Collaborative Testing Services, Inc.

Fasteners & Metals Interlaboratory Testing Program

Summary Report Cycle 129, 1st Qtr 2020

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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.

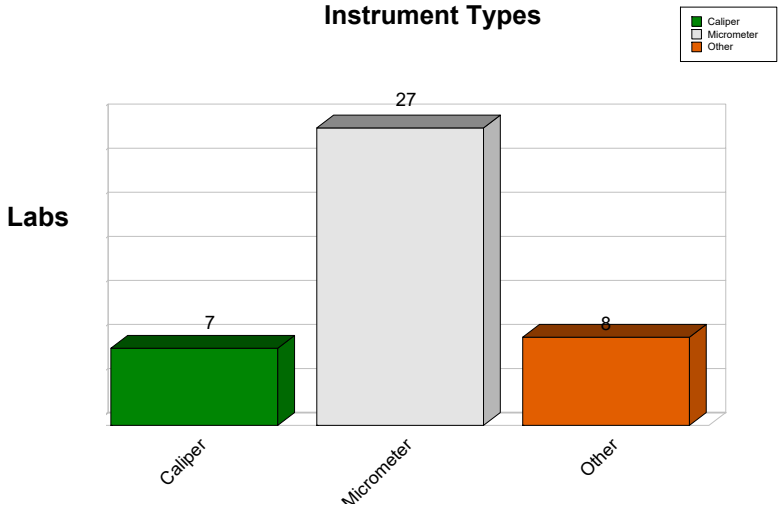
Fasteners and Metals Interlaboratory Testing Program

Analysis 1001

Dimensional: Outside Diameter of Plain Plug Gage
ISO GUM

Cycle 129
1st Qtr 2020

During Cycle 129, CTS conducted the Analysis #101 - Round Dimensional. For this test all participants received two samples I65 and I66 with nominal diameters; 0.3750 in. and 0.3746 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. 42 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 = 0.3750 in.

Xref2 = 0.3746 in.

				Sample I65		Sample I66		
WebCode	Data Flag (if assigned)	Reference Uncertainty (Uref)	Expanded Uncertainty (Ulab)	Lab Mean (Xlab)	Performance Statistic (En1)	Lab Mean (Xlab)	Performance Statistic (En2)	Instrument
2LPXNL		0.00004	0.00059	0.37510	0.17	0.37468	0.14	Micrometer
2UFJUK		0.00004	0.00118	0.37480	-0.17	0.37441	-0.16	Caliper
3BKB9U		0.00004	0.00210	0.37500	0.00	0.37500	0.19	Other
3QWQA6	X	0.00004	0.00042	0.37500	0.00	0.37400	-1.42	Other
3R8NMM		0.00004	0.00047	0.37497	-0.07	0.37457	-0.07	Micrometer
4UTRVJ		0.00004	0.00094	0.37484	-0.17	0.37437	-0.24	Micrometer
4VKNKD		0.00004	0.00040	0.37504	0.10	0.37458	-0.05	Micrometer
6PTZZR	X	0.00004	0.00008	0.37500	0.00	0.37450	-1.13	Micrometer
83AKQY		0.00004	0.00008	0.37499	-0.15	0.37458	-0.17	Other
8UXJDB		0.00004	0.00030	0.37500	0.00	0.37470	0.33	Micrometer
A8X7AX	X	0.00004	0.00022	0.37443	-2.49	0.37417	-1.87	Other
CFJ4X9		0.00004	0.00042	0.37497	-0.07	0.37461	0.03	Micrometer
D9Y9TX		0.00004	0.00016	0.37497	-0.19	0.37460	-0.01	Micrometer
DXHG7A	X	0.00004	0.00003	0.37470	-6.29	0.37422	-7.97	Micrometer
E8J4X7		0.00004	0.00008	0.37499	-0.09	0.37458	-0.28	Micrometer
GHRQXG	X	0.00004	0.00020	0.37486	-0.69	0.37430	-1.47	Micrometer
H2ZCWU		0.00004	0.00013	0.37506	0.40	0.37465	0.33	Micrometer
J2ZRMZ		0.00004	Not Reported	0.37500		0.37450		Other
KDARUD		0.00004	Not Reported	0.37500		0.37450		Caliper
KYKWBR		0.00004	0.00008	0.37500	0.00	0.37461	0.07	Micrometer
MBV494		0.00004	Not Reported	0.37500		0.37460		Micrometer
NTRQBM	X	0.00004	0.00020	0.37500	0.00	0.37500	1.96	Micrometer
NVVLUP		0.00004	0.00050	0.37480	-0.40	0.37430	-0.60	Micrometer
PHPTZR		0.00004	0.00030	0.37490	-0.33	0.37450	-0.33	Micrometer
PHZRWM		0.00004	Not Reported	0.37496		0.37450		Micrometer
PTMN3U		0.00004	0.00050	0.37500	0.00	0.37500	0.80	Other
PZ7RAW		0.00004	0.00015	0.37496	-0.26	0.37458	-0.13	Micrometer
Q8ZJVV		0.00004	2.00000	0.37496	0.00	0.37457	0.00	Other
TEV2KR		0.00004	0.00130	0.37500	0.00	0.37450	-0.08	Caliper
UVYVRR		0.00004	Not Reported	0.37491		0.37450		Micrometer
UYWFFN		0.00004	0.00100	0.37500	0.00	0.37450	-0.10	Caliper
V2ZQNW		0.00004	0.00030	0.37530	0.99	0.37470	0.33	Other
VAUYAM	X	0.00004	0.00004	0.37491	-1.47	0.37450	-1.76	Micrometer

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

Xref1 = 0.3750 in.

Xref2 = 0.3746 in.

WebCode	Data Flag (if assigned)	Reference Uncertainty (Uref)	Expanded Uncertainty (Ulab)	Sample I65 Lab Mean (Xlab)	Sample I65 Performance Statistic (En1)	Sample I66 Lab Mean (Xlab)	Sample I66 Performance Statistic (En2)	Instrument
VHHU7H		0.00004	0.00260	0.37480	-0.08	0.37450	-0.04	Caliper
VMYUTP		0.00004	0.00040	0.37505	0.12	0.37453	-0.17	Micrometer
VR9FCF		0.00004	0.00201	0.37500	0.00	0.37460	0.00	Micrometer
VYU9QZ		0.00004	0.00009	0.37494	-0.63	0.37456	-0.42	Micrometer
W8GL6Q		0.00004	0.00150	0.37500	0.00	0.37450	-0.07	Caliper
XPFYDR		0.00004	0.00015	0.37495	-0.32	0.37455	-0.32	Micrometer
XXA7XH		0.00004	0.00200	0.37500	0.00	0.37460	0.00	Micrometer
Y7WNMB		0.00004	0.00020	0.37480	-0.98	0.37450	-0.49	Micrometer
ZWP8RY	X	0.00004	0.00030	0.37460	-1.32	0.37450	-0.33	Caliper

Summary Statistics

	Sample I65		Sample I66	
Grand Means	0.3750	inch	0.3746	inch
Stnd Dev Btwn Labs	0.0001	inch	0.0002	inch

Samples I65, I66 : 52100 Steel, 52100 Steel

Statistics based on 38 of 42 reporting participants

Comments on Assigned Data Flags for Test #1001

3QWQA6 (X) - En value for sample I66 was low.

