. Possible Systematic Error.

ZUKGWM (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L82.

SAMPLE L81
0.2554 Percent

SAMPLE L82
0.2256 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.2517	-0.0043	-0.68	0.2167	-0.0027	-0.57	OE
37R8A8		0.2513	-0.0046	-0.73	0.2163	-0.0031	-0.64	OE
4BG2MY		0.2545	-0.0014	-0.23	0.2182	-0.0012	-0.26	OE
4CUKWW		0.2463	-0.0096	-1.52	0.2143	-0.0051	-1.06	IC
4MANTU		0.2433	-0.0126	-2.00	0.2133	-0.0061	-1.27	DR
62AKT8		0.2603	0.0043	0.69	0.2188	-0.0006	-0.13	OE
6687KB		0.2536	-0.0024	-0.38	0.2127	-0.0067	-1.41	OE
6CPPQV		0.2580	0.0020	0.32	0.2210	0.0016	0.33	OE
6KJN7J		0.2555	-0.0004	-0.07	0.2177	-0.0017	-0.36	OE
7LPLYQ		0.2570	0.0010	0.16	0.2153	-0.0041	-0.85	OE
7NJD9C		0.2580	0.0021	0.33	0.2203	0.0009	0.19	XX
83CBMR		0.2629	0.0069	1.09	0.2238	0.0044	0.92	WD
8AF7U8		0.2570	0.0010	0.16	0.2203	0.0009	0.19	OE
8CGC8R	*	0.2753	0.0194	3.06	0.2333	0.0139	2.91	OE
8KP72K		0.2580	0.0020	0.32	0.2190	-0.0004	-0.09	OE
93BU9U		0.2473	-0.0086	-1.36	0.2117	-0.0077	-1.62	OE
9DLJPB		0.2572	0.0013	0.20	0.2203	0.0009	0.18	IC
9KK3W8		0.2561	0.0001	0.02	0.2186	-0.0008	-0.18	OE
A96KLF		0.2577	0.0017	0.27	0.2200	0.0006	0.12	OE
AM9NBG		0.2522	-0.0037	-0.59	0.2135	-0.0059	-1.24	OE
BEFQ9E		0.2583	0.0024	0.38	0.2183	-0.0011	-0.23	IC
BV38CB		0.2604	0.0044	0.69	0.2207	0.0013	0.28	OE
C7UCFT		0.2568	0.0008	0.13	0.2224	0.0030	0.63	WD
CCHXNE		0.2584	0.0025	0.39	0.2173	-0.0021	-0.44	OE
CZUV89		0.2524	-0.0035	-0.56	0.2176	-0.0018	-0.38	OE
D7TPTM	*	0.2473	-0.0087	-1.37	0.2232	0.0038	0.80	OE
D9YZX4	X	0.2480	-0.0080	-1.26	0.1970	-0.0224	-4.69	OE
DACW39		0.2540	-0.0020	-0.31	0.2180	-0.0014	-0.30	AE
DMKHNL		0.2490	-0.0070	-1.10	0.2150	-0.0044	-0.92	OE
E38JDP	X	0.2640	0.0080	1.27	0.2439	0.0245	5.13	OE
EBHLYP		0.2680	0.0120	1.90	0.2277	0.0083	1.73	XX
EJVJH3		0.2586	0.0026	0.41	0.2218	0.0024	0.50	OE
ENL3PR		0.2548	-0.0012	-0.19	0.2177	-0.0017	-0.35	OE
EXUL4G		0.2567	0.0007	0.11	0.2217	0.0023	0.47	OE
FEUTU3		0.2513	-0.0046	-0.73	0.2187	-0.0007	-0.16	OE
FUDMC8		0.2527	-0.0033	-0.52	0.2157	-0.0037	-0.78	OE
G33G6V		0.2500	-0.0060	-0.94	0.2167	-0.0027	-0.57	OE
G7ZZ3N		0.2627	0.0067	1.06	0.2250	0.0056	1.17	IC
GZE3GL		0.2610	0.0050	0.80	0.2260	0.0066	1.38	OE
HBN8WG		0.2587	0.0027	0.43	0.2203	0.0009	0.19	OE
JGC68P		0.2503	-0.0056	-0.89	0.2150	-0.0044	-0.92	GD
JP6FGK		0.2597	0.0037	0.59	0.2230	0.0036	0.75	OE
JQH88F		0.2533	-0.0026	-0.41	0.2167	-0.0027	-0.57	OE
K6CW3D		0.2462	-0.0098	-1.55	0.2113	-0.0081	-1.70	OE
K86XUM		0.2621	0.0062	0.98	0.2238	0.0044	0.93	OE
KNPK7C	X	0.2373	-0.0187	-2.95	0.2023	-0.0171	-3.58	OE
L4ZELT	*	0.2540	-0.0020	-0.31	0.2283	0.0089	1.87	XX

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LEXLWH		0.2406	-0.0154	-2.43	0.2075	-0.0119	-2.49	OE
LJQJR2		0.2560	0.0000	0.01	0.2190	-0.0004	-0.09	OE
LPGU2Y		0.2570	0.0010	0.16	0.2217	0.0023	0.47	OE
LWUWUU		0.2590	0.0030	0.48	0.2233	0.0039	0.82	OE
MXC8MK		0.2400	-0.0160	-2.52	0.2100	-0.0094	-1.97	OE
N49EAY		0.2560	0.0000	0.01	0.2173	-0.0021	-0.43	XX
N6K898		0.2559	-0.0001	-0.01	0.2203	0.0009	0.18	OE
NBAQ9G		0.2499	-0.0061	-0.96	0.2150	-0.0044	-0.93	OE
NC3MT4		0.2477	-0.0083	-1.31	0.2120	-0.0074	-1.55	AE
NDCUUC		0.2570	0.0010	0.16	0.2200	0.0006	0.12	OE
NHPDFY		0.2587	0.0027	0.43	0.2180	-0.0014	-0.30	OE
NUKGPK	X	0.2567	0.0007	0.11	0.2300	0.0106	2.22	OE
NX32AE		0.2670	0.0110	1.75	0.2277	0.0083	1.73	OE
PP83EY	X	0.2593	0.0034	0.53	0.2523	0.0329	6.89	XR
PXZFCD		0.2670	0.0110	1.75	0.2300	0.0106	2.22	OE
Q83WWG		0.2490	-0.0070	-1.10	0.2183	-0.0011	-0.23	XX
QGKU49		0.2588	0.0028	0.44	0.2218	0.0024	0.50	OE
QXWC9E		0.2613	0.0053	0.84	0.2246	0.0052	1.09	XX
R4LYXT		0.2446	-0.0113	-1.79	0.2118	-0.0076	-1.59	OE
R8ZM74	X	0.2667	0.0107	1.69	0.2200	0.0006	0.12	GD
RDJ2VV		0.2560	0.0000	0.01	0.2200	0.0006	0.12	OE
TX6662	X	0.2203	-0.0356	-5.63	0.1910	-0.0284	-5.95	OE
U23VYJ	*	0.2510	-0.0049	-0.78	0.2092	-0.0102	-2.14	XX
U2HEHV		0.2570	0.0010	0.16	0.2210	0.0016	0.33	IC
UYY6QH		0.2553	-0.0006	-0.10	0.2203	0.0009	0.19	OE
VCFHHJ		0.2541	-0.0018	-0.29	0.2160	-0.0034	-0.71	OE
VFETF4		0.2583	0.0024	0.38	0.2233	0.0039	0.82	OE
VFYGTR	*	0.2573	0.0014	0.22	0.2297	0.0103	2.15	OE
VPBKBC		0.2503	-0.0056	-0.89	0.2120	-0.0074	-1.55	OE
WA8P3B		0.2550	-0.0010	-0.16	0.2235	0.0041	0.85	OE
WHMB88	X	0.2053	-0.0506	-8.00	0.1927	-0.0267	-5.60	XX
WZLKVB		0.2530	-0.0030	-0.47	0.2187	-0.0007	-0.16	XX
X2AE87		0.2604	0.0044	0.70	0.2245	0.0051	1.07	OE
X42BYK		0.2574	0.0014	0.22	0.2207	0.0013	0.28	OE
X4XY32		0.2500	-0.0060	-0.94	0.2200	0.0006	0.12	OE
XGKVGT		0.2660	0.0100	1.59	0.2223	0.0029	0.61	OE
XPCKQ2		0.2543	-0.0016	-0.26	0.2220	0.0026	0.54	OE
XRGBVW		0.2518	-0.0041	-0.65	0.2176	-0.0018	-0.37	OE
Y2RPL6		0.2594	0.0034	0.54	0.2198	0.0004	0.09	OE
Y8AAEH	*	0.2738	0.0178	2.81	0.2333	0.0139	2.90	OE
YDJBPE		0.2600	0.0040	0.64	0.2210	0.0016	0.33	OE
Z4NTNB		0.2538	-0.0021	-0.34	0.2182	-0.0012	-0.25	OE
ZUKGWM	X	0.2793	0.0234	3.69	0.2367	0.0173	3.61	OE
ZXKP3J		0.2613	0.0054	0.85	0.2220	0.0026	0.54	OE
ZZTYTV		0.2592	0.0032	0.51	0.2234	0.0040	0.84	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.2560	Percent	0.2194	Percent
Stnd Dev Btwn Labs	0.0063	Percent	0.0048	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 79 of 92 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #1605

D9YZX4 (X) - Data for sample L82 are low. Inconsistent within the determinations of both samples.