6PTZZR (X) - En value for sample I66 was low.

A8X7AX (X) - En value for both samples was low.

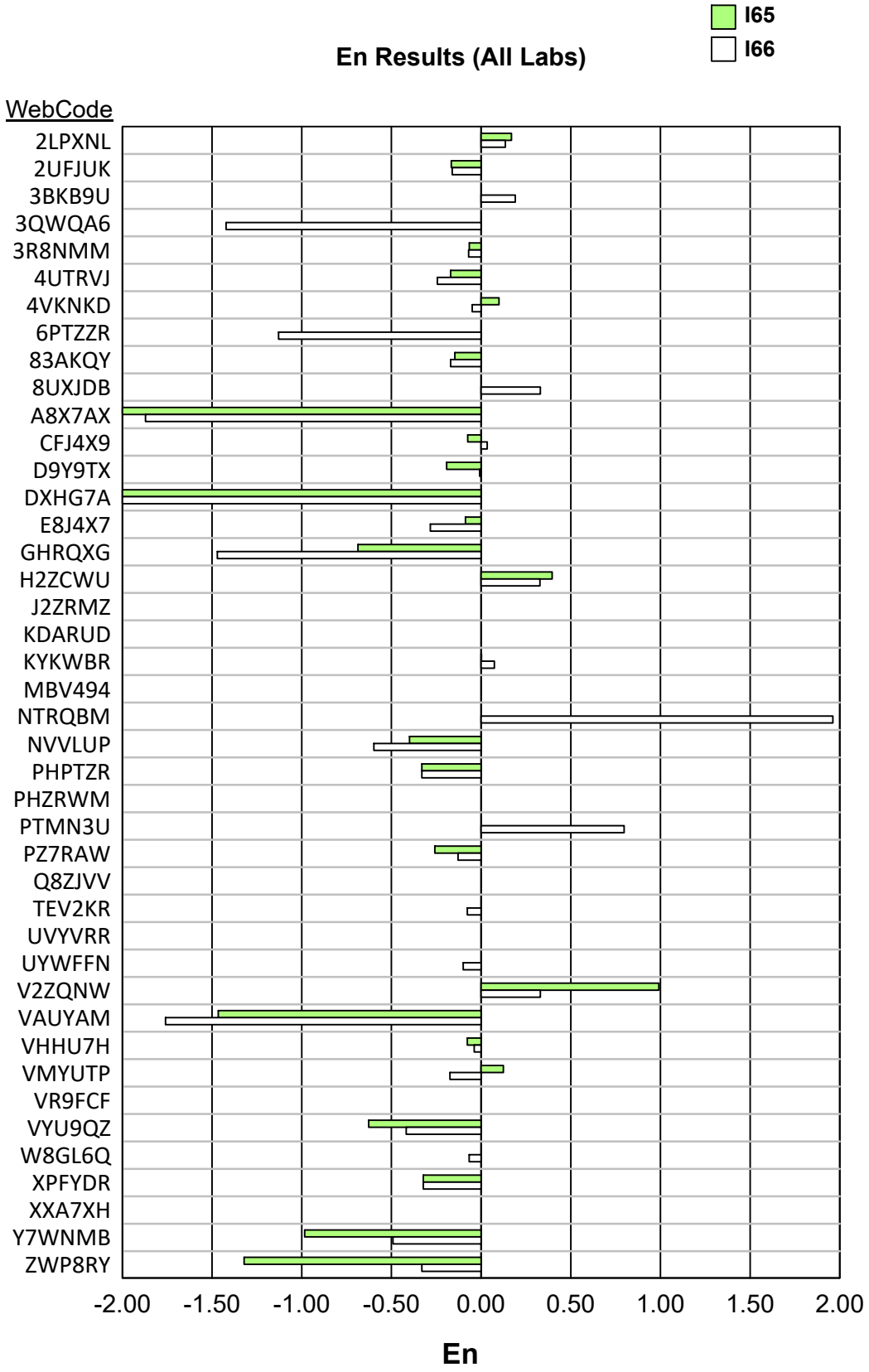
DXHG7A (X) - En value for both samples was low.

GHRQXG (X) - En value for sample I66 was low.

NTRQBM (X) - En value for sample I66 was high.

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

ZWP8RY (X) - En value for sample I65 was low.



		Sample R65			Sample R66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22F3RA		44.78	-1.40	-1.54	48.63	-1.60	-2.54
2KTMND		46.40	0.22	0.24	50.00	-0.23	-0.37
2MGUCF		46.30	0.12	0.13	50.10	-0.13	-0.21
3G8648		47.83	1.65	1.81	51.00	0.77	1.22
49LNN3		45.60	-0.58	-0.64	49.56	-0.67	-1.06
4NZWP7		45.90	-0.28	-0.31	50.80	0.57	0.90
4RQUMC		45.70	-0.48	-0.53	50.40	0.17	0.27
6H88NT		46.60	0.42	0.46	51.00	0.77	1.22
7DF6E2	X	46.20	0.02	0.02	52.10	1.87	2.96
7VZUUN		46.40	0.22	0.24	50.30	0.07	0.11
8DT98J		45.60	-0.58	-0.64	49.60	-0.63	-1.00
9ARCF4		46.20	0.02	0.02	50.10	-0.13	-0.21
CVEB83		46.30	0.12	0.13	50.30	0.07	0.11
D9XD3Z	*	46.42	0.24	0.26	51.60	1.37	2.17
DJFWMW		45.10	-1.08	-1.19	50.30	0.07	0.11
ECEZG6		47.20	1.02	1.12	50.60	0.37	0.58
EUBLZB		46.10	-0.08	-0.09	50.00	-0.23	-0.37
EUV4YQ		45.83	-0.35	-0.38	50.33	0.10	0.15
FMAT32		45.80	-0.38	-0.42	49.90	-0.33	-0.53
G88NAU	*	45.20	-0.98	-1.08	51.20	0.97	1.53
GQ46HX		46.70	0.52	0.57	50.50	0.27	0.42
HH8B2R		46.26	0.08	0.09	50.21	-0.02	-0.03
HHT3WX		46.80	0.62	0.68	50.60	0.37	0.58
HWNA7R		44.90	-1.28	-1.41	49.60	-0.63	-1.00
HZMK2R		47.68	1.50	1.65	50.92	0.69	1.09
JRR2ZN		47.20	1.02	1.12	50.40	0.17	0.27
KB2GVN		46.89	0.71	0.78	50.80	0.57	0.90
KV8WEZ		46.60	0.42	0.46	50.20	-0.03	-0.05
KXQ78Y		45.50	-0.68	-0.75	49.60	-0.63	-1.00
L2QEAN		45.60	-0.58	-0.64	49.00	-1.23	-1.95
L6ARUB		46.27	0.09	0.10	50.28	0.05	0.08
LNHQ2Q		45.85	-0.33	-0.37	49.94	-0.30	-0.47
NAEBPL		47.30	1.12	1.23	50.47	0.23	0.37
NTRQBM	*	43.90	-2.28	-2.51	48.40	-1.83	-2.90
NZPMUJ		46.70	0.52	0.57	50.20	-0.03	-0.05
PN84AM		46.50	0.32	0.35	50.70	0.47	0.74
PRA4AJ		46.09	-0.09	-0.10	50.07	-0.16	-0.26
Q2UUAG		47.00	0.82	0.90	50.00	-0.23	-0.37
QXTRHU		45.60	-0.58	-0.64	50.40	0.17	0.27
RM82XF		47.50	1.32	1.45	50.40	0.17	0.27
RZENQK		45.30	-0.88	-0.97	49.60	-0.63	-1.00
U4R8MK		47.60	1.42	1.56	51.30	1.07	1.69
XLE3LC		46.24	0.06	0.07	50.23	0.00	0.00
XY4YMA		46.57	0.39	0.43	50.65	0.42	0.66
Y8DQQD	*	43.60	-2.58	-2.84	49.40	-0.83	-1.32
YCJJK9		45.60	-0.58	-0.64	50.70	0.47	0.74
YWTA7J		45.98	-0.20	-0.22	49.89	-0.34	-0.54