E38JDP (X) - Data for sample L82 are high.

KNPK7C (X) - Data for both samples are low.

NUKGPK (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L81.

PP83EY (X) - Data for sample L82 are high.

R8ZM74 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L81.

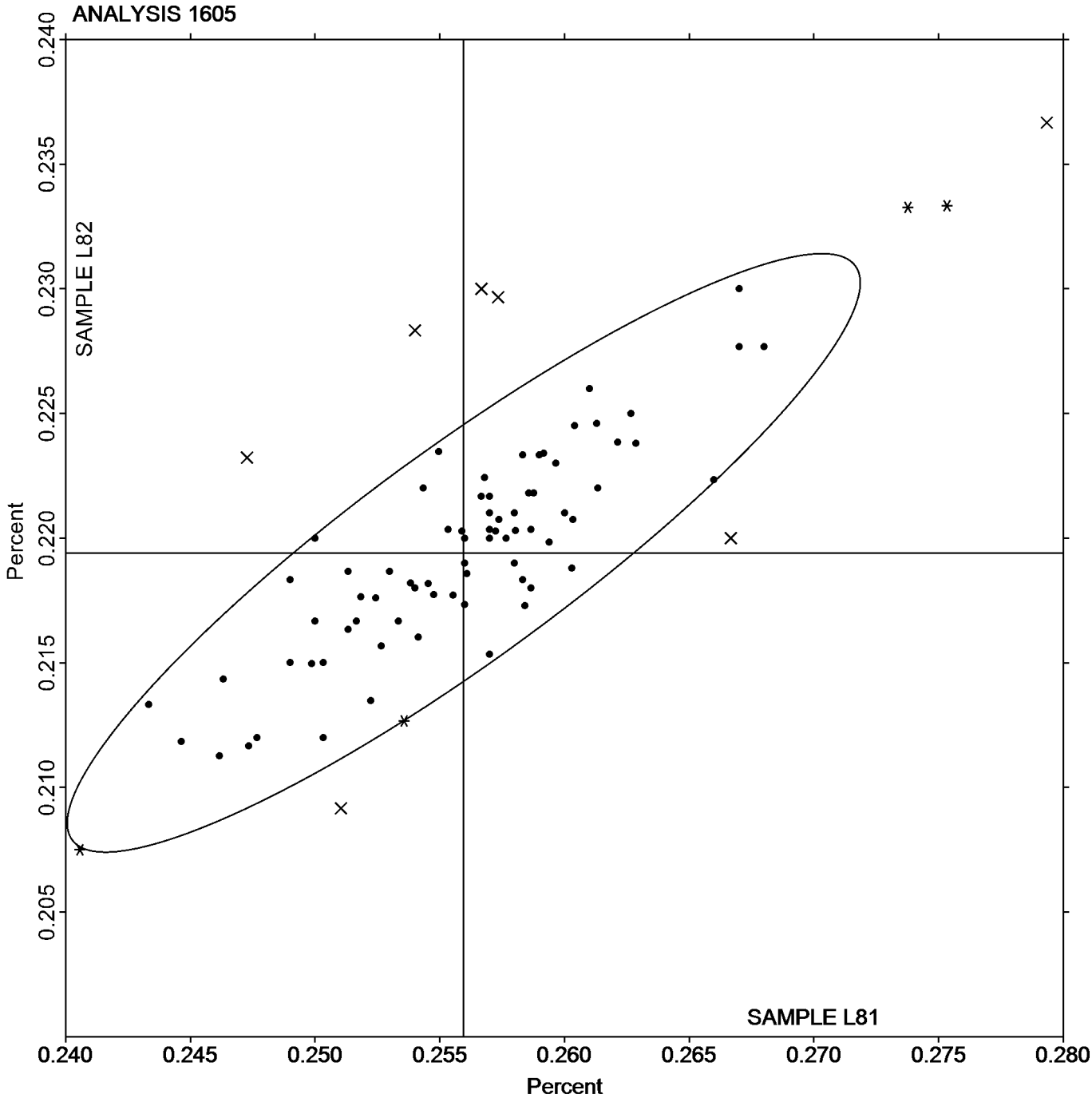
TX6662 (X) - Data for both samples are low.

WHMB88 (X) - Data for both samples are low.

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

SAMPLE L81
0.2560 Percent

SAMPLE L82
0.2194 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		1.835	0.005	0.19	1.650	-0.002	-0.06	OE
37R8A8		1.833	0.002	0.09	1.654	0.002	0.09	OE
4BG2MY		1.830	-0.001	-0.04	1.658	0.006	0.24	OE
4CUKWW		1.859	0.028	1.14	1.699	0.047	1.77	IC
4MANTU		1.837	0.006	0.24	1.657	0.005	0.18	DR
62AKT8		1.826	-0.005	-0.21	1.654	0.002	0.07	OE
6687KB	*	1.778	-0.053	-2.17	1.577	-0.075	-2.83	OE
6CPPQV		1.871	0.040	1.65	1.701	0.049	1.85	OE
6KJN7J	X	2.048	0.217	8.87	1.870	0.218	8.23	OE
7NJD9C		1.825	-0.006	-0.25	1.650	-0.002	-0.08	XX
83CBMR		1.802	-0.029	-1.19	1.626	-0.026	-0.97	WD
8AF7U8		1.824	-0.007	-0.29	1.649	-0.003	-0.12	OE
8CGC8R		1.853	0.023	0.93	1.677	0.025	0.94	OE
8KP72K	*	1.900	0.069	2.84	1.723	0.071	2.69	OE
93BU9U		1.832	0.002	0.07	1.631	-0.021	-0.78	OE
9DLJPB		1.820	-0.011	-0.44	1.649	-0.003	-0.10	IC
9KK3W8		1.806	-0.025	-1.02	1.621	-0.031	-1.16	OE
A96KLF		1.843	0.013	0.52	1.653	0.001	0.05	OE
AM9NBG		1.840	0.009	0.38	1.641	-0.011	-0.41	OE
BEFQ9E		1.842	0.011	0.46	1.676	0.024	0.90	IC
BV38CB		1.821	-0.010	-0.39	1.640	-0.012	-0.44	OE
C7UCFT		1.826	-0.004	-0.18	1.652	0.000	-0.01	WD
CCHXNE	*	1.898	0.068	2.77	1.719	0.067	2.54	OE
D9YZX4		1.781	-0.050	-2.03	1.596	-0.056	-2.11	OE
DACW39		1.783	-0.047	-1.94	1.603	-0.049	-1.84	AE
DMKHNL		1.823	-0.007	-0.30	1.630	-0.022	-0.83	OE
E38JDP	X	2.051	0.221	9.03	1.709	0.057	2.16	OE
EBHLYP	X	1.710	-0.120	-4.93	1.876	0.224	8.45	XX
EJVJH3		1.849	0.018	0.73	1.658	0.007	0.25	OE
ENL3PR		1.818	-0.012	-0.51	1.629	-0.023	-0.87	OE
EXUL4G	*	1.757	-0.074	-3.03	1.580	-0.072	-2.72	OE
FEUTU3		1.847	0.016	0.65	1.673	0.021	0.81	OE
FUDMC8		1.862	0.032	1.29	1.685	0.033	1.25	OE
G33G6V		1.827	-0.004	-0.17	1.643	-0.009	-0.32	XX
G7ZZ3N		1.808	-0.023	-0.93	1.648	-0.004	-0.14	XX
GZE3GL	X	0.1800	-1.651	-67.56	1.630	-0.022	-0.83	OE
HBN8WG		1.826	-0.005	-0.19	1.650	-0.002	-0.07	OE
JGC68P	X	1.890	0.059	2.43	1.753	0.101	3.83	GD
JP6FGK		1.831	0.000	0.00	1.663	0.011	0.42	IC
JQH88F		1.863	0.033	1.33	1.665	0.013	0.49	OE
K6CW3D		1.834	0.003	0.12	1.651	-0.001	-0.02	OE
K86XUM		1.821	-0.009	-0.38	1.654	0.002	0.07	OE
KNPK7C	X	1.773	-0.058	-2.37	1.563	-0.089	-3.37	OE
L4ZELT		1.834	0.003	0.13	1.665	0.013	0.51	XX
LEXLWH	X	1.698	-0.133	-5.45	1.513	-0.139	-5.27	XX
LJQJR2		1.822	-0.008	-0.34	1.631	-0.021	-0.78	OE
LPGU2Y		1.830	-0.001	-0.04	1.656	0.004	0.17	OE