		Sample R65			Sample R66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
Z2GHKA		47.54	1.36	1.49	50.72	0.49	0.77

Summary Statistics

	Sample R65		Sample R66	
Grand Means	46.18	ksi	50.23	ksi
Stnd Dev Btwn Labs	0.91	ksi	0.63	ksi

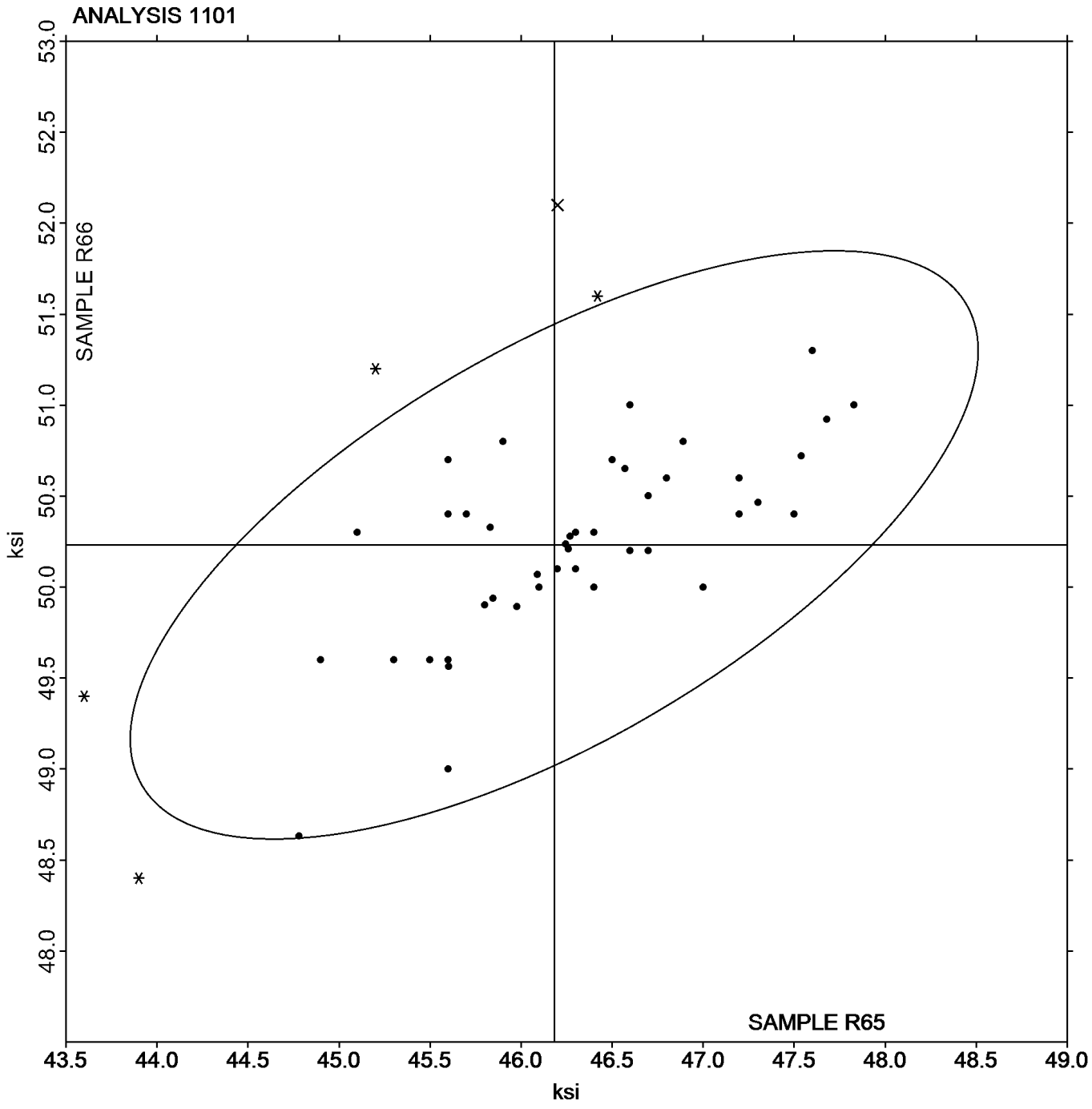
Samples R65, R66 : 16G 6061-T6 (A), 14G 6061-T6 (B)

Statistics based on 47 of 48 reporting participants

Comments on Assigned Data Flags for Test #1101

7DF6E2 (X) - Data for sample R66 are high.

SAMPLE R65	SAMPLE R66
46.18 ksi	50.23 ksi



		Sample R65			Sample R66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22F3RA		39.38	-1.46	-1.56	40.26	-1.09	-1.90
2KTMND		41.40	0.56	0.60	41.60	0.25	0.43
2MGUCF		41.10	0.26	0.28	41.40	0.05	0.09
3G8648		42.40	1.56	1.67	41.92	0.57	0.99
49LNN3	X	38.18	-2.66	-2.84	38.19	-3.16	-5.51
4NZWP7		40.80	-0.04	-0.04	42.10	0.75	1.31
4RQUMC		40.40	-0.44	-0.46	41.70	0.35	0.61
6H88NT		41.30	0.46	0.50	42.10	0.75	1.31
7DF6E2	X	40.70	-0.14	-0.14	42.90	1.55	2.70
7VZUUN		40.90	0.06	0.07	41.30	-0.05	-0.09
8DT98J		40.50	-0.34	-0.36	40.70	-0.65	-1.14
9ARCF4		40.30	-0.54	-0.57	40.80	-0.55	-0.96
CVEB83		41.10	0.26	0.28	41.50	0.15	0.26
D9XD3Z		41.24	0.40	0.43	42.06	0.71	1.24
DJFWMW		40.00	-0.84	-0.89	41.00	-0.35	-0.61
ECEZG6	X	43.90	3.06	3.27	41.50	0.15	0.26
EUBLZB		40.80	-0.04	-0.04	41.40	0.05	0.09
EUV4YQ		40.76	-0.08	-0.08	41.34	-0.02	-0.03
FMAT32		40.50	-0.34	-0.36	41.00	-0.35	-0.61
G88NAU		39.80	-1.04	-1.10	41.70	0.35	0.61
GQ46HX		41.30	0.46	0.50	41.60	0.25	0.43
HH8B2R		40.91	0.07	0.08	41.46	0.11	0.19
HHT3WX		41.60	0.76	0.82	41.80	0.45	0.78
HWNA7R		40.00	-0.84	-0.89	41.30	-0.05	-0.09
HZMK2R		42.34	1.50	1.60	42.10	0.75	1.31
JRR2ZN		42.00	1.16	1.24	41.50	0.15	0.26
KB2GVN		41.41	0.57	0.61	41.67	0.32	0.56
KV8WEZ		41.50	0.66	0.71	41.70	0.35	0.61
KXQ78Y		39.20	-1.64	-1.74	40.90	-0.45	-0.79
L2QEAN		40.40	-0.44	-0.46	40.30	-1.05	-1.83
L6ARUB		41.00	0.16	0.18	41.30	-0.05	-0.09
LNHQ2Q		40.55	-0.28	-0.30	40.96	-0.39	-0.68
NAEBPL		41.26	0.43	0.46	41.44	0.09	0.15
NTRQBM	*	38.70	-2.14	-2.28	39.90	-1.45	-2.53
NZPMUJ		41.50	0.66	0.71	41.50	0.15	0.26
PN84AM		41.20	0.36	0.39	40.90	-0.45	-0.79
PRA4AJ		40.83	-0.01	-0.01	41.10	-0.25	-0.44
Q2UUAG		41.60	0.76	0.82	41.10	-0.25	-0.44
QXTRHU		40.60	-0.24	-0.25	41.90	0.55	0.96
RM82XF		42.10	1.26	1.35	41.40	0.05	0.09
RZENQK		38.90	-1.94	-2.06	40.60	-0.75	-1.31
U4R8MK		42.20	1.36	1.46	42.60	1.25	2.18
XLE3LC		40.95	0.12	0.12	41.31	-0.04	-0.08
XY4YMA		41.41	0.57	0.61	41.76	0.41	0.71
Y8DQQD	*	38.30	-2.54	-2.70	40.10	-1.25	-2.18
YCJJK9		40.40	-0.44	-0.46	41.90	0.55	0.96
YWTA7J		40.61	-0.22	-0.24	40.90	-0.45	-0.79

Fasteners and Metals Interlaboratory Testing Program

Analysis 1102

Yield Strength: Lab-Machined Flat Aluminum
ASTM B557

WebCode	Data Flag	Sample R65 Lab Mean	Sample R65 Diff. from Grand Mean	Sample R65 CPV	Sample R66 Lab Mean	Sample R66 Diff. from Grand Mean	Sample R66 CPV
Z2GHKA		42.15	1.31	1.40	41.93	0.58	1.01

Summary Statistics

	Sample R65		Sample R66	
Grand Means	40.84	ksi	41.35	ksi
Stnd Dev Btwn Labs	0.94	ksi	0.57	ksi

Samples R65, R66 : 16G 6061-T6 (A), 14G 6061-T6 (B)

Statistics based on 45 of 48 reporting participants

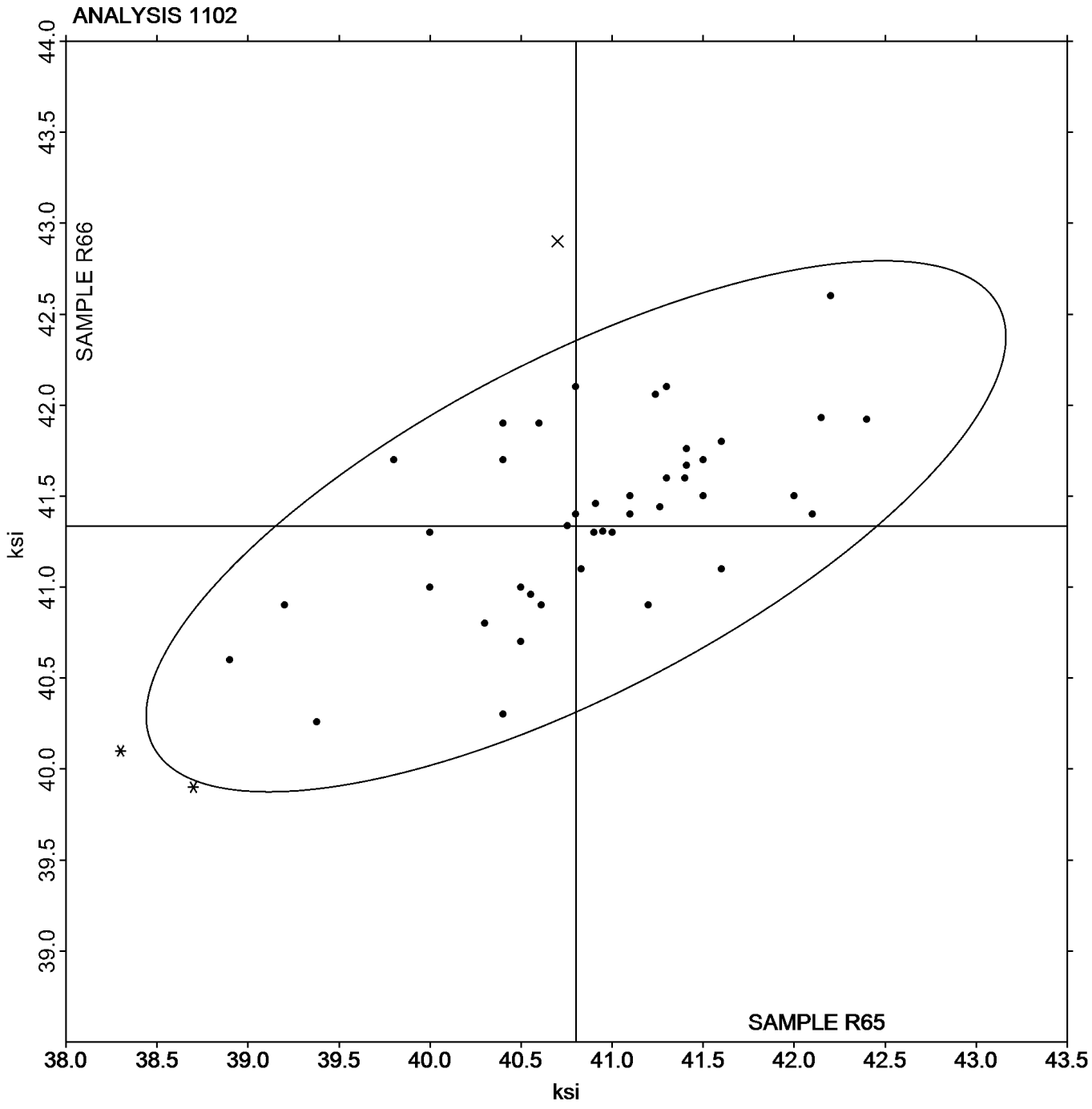
Comments on Assigned Data Flags for Test #1102

49LNN3 (X) - Data for both samples are low.