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LWUWUU	X	1.878	0.047	1.93	1.742	0.090	3.39	OE
MXC8MK	*	1.833	0.003	0.11	1.580	-0.072	-2.72	OE
N49EAY	X	1.730	-0.101	-4.12	1.663	0.011	0.43	XX
N6K898		1.831	0.000	0.01	1.654	0.002	0.07	OE
NBAQ9G		1.814	-0.017	-0.69	1.629	-0.023	-0.85	OE
NC3MT4		1.787	-0.044	-1.80	1.630	-0.022	-0.83	AE
NHPDFY		1.820	-0.011	-0.44	1.630	-0.022	-0.83	OE
NUKGPK		1.847	0.016	0.65	1.667	0.015	0.56	OE
NX32AE		1.837	0.007	0.27	1.659	0.007	0.26	OE
PP83EY	X	1.710	-0.121	-4.94	1.653	0.001	0.04	XR
PXZFCD	X	1.920	0.089	3.65	1.723	0.071	2.69	OE
Q83WWG		1.830	-0.001	-0.03	1.657	0.005	0.18	XX
QGKU49		1.881	0.050	2.05	1.672	0.020	0.75	OE
QXWC9E		1.866	0.035	1.43	1.673	0.021	0.81	OE
R4LYXT		1.823	-0.008	-0.33	1.648	-0.004	-0.14	OE
R8ZM74	X	1.827	-0.004	-0.17	1.697	0.045	1.69	GD
RDJ2VV		1.830	-0.001	-0.03	1.643	-0.009	-0.35	OE
TX6662	X	1.416	-0.415	-16.97	1.283	-0.369	-13.93	OE
U23VYJ		1.830	-0.001	-0.02	1.640	-0.012	-0.46	XX
U2HEHV		1.817	-0.014	-0.56	1.642	-0.010	-0.37	IC
UYY6QH		1.822	-0.008	-0.34	1.674	0.022	0.83	OE
VCFHHJ		1.824	-0.006	-0.26	1.645	-0.006	-0.24	OE
VFETF4		1.827	-0.004	-0.17	1.670	0.018	0.68	OE
VFYGTR		1.850	0.019	0.79	1.677	0.025	0.94	OE
WA8P3B		1.849	0.018	0.74	1.669	0.017	0.63	OE
WHMB88	X	1.740	-0.091	-3.71	1.567	-0.085	-3.22	XX
WZLKVB		1.819	-0.012	-0.48	1.641	-0.011	-0.42	XX
X2AE87		1.816	-0.014	-0.59	1.632	-0.020	-0.77	OE
X42BYK		1.847	0.016	0.65	1.688	0.036	1.35	OE
XGKVGT		1.857	0.026	1.06	1.683	0.031	1.19	OE
XPCKQ2		1.835	0.004	0.16	1.627	-0.025	-0.94	OE
XRGBVW		1.829	-0.001	-0.06	1.682	0.030	1.14	OE
Y2RPL6		1.828	-0.003	-0.13	1.633	-0.019	-0.73	OE
Y8AAEH	X	1.963	0.132	5.42	1.649	-0.003	-0.10	OE
YDJBPE		1.837	0.006	0.24	1.650	-0.002	-0.07	OE
Z4NTNB		1.814	-0.016	-0.67	1.629	-0.023	-0.85	OE
ZUKGWM	X	1.883	0.053	2.15	1.570	-0.082	-3.09	OE
ZXKP3J		1.810	-0.021	-0.85	1.643	-0.009	-0.32	OE
ZZTYTV		1.829	-0.002	-0.08	1.657	0.005	0.19	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	1.831	Percent	1.652	Percent
Stnd Dev Btwn Labs	0.024	Percent	0.026	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 69 of 86 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #1606

6KJN7J (X) - Data for both samples are high. Possible Systematic Error.

E38JDP (X) - Data for sample L81 are high.

EBHLYP (X) - Data for sample L81 are low and data for sample L82 are high. Inconsistent in testing between samples.

GZE3GL (X) - Data for sample L81 are low.

JGC68P (X) - Data for sample L82 are high.

KNPK7C (X) - Data for sample L82 are low. Inconsistent within the determinations of sample L82.

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

LWUWUU (X) - Data for sample L82 are high.

N49EAY (X) - Data for sample L81 are low.

PP83EY (X) - Data for sample L81 are low. Inconsistent within the determinations of both samples.

PXZFCD (X) - Data for sample L81 are high.

R8ZM74 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

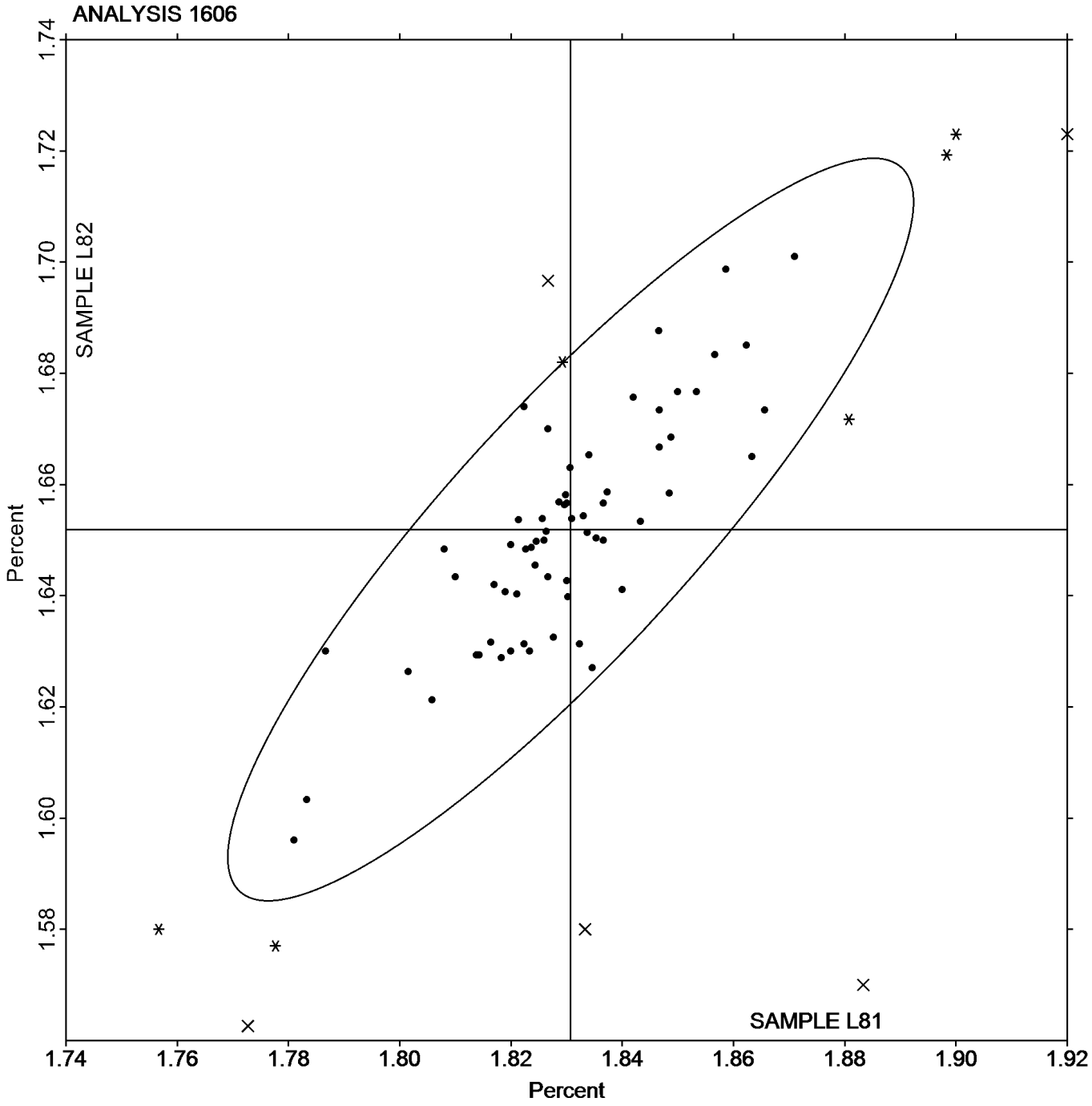
TX6662 (X) - Data for both samples are low. Possible Systematic Error.

WHMB88 (X) - Data for both samples are low. Possible Systematic Error.

Y8AAEH (X) - Data for sample L81 are high.

ZUKGWM (X) - Data for sample L82 are low. Inconsistent within the determinations of both samples.

SAMPLE L81	SAMPLE L82
1.831 Percent	1.652 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.8167	-0.0159	-1.53	0.7690	-0.0119	-1.11	OE
37R8A8		0.8400	0.0074	0.72	0.7827	0.0017	0.16	OE
4BG2MY		0.8300	-0.0026	-0.25	0.7803	-0.0006	-0.06	OE
4MANTU		0.8133	-0.0192	-1.86	0.7667	-0.0143	-1.33	DR
62AKT8		0.8405	0.0080	0.77	0.7791	-0.0018	-0.17	OE
6687KB		0.8526	0.0201	1.94	0.8091	0.0282	2.63	OE
6CPPQV		0.8280	-0.0046	-0.44	0.7780	-0.0029	-0.27	OE
6KJN7J	X	0.7907	-0.0419	-4.04	0.7410	-0.0399	-3.73	OE
7LPLYQ		0.8240	-0.0086	-0.83	0.7677	-0.0133	-1.24	OE
7NJD9C		0.8311	-0.0014	-0.14	0.7781	-0.0029	-0.27	XX
83CBMR		0.8311	-0.0015	-0.14	0.7781	-0.0029	-0.27	WD
8AF7U8		0.8253	-0.0072	-0.70	0.7763	-0.0046	-0.43	OE
8CGC8R	*	0.8470	0.0144	1.39	0.7773	-0.0036	-0.34	OE
8KP72K		0.8353	0.0028	0.27	0.7787	-0.0023	-0.21	OE
93BU9U		0.8337	0.0011	0.11	0.7773	-0.0036	-0.34	OE
9DLJPB		0.8343	0.0018	0.17	0.7834	0.0025	0.23	IC
9KK3W8		0.8443	0.0118	1.13	0.7885	0.0076	0.71	OE
A96KLF		0.8410	0.0084	0.81	0.7773	-0.0036	-0.34	OE
AM9NBG		0.8356	0.0030	0.29	0.7828	0.0018	0.17	OE
BEFQ9E		0.8310	-0.0016	-0.15	0.7823	0.0014	0.13	IC
BV38CB		0.8367	0.0041	0.39	0.7828	0.0018	0.17	OE
C7UCFT		0.8300	-0.0025	-0.24	0.7771	-0.0038	-0.36	WD
CCHXNE		0.8311	-0.0015	-0.15	0.7763	-0.0047	-0.44	OE
CZUV89	X	0.8019	-0.0306	-2.96	0.7666	-0.0143	-1.34	OE
D7TPTM	X	0.8004	-0.0322	-3.11	0.7425	-0.0384	-3.59	OE
D9YZX4		0.8557	0.0231	2.23	0.8027	0.0217	2.03	OE
DACW39		0.8217	-0.0109	-1.05	0.7717	-0.0093	-0.87	AE
DMKHNL		0.8267	-0.0059	-0.57	0.7677	-0.0133	-1.24	OE
E38JDP	*	0.8380	0.0054	0.52	0.7981	0.0172	1.60	OE
EBHLYP		0.8513	0.0188	1.81	0.8033	0.0224	2.09	XX
EJVJH3		0.8303	-0.0023	-0.22	0.7842	0.0033	0.31	OE
ENL3PR		0.8283	-0.0043	-0.42	0.7699	-0.0110	-1.03	OE
EXUL4G		0.8467	0.0141	1.36	0.7933	0.0124	1.16	OE
FEUTU3		0.8353	0.0028	0.27	0.7797	-0.0013	-0.12	XX
FUDMC8		0.8437	0.0111	1.07	0.7927	0.0117	1.09	OE
G33G6V		0.8300	-0.0026	-0.25	0.7767	-0.0043	-0.40	OE
G7ZZ3N		0.8340	0.0014	0.14	0.7850	0.0041	0.38	IC
GZE3GL	X	0.8710	0.0384	3.71	0.8300	0.0491	4.58	OE
HBN8WG		0.8310	-0.0016	-0.15	0.7800	-0.0009	-0.09	OE
JGC68P	*	0.8347	0.0021	0.20	0.7603	-0.0206	-1.92	GD
JP6FGK		0.8337	0.0011	0.11	0.7810	0.0001	0.01	IC
JQH88F	*	0.8000	-0.0326	-3.14	0.7500	-0.0309	-2.89	OE
K6CW3D		0.8141	-0.0184	-1.78	0.7597	-0.0213	-1.99	OE
K86XUM		0.8340	0.0014	0.14	0.7837	0.0027	0.25	OE
KNPK7C		0.8314	-0.0011	-0.11	0.7851	0.0041	0.39	OE
L4ZELT		0.8347	0.0021	0.20	0.7797	-0.0013	-0.12	XX
LEXLWH	X	0.8352	0.0026	0.25	0.7486	-0.0323	-3.02	OE

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LJQJR2		0.8190	-0.0136	-1.31	0.7697	-0.0113	-1.05	OE
LPGU2Y		0.8283	-0.0042	-0.41	0.7797	-0.0013	-0.12	OE
LWUWUU		0.8087	-0.0239	-2.31	0.7590	-0.0219	-2.05	OE
MXC8MK	X	0.7800	-0.0526	-5.07	0.7400	-0.0409	-3.82	OE
N49EAY		0.8317	-0.0009	-0.09	0.7780	-0.0029	-0.27	XX
N6K898		0.8375	0.0049	0.47	0.7788	-0.0022	-0.20	OE
NBAQ9G		0.8265	-0.0061	-0.59	0.7730	-0.0079	-0.74	OE
NC3MT4		0.8267	-0.0059	-0.57	0.7700	-0.0109	-1.02	AE
NDCUUC		0.8393	0.0068	0.65	0.7847	0.0037	0.35	OE
NHPDFY		0.8317	-0.0009	-0.09	0.7867	0.0057	0.53	OE
NUKGPK		0.8367	0.0041	0.40	0.7833	0.0024	0.22	XX
NX32AE		0.8327	0.0001	0.01	0.7810	0.0001	0.01	OE
PP83EY	X	0.8157	-0.0169	-1.63	0.7990	0.0181	1.69	XR
PXZFCD		0.8260	-0.0066	-0.63	0.7750	-0.0059	-0.55	OE
Q83WWG		0.8393	0.0068	0.65	0.7943	0.0134	1.25	XX
QGKU49		0.8369	0.0043	0.42	0.7870	0.0060	0.56	OE
QXWC9E		0.8305	-0.0020	-0.20	0.7787	-0.0022	-0.21	OE
R4LYXT		0.8340	0.0014	0.14	0.7860	0.0051	0.47	OE
R8ZM74	*	0.8500	0.0174	1.68	0.8067	0.0257	2.40	GD
RDJ2VV		0.8323	-0.0002	-0.02	0.7847	0.0037	0.35	OE
TX6662		0.8397	0.0071	0.68	0.7880	0.0071	0.66	OE
U23VYJ		0.8416	0.0090	0.87	0.7823	0.0013	0.12	XX
U2HEHV		0.8323	-0.0002	-0.02	0.7860	0.0051	0.47	IC
UYY6QH		0.8380	0.0054	0.52	0.7890	0.0081	0.75	OE
VCFHHJ		0.8468	0.0143	1.38	0.7986	0.0177	1.65	OE
VFETF4		0.8313	-0.0012	-0.12	0.7840	0.0031	0.29	OE
VFYGTR	X	0.8700	0.0374	3.61	0.8130	0.0321	2.99	OE
VPBKBC		0.8313	-0.0012	-0.12	0.7683	-0.0126	-1.18	OE
WA8P3B		0.8298	-0.0027	-0.26	0.7842	0.0033	0.30	OE
WHMB88		0.8200	-0.0126	-1.21	0.7700	-0.0109	-1.02	XX
WZLKVB		0.8310	-0.0016	-0.15	0.7837	0.0027	0.25	XX
X2AE87		0.8135	-0.0191	-1.84	0.7663	-0.0146	-1.37	XX
X42BYK		0.8371	0.0045	0.44	0.7853	0.0044	0.41	OE
X4XY32		0.8233	-0.0092	-0.89	0.7700	-0.0109	-1.02	OE
XGKVGT		0.8473	0.0148	1.42	0.7940	0.0131	1.22	OE
XPCKQ2		0.8343	0.0018	0.17	0.7800	-0.0009	-0.09	OE
XRGBVW		0.8408	0.0083	0.80	0.7909	0.0100	0.93	OE
Y2RPL6		0.8303	-0.0022	-0.22	0.7786	-0.0023	-0.22	OE
Y8AAEH		0.8123	-0.0203	-1.96	0.7645	-0.0164	-1.53	OE
YDJBPE	*	0.8617	0.0291	2.81	0.8030	0.0221	2.06	OE
Z4NTNB		0.8323	-0.0003	-0.03	0.7820	0.0010	0.10	OE
ZUKGWM	X	0.8420	0.0094	0.91	0.8083	0.0274	2.56	OE
ZXKP3J		0.8243	-0.0082	-0.79	0.7737	-0.0073	-0.68	OE
ZZTYTV	X	0.7930	-0.0395	-3.81	0.7806	-0.0003	-0.03	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.8326	Percent	0.7809	Percent
Stnd Dev Btwn Labs	0.0104	Percent	0.0107	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 79 of 91 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #1607