7DF6E2 (X) - Data for sample R66 are high.

ECEZG6 (X) - Data for sample R65 are high.

SAMPLE R65	SAMPLE R66
40.84 ksi	41.35 ksi



		Sample R65			Sample R66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22F3RA		11.00	0.19	0.28	14.00	-0.90	-1.13
2KTMND		10.00	-0.81	-1.17	14.50	-0.40	-0.50
2MGUCF		10.00	-0.81	-1.17	14.30	-0.60	-0.75
3G8648		10.70	-0.11	-0.16	14.70	-0.20	-0.25
49LNN3		12.00	1.19	1.72	16.00	1.10	1.40
4NZWP7		10.00	-0.81	-1.17	14.00	-0.90	-1.13
4RQUMC		11.20	0.39	0.56	14.70	-0.20	-0.25
6H88NT		10.00	-0.81	-1.17	15.00	0.10	0.13
7DF6E2		11.17	0.36	0.52	15.15	0.25	0.32
7VZUUN		10.90	0.09	0.13	15.00	0.10	0.13
8DT98J		11.70	0.89	1.29	15.40	0.50	0.64
9ARCF4	X	11.60	0.79	1.14	11.10	-3.80	-4.79
CVEB83		11.60	0.79	1.14	15.50	0.60	0.76
D9XD3Z		10.54	-0.27	-0.39	14.78	-0.12	-0.15
DJFWMW		10.50	-0.31	-0.45	14.50	-0.40	-0.50
ECEZG6		11.50	0.69	1.00	15.00	0.10	0.13
EUBLZB		10.80	-0.01	-0.01	15.70	0.80	1.02
EUV4YQ		10.00	-0.81	-1.17	15.00	0.10	0.13
FMAT32		12.10	1.29	1.87	15.30	0.40	0.51
G88NAU		10.10	-0.71	-1.03	14.40	-0.50	-0.63
GQ46HX		10.50	-0.31	-0.45	14.50	-0.40	-0.50
HH8B2R		11.00	0.19	0.28	16.00	1.10	1.40
HHT3WX		10.50	-0.31	-0.45	15.00	0.10	0.13
HWNA7R		10.00	-0.81	-1.17	13.00	-1.90	-2.39
HZMK2R		10.30	-0.51	-0.74	14.90	0.00	0.01
JRR2ZN		10.50	-0.31	-0.45	14.00	-0.90	-1.13
KB2GVN		11.30	0.49	0.71	15.70	0.80	1.02
KV8WEZ		11.00	0.19	0.28	15.00	0.10	0.13
KXQ78Y	*	12.20	1.39	2.01	17.00	2.10	2.66
L2QEAN		11.00	0.19	0.28	15.00	0.10	0.13
L6ARUB		11.00	0.19	0.28	15.00	0.10	0.13
LNHQ2Q		12.00	1.19	1.72	16.00	1.10	1.40
NAEBPL		11.48	0.67	0.97	16.61	1.71	2.16
NTRQBM		10.00	-0.81	-1.17	13.50	-1.40	-1.76
NZPMUJ	X	13.00	2.19	3.17	15.50	0.60	0.76
PN84AM	X	10.00	-0.81	-1.17	9.800	-5.10	-6.44
PRA4AJ		10.70	-0.11	-0.16	14.30	-0.60	-0.75
Q2UUAG		10.00	-0.81	-1.17	14.50	-0.40	-0.50
QXTRHU		11.00	0.19	0.28	15.00	0.10	0.13
RM82XF		10.50	-0.31	-0.45	14.50	-0.40	-0.50
RZENQK		10.70	-0.11	-0.16	14.20	-0.70	-0.88
U4R8MK		11.00	0.19	0.28	16.00	1.10	1.40
XLE3LC		11.45	0.64	0.92	14.75	-0.15	-0.18
XY4YMA		10.70	-0.11	-0.16	14.30	-0.60	-0.75
Y8DQQD		9.300	-1.51	-2.18	14.20	-0.70	-0.88
YCJJK9		10.50	-0.31	-0.45	14.50	-0.40	-0.50
YWTA7J		12.00	1.19	1.72	15.90	1.00	1.27

		Sample R65			Sample R66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
Z2GHKA		10.00	-0.81	-1.17	14.00	-0.90	-1.13

Summary Statistics

	Sample R65		Sample R66	
Grand Means	10.81	Percent	14.90	Percent
Stnd Dev Btwn Labs	0.69	Percent	0.79	Percent

Samples R65, R66 : 16G 6061-T6 (A), 14G 6061-T6 (B)

Statistics based on 45 of 48 reporting participants

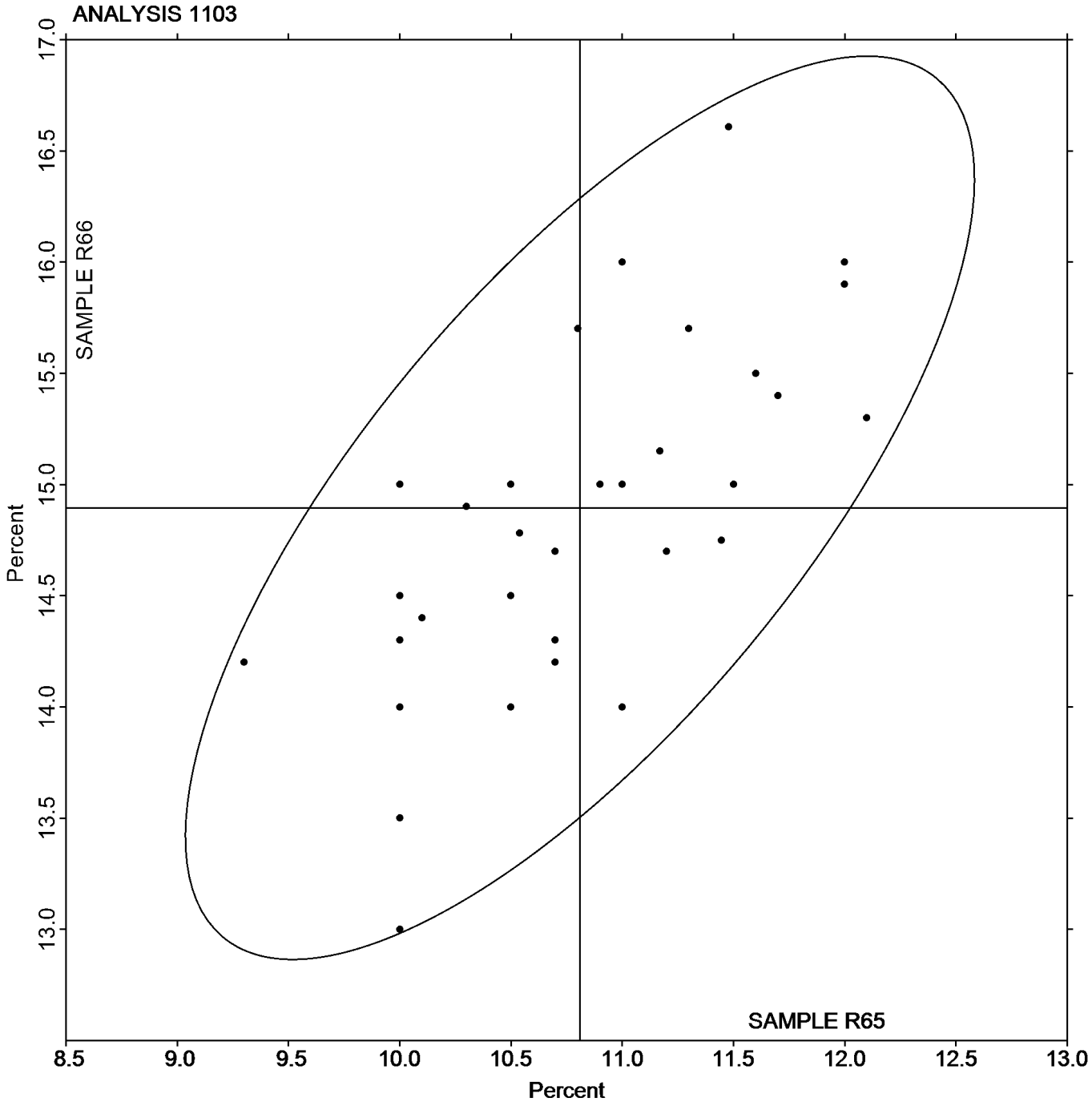
Comments on Assigned Data Flags for Test #1103