6KJN7J (X) - Data for both samples are low. Possible Systematic Error.

CZUV89 (X) - Data for sample L81 are low. Inconsistent within the determinations of sample L82.

D7TPTM (X) - Data for both samples are low. Possible Systematic Error.

GZE3GL (X) - Data for both samples are high. Possible Systematic Error.

LEXLWH (X) - Data for sample L82 are low.

MXC8MK (X) - Data for both samples are low. Possible Systematic Error.

PP83EY (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

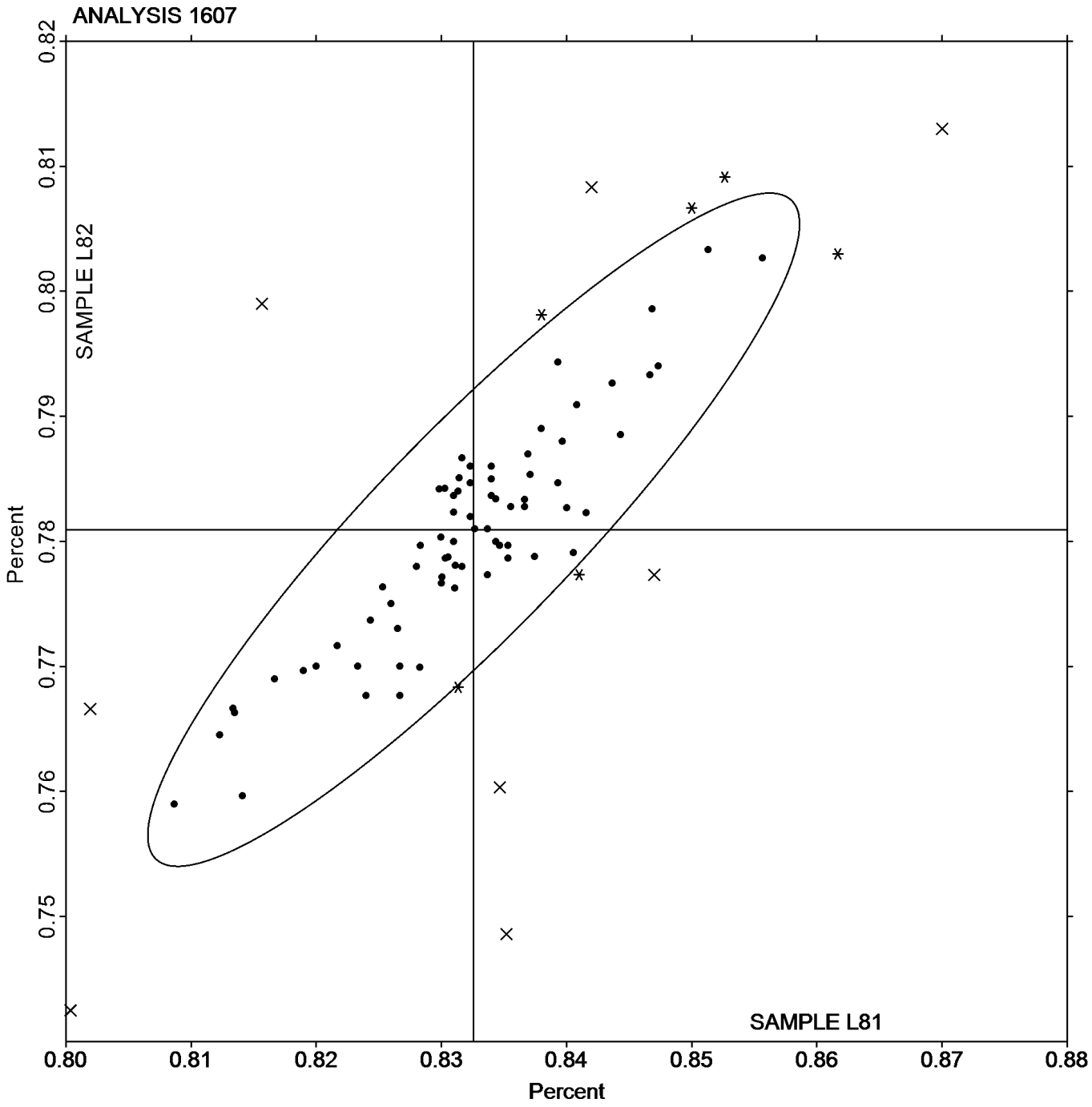
VFYGTR (X) - Data for both samples are high. Possible Systematic Error.

ZUKGWM (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L81.

ZZTYTV (X) - Data for sample L81 are low.

SAMPLE L81
0.8326 Percent

SAMPLE L82
0.7809 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.0147	-0.0038	-2.17	0.1380	-0.0041	-0.98	OE
4BG2MY		0.0183	-0.0001	-0.05	0.1466	0.0045	1.06	OE
4CUKWW		0.0171	-0.0013	-0.76	0.1417	-0.0005	-0.11	IC
4MANTU		0.0200	0.0016	0.91	0.1400	-0.0021	-0.51	DR
62AKT8		0.0170	-0.0014	-0.82	0.1475	0.0054	1.28	OE
6687KB		0.0163	-0.0022	-1.24	0.1333	-0.0089	-2.10	OE
6CPPQV		0.0184	0.0000	-0.01	0.1340	-0.0081	-1.93	OE
6KJN7J		0.0219	0.0035	2.02	0.1379	-0.0043	-1.01	OE
7LPLYQ		0.0187	0.0002	0.14	0.1437	0.0015	0.36	OE
7NJD9C		0.0188	0.0004	0.22	0.1412	-0.0009	-0.21	XX
83CBMR		0.0190	0.0006	0.35	0.1436	0.0014	0.34	WD
8AF7U8		0.0166	-0.0018	-1.03	0.1377	-0.0045	-1.06	OE
8CGC8R	X	0.0233	0.0049	2.83	0.1640	0.0219	5.18	OE
8KP72K		0.0153	-0.0031	-1.78	0.1377	-0.0045	-1.06	OE
93BU9U		0.0201	0.0017	0.99	0.1523	0.0102	2.41	OE
9DLJPB		0.0178	-0.0006	-0.34	0.1424	0.0003	0.06	IC
9KK3W8		0.0187	0.0002	0.14	0.1403	-0.0018	-0.44	OE
A96KLF		0.0197	0.0012	0.72	0.1447	0.0025	0.60	OE
AM9NBG		0.0173	-0.0012	-0.67	0.1393	-0.0029	-0.68	OE
BEFQ9E		0.0184	0.0000	0.01	0.1410	-0.0011	-0.27	IC
BV38CB		0.0193	0.0008	0.49	0.1409	-0.0012	-0.29	OE
C7UCFT		0.0193	0.0008	0.49	0.1429	0.0008	0.18	WD
CCHXNE		0.0190	0.0005	0.31	0.1387	-0.0034	-0.81	OE
CZUV89		0.0164	-0.0020	-1.17	0.1430	0.0008	0.20	OE
D7TPTM	X	0.0274	0.0089	5.16	0.1409	-0.0012	-0.29	OE
D9YZX4		0.0180	-0.0004	-0.24	0.1383	-0.0038	-0.90	OE
DACW39		0.0160	-0.0024	-1.40	0.1377	-0.0045	-1.06	AE
DMKHNL		0.0177	-0.0007	-0.40	0.1380	-0.0041	-0.98	OE
E38JDP		0.0173	-0.0011	-0.63	0.1437	0.0016	0.38	OE
EBHLYP	X	0.0340	0.0156	8.98	0.1587	0.0165	3.92	XX
EJVJH3		0.0207	0.0023	1.33	0.1456	0.0034	0.81	OE
ENL3PR		0.0192	0.0007	0.43	0.1463	0.0042	0.99	OE
EXUL4G		0.0207	0.0022	1.29	0.1467	0.0045	1.07	OE
FEUTU3		0.0188	0.0004	0.22	0.1450	0.0029	0.68	OE
FUDMC8	X	0.0171	-0.0013	-0.74	0.1206	-0.0215	-5.09	OE
G33G6V	*	0.0145	-0.0040	-2.28	0.1522	0.0100	2.38	OE
G7ZZ3N		0.0182	-0.0002	-0.11	0.1403	-0.0018	-0.43	XX
GZE3GL	X	0.0350	0.0166	9.56	0.1480	0.0059	1.39	OE
HBN8WG		0.0185	0.0001	0.04	0.1420	-0.0001	-0.03	OE
JGC68P		0.0176	-0.0008	-0.46	0.1400	-0.0021	-0.51	GD
JP6FGK		0.0185	0.0001	0.06	0.1420	-0.0001	-0.03	IC
JQH88F		0.0177	-0.0008	-0.44	0.1383	-0.0038	-0.90	OE
K6CW3D		0.0197	0.0012	0.71	0.1418	-0.0003	-0.08	OE
KNPK7C	X	0.0625	0.0441	25.43	0.1384	-0.0037	-0.89	OE
L4ZELT		0.0190	0.0006	0.33	0.1430	0.0009	0.20	XX
LEXLWH		0.0176	-0.0009	-0.49	0.1407	-0.0014	-0.34	XX
LJQJR2		0.0190	0.0006	0.35	0.1470	0.0049	1.15	OE

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
LPGU2Y		0.0156	-0.0029	-1.65	0.1440	0.0019	0.44	OE
LWUWUU		0.0163	-0.0021	-1.21	0.1440	0.0019	0.44	OE
MXC8MK		0.0170	-0.0014	-0.82	0.1400	-0.0021	-0.51	OE
N49EAY		0.0180	-0.0004	-0.24	0.1390	-0.0031	-0.74	XX
N6K898		0.0178	-0.0007	-0.38	0.1413	-0.0009	-0.21	OE
NBAQ9G		0.0170	-0.0014	-0.82	0.1407	-0.0014	-0.34	OE
NC3MT4		0.0187	0.0003	0.16	0.1440	0.0019	0.44	AE
NDCUUC		0.0163	-0.0021	-1.21	0.1373	-0.0048	-1.14	OE
NHPDFY		0.0198	0.0014	0.81	0.1470	0.0049	1.15	OE
NUKGPK		0.0180	-0.0004	-0.24	0.1400	-0.0021	-0.51	OE
NX32AE		0.0167	-0.0018	-1.01	0.1400	-0.0021	-0.51	OE
PP83EY		0.0227	0.0042	2.45	0.1407	-0.0015	-0.35	XR
PXZFCD	*	0.0160	-0.0024	-1.40	0.1520	0.0099	2.34	OE
Q83WWG		0.0187	0.0002	0.14	0.1443	0.0022	0.52	XX
QGKU49		0.0195	0.0011	0.64	0.1478	0.0056	1.33	OE
QXWC9E		0.0170	-0.0014	-0.82	0.1520	0.0099	2.34	OE
R4LYXT	X	0.0260	0.0076	4.37	0.1457	0.0035	0.84	OE
R8ZM74		0.0203	0.0019	1.10	0.1400	-0.0021	-0.51	GD
RDJ2VV		0.0140	-0.0044	-2.53	0.1433	0.0012	0.28	OE
TX6662	*	0.0170	-0.0014	-0.82	0.1293	-0.0128	-3.03	OE
U23VYJ	*	0.0224	0.0040	2.31	0.1540	0.0118	2.80	XX
U2HEHV		0.0170	-0.0014	-0.82	0.1433	0.0012	0.28	IC
UYY6QH		0.0180	-0.0004	-0.24	0.1440	0.0019	0.44	OE
VCFHHJ		0.0182	-0.0002	-0.13	0.1439	0.0017	0.41	OE
VFETF4		0.0185	0.0001	0.04	0.1450	0.0029	0.68	OE
VFYGTR	X	0.0189	0.0004	0.25	0.0145	-0.1276	-30.23	OE
VPBKBC		0.0187	0.0002	0.14	0.1423	0.0002	0.05	OE
WA8P3B		0.0186	0.0002	0.12	0.1422	0.0000	0.01	OE
WHMB88		0.0173	-0.0011	-0.63	0.1357	-0.0065	-1.53	XX
WZLKVB		0.0196	0.0011	0.66	0.1410	-0.0011	-0.27	OE
X2AE87	X	0.0283	0.0099	5.69	0.1456	0.0035	0.82	OE
X42BYK		0.0172	-0.0012	-0.71	0.1372	-0.0049	-1.16	OE
X4XY32		0.0200	0.0016	0.91	0.1500	0.0079	1.86	OE
XGKVGT	X	0.0103	-0.0081	-4.67	0.1327	-0.0095	-2.24	IC
XPCKQ2		0.0225	0.0041	2.35	0.1463	0.0042	0.99	XX
XRGBVW		0.0190	0.0006	0.33	0.1363	-0.0058	-1.38	OE
Y2RPL6		0.0181	-0.0003	-0.19	0.1423	0.0002	0.05	OE
Y8AAEH		0.0204	0.0019	1.12	0.1431	0.0009	0.22	OE
YDJBPE		0.0205	0.0021	1.20	0.1410	-0.0011	-0.27	OE
Z4NTNB		0.0172	-0.0012	-0.71	0.1445	0.0024	0.56	OE
ZUKGWM	X	0.0183	-0.0001	-0.05	0.1220	-0.0201	-4.77	OE
ZXKP3J		0.0220	0.0036	2.06	0.1453	0.0032	0.76	OE
ZZTYTV		0.0207	0.0023	1.33	0.1478	0.0057	1.35	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.0184	Percent	0.1421	Percent
Stnd Dev Btwn Labs	0.0017	Percent	0.0042	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 77 of 90 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #1608

8CGC8R (X) - Data for both samples are high.

D7TPTM (X) - Data for sample L81 are high.

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

FUDMC8 (X) - Data for sample L82 are low.

GZE3GL (X) - Data for sample L81 are high. Inconsistent within the determinations of both samples.

KNPK7C (X) - Data for sample L81 are high. Inconsistent within the determinations of sample L81.

R4LYXT (X) - Data for sample L81 are high.

VFYGTR (X) - Data for sample L82 appear to be off by a factor of ten.