9ARCF4 (X) - Data for sample R66 are low.

NZPMUJ (X) - Data for sample R65 are high.

PN84AM (X) - Data for sample R66 are low.

SAMPLE R65	SAMPLE R66
10.81 Percent	14.90 Percent



		Sample A65			Sample A66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2CWMDQ		71.30	0.68	0.85	70.20	0.00	0.00
3JBXVK		69.50	-1.12	-1.42	69.10	-1.10	-1.37
3ZVNVJ		69.80	-0.82	-1.04	69.30	-0.90	-1.12
4UUMEP		70.78	0.16	0.20	70.05	-0.15	-0.18
6F8YJH		70.30	-0.32	-0.41	70.30	0.10	0.12
7DF6E2		71.50	0.88	1.11	70.90	0.70	0.87
7GWRR7		70.54	-0.08	-0.10	69.90	-0.30	-0.37
7NVYRF		70.10	-0.52	-0.66	69.80	-0.40	-0.50
89JVPK		71.30	0.68	0.85	70.30	0.10	0.12
8MZQ6G		69.62	-1.00	-1.27	69.62	-0.58	-0.73
9FCQZN		70.30	-0.32	-0.41	69.80	-0.40	-0.50
9R9JPE		70.90	0.28	0.35	70.00	-0.20	-0.25
9XWGYN	*	70.05	-0.57	-0.72	71.07	0.87	1.08
B4UPGZ		71.80	1.18	1.48	70.70	0.50	0.62
BHANNL		71.07	0.45	0.56	70.63	0.43	0.54
BR4W9D		70.60	-0.02	-0.03	70.70	0.50	0.62
CDEFGX		72.20	1.58	1.99	71.39	1.19	1.47
EKNJHG		71.30	0.68	0.85	70.90	0.70	0.87
EZF849		69.50	-1.12	-1.42	68.80	-1.40	-1.74
F99YP8		69.40	-1.22	-1.54	69.20	-1.00	-1.24
GLTRZY		70.92	0.30	0.38	70.68	0.47	0.59
GQ46HX		70.60	-0.02	-0.03	70.30	0.10	0.12
H43EF4		69.30	-1.32	-1.67	69.30	-0.90	-1.12
H9L6AE		70.51	-0.11	-0.14	71.26	1.06	1.31
HHT3WX		70.30	-0.32	-0.41	70.40	0.20	0.24
HVDHYW		70.63	0.01	0.01	70.20	0.00	0.00
JCC4T3		70.10	-0.52	-0.66	69.60	-0.60	-0.75
MBV494		71.49	0.87	1.09	70.24	0.04	0.05
MU7TL2		70.94	0.32	0.40	71.03	0.83	1.03
N9HQ48		70.70	0.08	0.10	70.10	-0.10	-0.13
P9CWX8		71.07	0.45	0.56	70.63	0.43	0.54
Q8KZBX		70.22	-0.40	-0.51	70.06	-0.15	-0.18
R6AHNM		70.10	-0.52	-0.66	69.30	-0.90	-1.12
RJ64MM		71.30	0.68	0.85	70.30	0.10	0.12
RLCGD2		72.26	1.64	2.06	71.32	1.11	1.38
UZ7P4E		72.20	1.58	1.99	71.90	1.70	2.11
WEJH6Q		69.60	-1.02	-1.29	68.70	-1.50	-1.87
X24AGP		69.40	-1.22	-1.54	69.00	-1.20	-1.49
XCRYMP		71.00	0.38	0.48	70.00	-0.20	-0.25
XEYEUV		70.11	-0.51	-0.64	69.91	-0.29	-0.36
XY4W4X	*	71.50	0.88	1.11	72.28	2.08	2.58
YVZHUD		70.75	0.13	0.16	70.35	0.15	0.18
ZRRUML		69.90	-0.72	-0.91	69.20	-1.00	-1.24