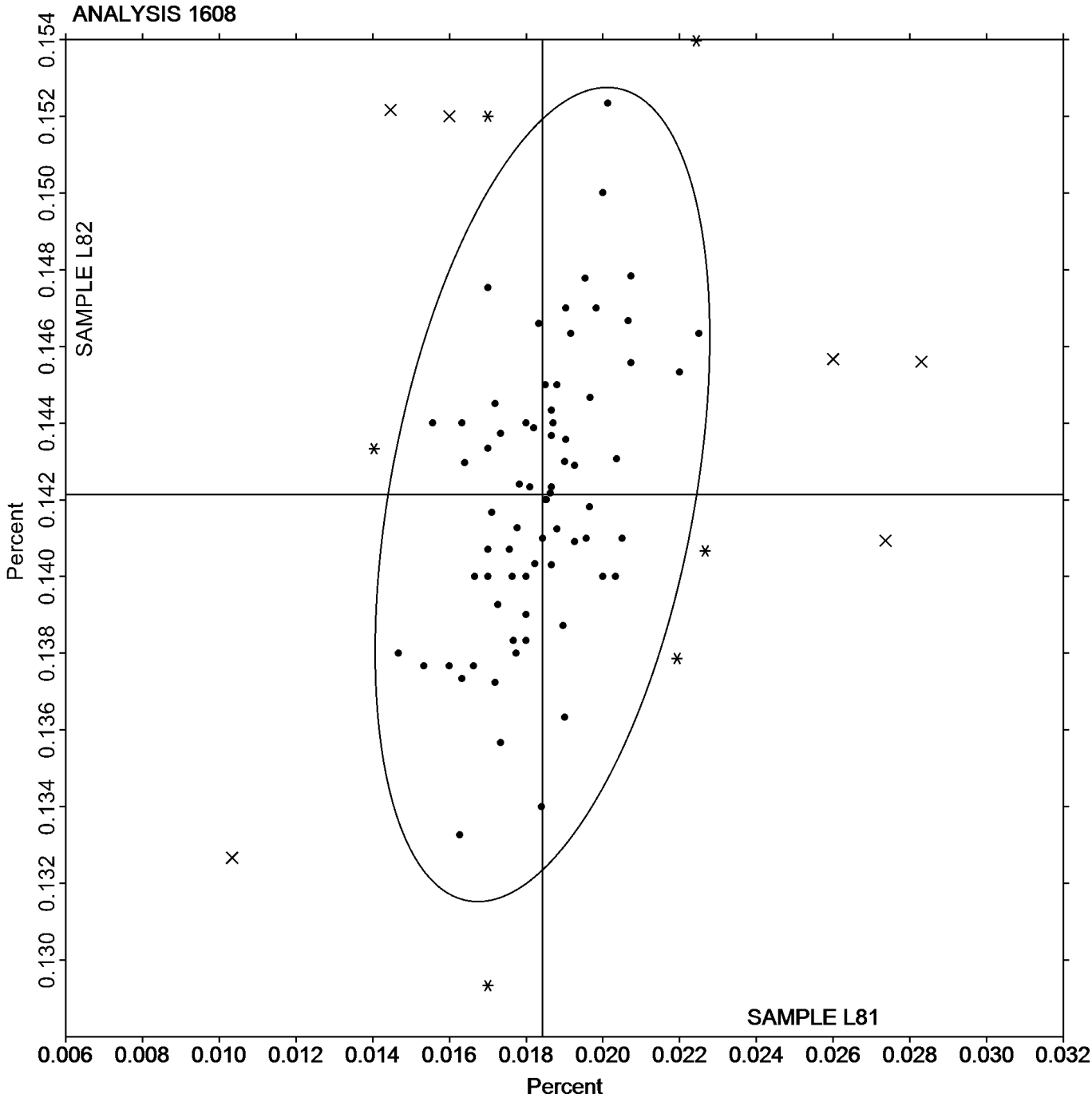
X2AE87 (X) - Data for sample L81 are high.

XGKVGT (X) - Data for sample L81 are low.

ZUKGWM (X) - Data for sample L82 are low.

SAMPLE L81
0.0184 Percent

SAMPLE L82
0.1421 Percent



		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
2LLD3B		0.0267	-0.0033	-2.22	0.0183	-0.0022	-1.74	OE
4BG2MY		0.0295	-0.0005	-0.34	0.0201	-0.0004	-0.35	OE
4CUKWW		0.0277	-0.0023	-1.56	0.0202	-0.0004	-0.30	IC
4MANTU		0.0300	0.0000	-0.01	0.0200	-0.0005	-0.43	DR
62AKT8		0.0300	0.0000	-0.01	0.0220	0.0015	1.14	XX
6687KB		0.0297	-0.0003	-0.19	0.0194	-0.0011	-0.87	OE
6CPPQV		0.0288	-0.0012	-0.80	0.0197	-0.0008	-0.67	OE
6KJN7J		0.0291	-0.0009	-0.63	0.0197	-0.0009	-0.69	OE
7LPLYQ		0.0300	0.0000	-0.01	0.0210	0.0005	0.35	OE
7NJD9C		0.0301	0.0001	0.06	0.0204	-0.0001	-0.12	XX
83CBMR		0.0278	-0.0022	-1.44	0.0206	0.0001	0.04	WD
8AF7U8		0.0295	-0.0005	-0.32	0.0190	-0.0015	-1.19	OE
8CGC8R		0.0299	-0.0001	-0.05	0.0199	-0.0006	-0.48	OE
8KP72K		0.0297	-0.0003	-0.23	0.0203	-0.0002	-0.17	OE
93BU9U		0.0275	-0.0025	-1.64	0.0182	-0.0023	-1.82	OE
9DLJPB		0.0311	0.0011	0.74	0.0213	0.0008	0.62	IC
9KK3W8		0.0298	-0.0002	-0.16	0.0212	0.0007	0.54	OE
A96KLF		0.0325	0.0025	1.65	0.0228	0.0023	1.79	OE
AM9NBG		0.0297	-0.0003	-0.23	0.0210	0.0005	0.35	OE
BEFQ9E		0.0292	-0.0008	-0.52	0.0197	-0.0008	-0.67	IC
BV38CB		0.0294	-0.0006	-0.38	0.0207	0.0001	0.09	OE
C7UCFT		0.0306	0.0006	0.42	0.0202	-0.0004	-0.30	IC
CCHXNE		0.0303	0.0003	0.17	0.0213	0.0008	0.61	OE
CZUV89		0.0321	0.0021	1.36	0.0221	0.0016	1.24	OE
D7TPTM	X	0.0183	-0.0117	-7.76	0.0129	-0.0076	-5.98	XX
D9YZX4		0.0283	-0.0017	-1.11	0.0187	-0.0019	-1.48	OE
DACW39		0.0297	-0.0003	-0.23	0.0217	0.0011	0.88	AE
DMKHNL		0.0308	0.0008	0.52	0.0197	-0.0008	-0.64	OE
E38JDP	*	0.0340	0.0040	2.64	0.0192	-0.0013	-1.06	OE
EBHLYP		0.0303	0.0003	0.21	0.0190	-0.0015	-1.21	XX
EJVJH3		0.0328	0.0028	1.85	0.0225	0.0019	1.51	OE
ENL3PR		0.0297	-0.0003	-0.19	0.0202	-0.0004	-0.30	OE
EXUL4G	X	0.0430	0.0130	8.61	0.0263	0.0058	4.54	OE
FEUTU3		0.0323	0.0023	1.54	0.0214	0.0008	0.64	OE
FUDMC8		0.0324	0.0024	1.60	0.0211	0.0006	0.46	OE
G33G6V		0.0299	-0.0001	-0.07	0.0188	-0.0017	-1.35	OE
G7ZZ3N		0.0293	-0.0007	-0.45	0.0204	-0.0002	-0.14	IC
GZE3GL		0.0330	0.0030	1.98	0.0236	0.0031	2.39	OE
HBN8WG		0.0302	0.0002	0.10	0.0190	-0.0016	-1.24	OE
JGC68P		0.0289	-0.0011	-0.72	0.0182	-0.0023	-1.84	GD
JP6FGK		0.0301	0.0001	0.06	0.0202	-0.0003	-0.25	IC
K6CW3D		0.0297	-0.0003	-0.22	0.0206	0.0001	0.07	OE
KNPK7C	X	0.0189	-0.0111	-7.39	0.0132	-0.0073	-5.77	OE
L4ZELT		0.0320	0.0020	1.32	0.0220	0.0015	1.14	XX
LJQJR2		0.0293	-0.0007	-0.47	0.0200	-0.0005	-0.40	OE
LPGU2Y		0.0307	0.0007	0.46	0.0210	0.0004	0.33	OE
LWUWUU		0.0307	0.0007	0.43	0.0210	0.0005	0.35	OE

		Sample L81			Sample L82			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
MXC8MK		0.0279	-0.0021	-1.40	0.0187	-0.0018	-1.42	OE
N49EAY		0.0274	-0.0026	-1.73	0.0197	-0.0008	-0.64	XX
N6K898		0.0277	-0.0023	-1.53	0.0207	0.0002	0.12	OE
NBAQ9G		0.0315	0.0015	0.99	0.0221	0.0016	1.22	OE
NC3MT4		0.0320	0.0020	1.32	0.0216	0.0011	0.85	AE
NDCUUC		0.0307	0.0007	0.43	0.0203	-0.0002	-0.17	OE
NHPDFY		0.0304	0.0004	0.28	0.0206	0.0001	0.07	OE
NUKGPK		0.0287	-0.0013	-0.89	0.0197	-0.0009	-0.69	OE
NX32AE		0.0295	-0.0005	-0.34	0.0206	0.0001	0.04	OE
PP83EY	X	0.0233	-0.0067	-4.43	0.0243	0.0038	2.97	XR
PXZFCD		0.0300	0.0000	-0.01	0.0210	0.0005	0.35	OE
Q83WWG	X	0.0343	0.0043	2.86	0.0190	-0.0015	-1.21	XX
QGKU49		0.0304	0.0004	0.23	0.0189	-0.0016	-1.27	OE
QXWC9E		0.0307	0.0007	0.48	0.0213	0.0008	0.59	OE
R4LYXT		0.0336	0.0036	2.40	0.0225	0.0019	1.51	OE
R8ZM74		0.0273	-0.0027	-1.78	0.0190	-0.0015	-1.21	GD
RDJ2VV		0.0294	-0.0006	-0.38	0.0204	-0.0002	-0.14	OE
TX6662		0.0323	0.0023	1.54	0.0223	0.0018	1.40	OE
U23VYJ		0.0272	-0.0028	-1.86	0.0184	-0.0022	-1.71	XX
U2HEHV		0.0297	-0.0003	-0.23	0.0210	0.0005	0.35	IC
UYY6QH		0.0310	0.0010	0.65	0.0200	-0.0005	-0.43	XX
VCFHHJ		0.0301	0.0001	0.04	0.0206	0.0001	0.04	OE
VFETF4		0.0303	0.0003	0.17	0.0211	0.0005	0.41	OE
VFYGTR	*	0.0277	-0.0023	-1.53	0.0225	0.0020	1.56	OE
VPBKBC		0.0290	-0.0010	-0.67	0.0197	-0.0009	-0.69	OE
WA8P3B		0.0282	-0.0018	-1.18	0.0195	-0.0011	-0.85	OE
WHMB88		0.0307	0.0007	0.43	0.0207	0.0001	0.09	XX
WZLKVB		0.0316	0.0016	1.05	0.0216	0.0011	0.83	XX
X2AE87		0.0286	-0.0014	-0.94	0.0211	0.0006	0.43	OE
X42BYK		0.0312	0.0012	0.81	0.0214	0.0008	0.64	OE
X4XY32		0.0300	0.0000	-0.01	0.0200	-0.0005	-0.43	OE
XGKVGT		0.0290	-0.0010	-0.67	0.0193	-0.0012	-0.95	OE
XPCKQ2		0.0300	0.0000	-0.01	0.0220	0.0015	1.14	OE
XRGBVW		0.0332	0.0032	2.13	0.0218	0.0013	0.98	OE
Y2RPL6		0.0296	-0.0004	-0.25	0.0208	0.0003	0.22	OE
Y8AAEH		0.0327	0.0027	1.78	0.0238	0.0033	2.55	OE
YDJBPE		0.0302	0.0002	0.15	0.0208	0.0002	0.17	OE
Z4NTNB		0.0294	-0.0006	-0.41	0.0226	0.0021	1.61	OE
ZUKGWM		0.0293	-0.0007	-0.45	0.0175	-0.0030	-2.39	OE
ZXKP3J		0.0317	0.0017	1.10	0.0227	0.0021	1.66	OE
ZZTYTV		0.0277	-0.0023	-1.50	0.0203	-0.0002	-0.19	OE

Summary Statistics

	Sample L81		Sample L82	
Grand Means	0.0300	Percent	0.0205	Percent
Stnd Dev Btwn Labs	0.0015	Percent	0.0013	Percent

Samples L81, L82 : AISI 4340, AISI 4340 (H)

Statistics based on 81 of 88 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #1613

D7TPTM (X) - Data for both samples are low.

EXUL4G (X) - Data for both samples are high. Inconsistent within the determinations of sample L81.

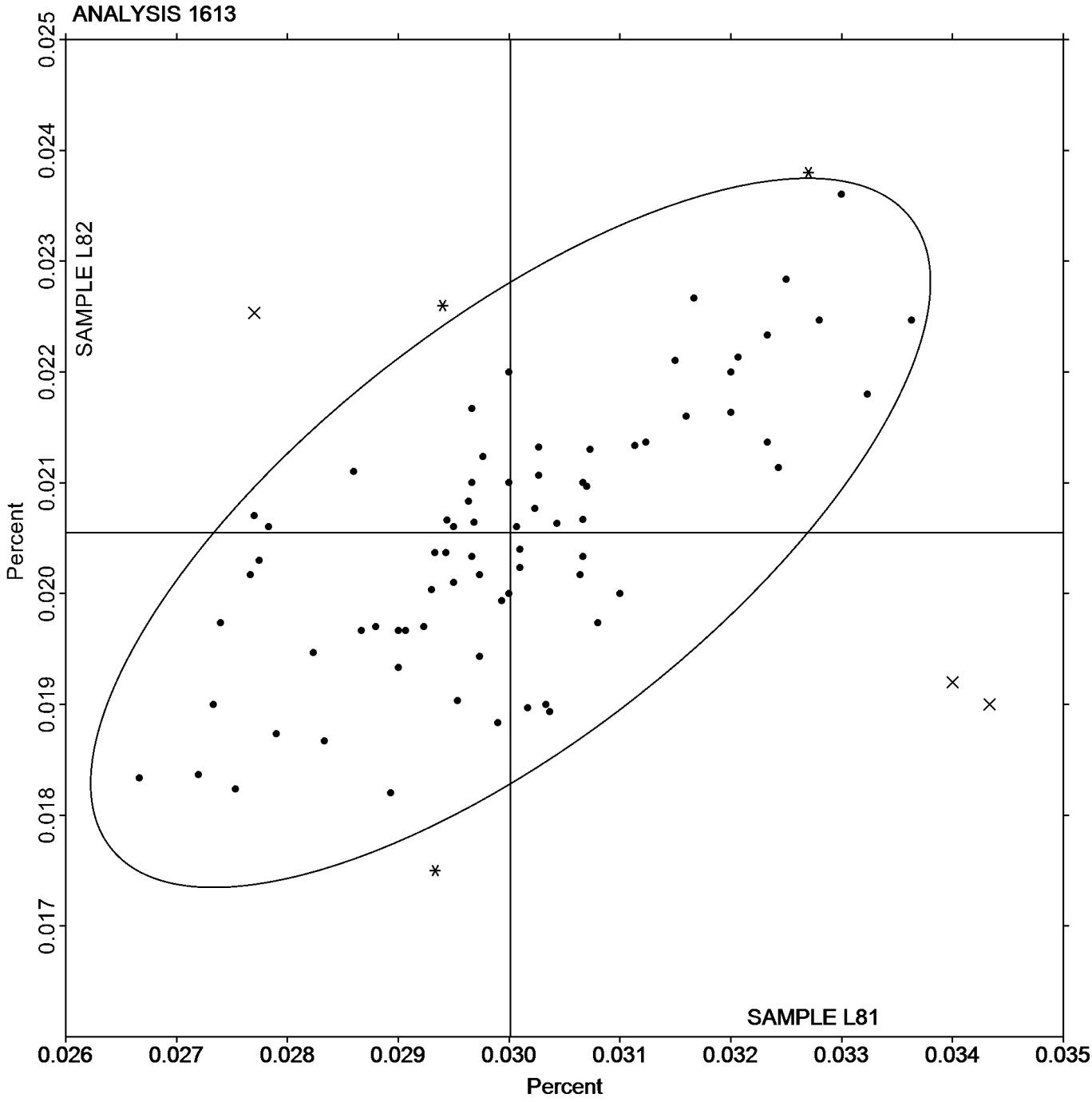
KNPK7C (X) - Data for both samples are low.

PP83EY (X) - Data for sample L81 are low and data for sample L82 are high. Inconsistent within the determinations of both samples.

Q83WWG (X) - Data for sample L81 are high. Inconsistent within the determinations of sample L81.

SAMPLE L81
0.0300 Percent

SAMPLE L82
0.0205 Percent



-End of Report-