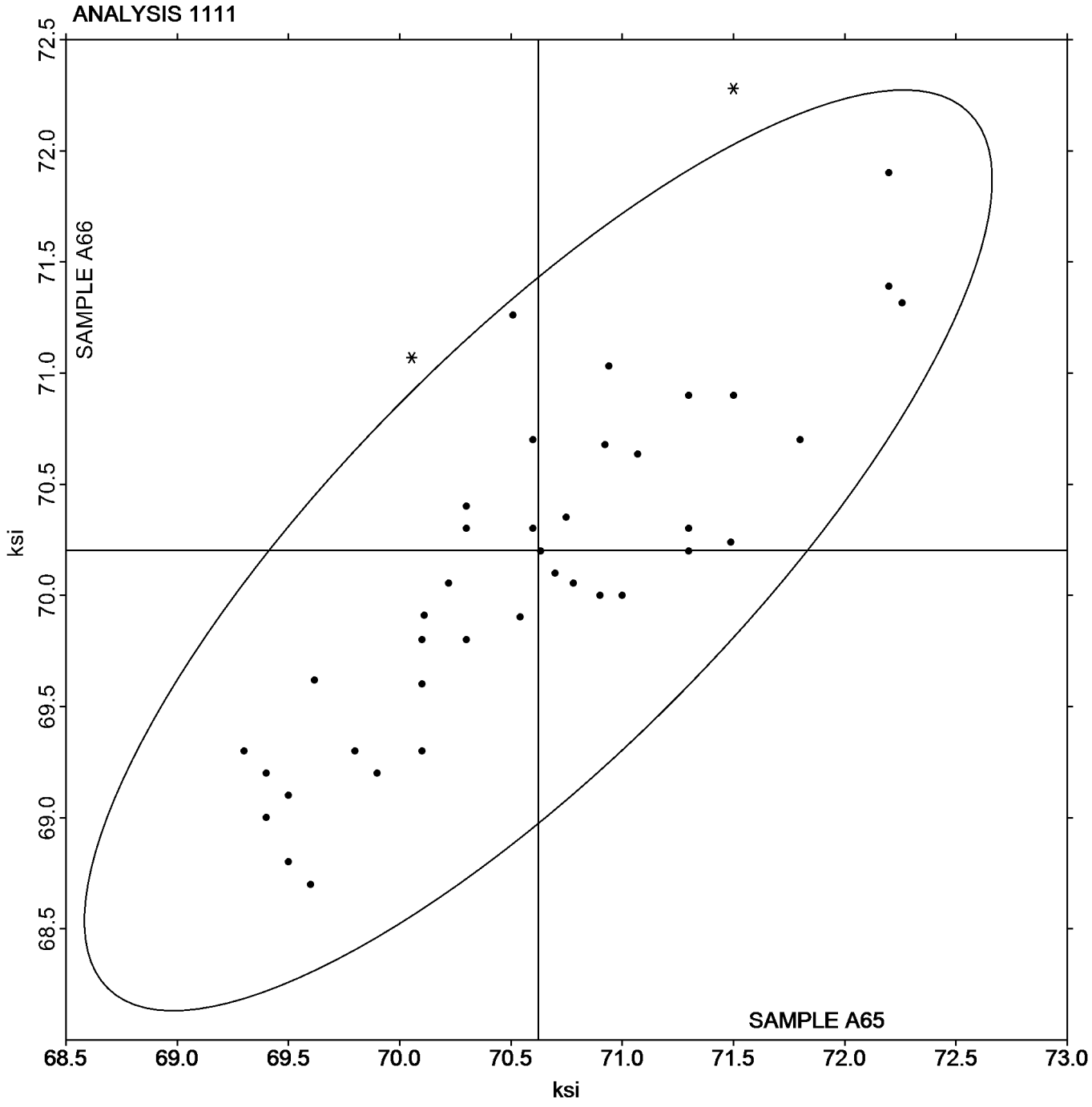
Summary Statistics

	Sample A65		Sample A66	
Grand Means	70.62	ksi	70.20	ksi
Stnd Dev Btwn Labs	0.79	ksi	0.81	ksi

Samples A65, A66 : AISI 1018 (L), AISI 1018 (S)

Statistics based on 43 of 43 reporting participants

SAMPLE A65	SAMPLE A66
70.62 ksi	70.20 ksi



		Sample A65			Sample A66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2CWMDQ		50.50	1.80	0.55	47.70	0.00	0.00
3JBXVK		53.00	4.30	1.32	47.60	-0.10	-0.03
3ZVNVJ		52.00	3.30	1.01	45.20	-2.50	-0.81
4UUMEP		45.92	-2.78	-0.85	44.25	-3.46	-1.12
6F8YJH		51.10	2.40	0.74	52.50	4.80	1.55
7DF6E2		45.70	-3.00	-0.92	44.60	-3.10	-1.00
7GWRR7		46.38	-2.32	-0.71	46.79	-0.91	-0.30
7NVYRF		54.60	5.90	1.81	53.30	5.60	1.81
89JVPK		49.90	1.20	0.37	48.20	0.50	0.16
8MZQ6G		46.12	-2.58	-0.79	46.56	-1.14	-0.37
9FCQZN		52.30	3.60	1.11	47.20	-0.50	-0.16
9R9JPE		53.10	4.40	1.35	55.20	7.50	2.43
9XWGYN		48.88	0.18	0.05	43.95	-3.76	-1.22
B4UPGZ		52.80	4.10	1.26	52.80	5.10	1.65
BHANNL		46.99	-1.71	-0.53	46.41	-1.29	-0.42
BR4W9D	M	No Data Reported			42.50	-5.20	-1.68
CDEFGX		45.17	-3.53	-1.09	45.13	-2.57	-0.83
EKNJHG		44.80	-3.90	-1.20	44.60	-3.10	-1.00
EZF849		45.50	-3.20	-0.98	45.50	-2.20	-0.71
F99YP8		46.80	-1.90	-0.58	49.90	2.20	0.71
GLTRZY		52.36	3.66	1.12	50.95	3.25	1.05
GQ46HX		53.80	5.10	1.57	49.70	2.00	0.65
H43EF4		45.60	-3.10	-0.95	45.40	-2.30	-0.74
H9L6AE		46.26	-2.44	-0.75	44.08	-3.62	-1.17
HHT3WX		52.40	3.70	1.14	51.20	3.50	1.13
HVDHYW		45.83	-2.87	-0.88	44.09	-3.61	-1.17
JCC4T3		47.90	-0.80	-0.25	49.50	1.80	0.58
MBV494		45.58	-3.12	-0.96	45.39	-2.31	-0.75
MU7TL2		44.73	-3.97	-1.22	45.83	-1.87	-0.61
N9HQ48		46.73	-1.97	-0.61	51.48	3.78	1.22
P9CWX8		50.47	1.77	0.54	45.83	-1.87	-0.60
Q8KZBX		54.00	5.30	1.63	51.40	3.70	1.20
R6AHNM		50.70	2.00	0.61	48.00	0.30	0.10
RJ64MM		44.00	-4.70	-1.44	43.60	-4.10	-1.33
RLCGD2		53.53	4.83	1.48	53.35	5.64	1.83
UZ7P4E		45.50	-3.20	-0.98	45.30	-2.40	-0.78
WEJH6Q		48.60	-0.10	-0.03	48.80	1.10	0.36
X24AGP		48.80	0.10	0.03	48.10	0.40	0.13
XCRYMP		44.00	-4.70	-1.44	45.00	-2.70	-0.87
XEYEUV		48.33	-0.38	-0.12	49.17	1.47	0.47
XY4W4X		48.48	-0.22	-0.07	46.49	-1.21	-0.39
YVZHUD		45.28	-3.43	-1.05	44.23	-3.47	-1.12
ZRRUML		51.05	2.35	0.72	49.22	1.52	0.49

Summary Statistics

	Sample A65		Sample A66	
Grand Means	48.70	ksi	47.70	ksi
Stnd Dev Btwn Labs	3.25	ksi	3.09	ksi

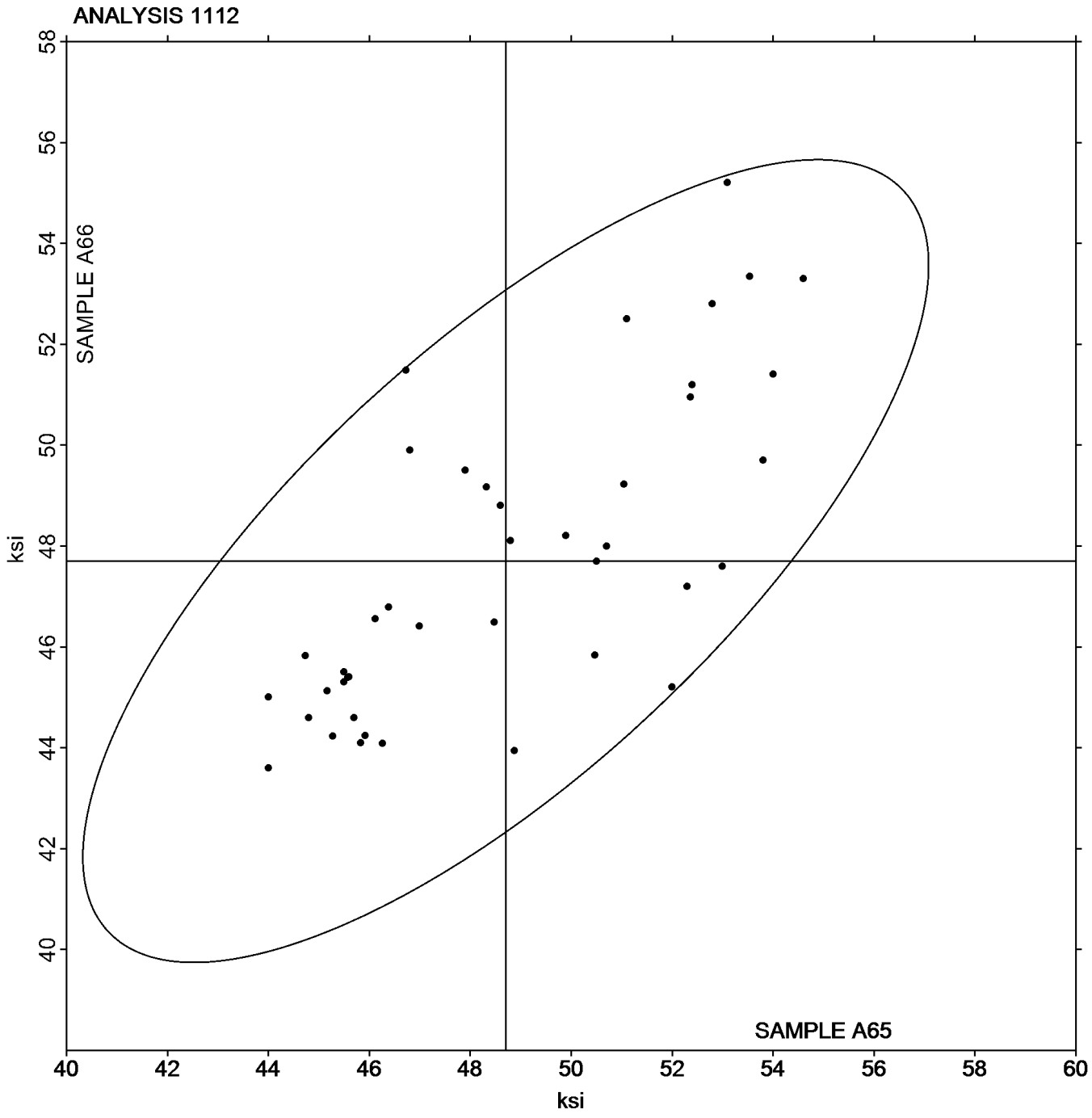
Samples A65, A66 : AISI 1018 (L), AISI 1018 (S)

Statistics based on 42 of 43 reporting participants

Comments on Assigned Data Flags for Test #1112

BR4W9D (M) - Participant did not submit data for sample A65.

SAMPLE A65	SAMPLE A66
48.70 ksi	47.70 ksi



		Sample A65			Sample A66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2CWMDQ		35.70	0.72	0.56	36.00	0.80	0.58
3JBXVK		35.30	0.32	0.25	36.00	0.80	0.58
3ZVNVJ		35.50	0.52	0.40	36.10	0.90	0.65
4UUMEP		33.00	-1.98	-1.54	34.00	-1.20	-0.86
6F8YJH		37.70	2.72	2.11	36.60	1.40	1.01
7DF6E2		33.75	-1.23	-0.96	34.91	-0.29	-0.20
7GWRR7		32.22	-2.76	-2.14	33.24	-1.96	-1.40
7NVYRF		37.80	2.82	2.19	37.00	1.80	1.29
89JVPK		35.70	0.72	0.56	37.30	2.10	1.51
8MZQ6G		35.00	0.02	0.02	33.90	-1.30	-0.93
9FCQZN		35.90	0.92	0.72	36.90	1.70	1.22
9R9JPE		37.80	2.82	2.19	36.60	1.40	1.01
9XWGYN		36.20	1.22	0.95	34.80	-0.40	-0.28
B4UPGZ		33.80	-1.18	-0.92	36.60	1.40	1.01
BHANNL		34.00	-0.98	-0.76	34.00	-1.20	-0.86
BR4W9D		35.80	0.82	0.64	36.20	1.00	0.72
CDEFGX		33.40	-1.58	-1.23	34.30	-0.90	-0.64
EKNJHG		34.60	-0.38	-0.29	34.00	-1.20	-0.86
EZF849		35.30	0.32	0.25	35.40	0.20	0.15
F99YP8		35.60	0.62	0.48	36.00	0.80	0.58
GLTRZY		33.60	-1.38	-1.07	33.50	-1.70	-1.21
GQ46HX		33.50	-1.48	-1.15	33.00	-2.20	-1.57
H43EF4		35.80	0.82	0.64	36.10	0.90	0.65
H9L6AE		35.00	0.02	0.02	35.00	-0.20	-0.14
HHT3WX		34.00	-0.98	-0.76	33.50	-1.70	-1.21
HVDHYW		36.20	1.22	0.95	36.70	1.50	1.08
JCC4T3		35.60	0.62	0.48	35.80	0.60	0.43
MBV494		36.20	1.22	0.95	36.00	0.80	0.58
MU7TL2		33.48	-1.50	-1.16	34.33	-0.87	-0.62
N9HQ48		35.30	0.32	0.25	35.57	0.37	0.27
P9CWX8		34.80	-0.18	-0.14	34.20	-1.00	-0.71
Q8KZBX		34.50	-0.48	-0.37	35.40	0.20	0.15
R6AHNM		34.30	-0.68	-0.53	35.40	0.20	0.15
RJ64MM		33.90	-1.08	-0.84	36.40	1.20	0.86
RLCGD2		34.15	-0.83	-0.64	32.18	-3.02	-2.16
UZ7P4E		34.60	-0.38	-0.29	36.20	1.00	0.72
WEJH6Q		35.00	0.02	0.02	35.90	0.70	0.50
X24AGP		35.20	0.22	0.17	36.50	1.30	0.93
XCRYMP	*	33.50	-1.48	-1.15	31.50	-3.70	-2.65
XEYEUV		36.40	1.42	1.10	36.40	1.20	0.86
XY4W4X		34.00	-0.98	-0.76	33.00	-2.20	-1.57
YVZHUD		34.20	-0.78	-0.61	35.20	0.00	0.00
ZRRUML		36.80	1.82	1.42	35.80	0.60	0.43

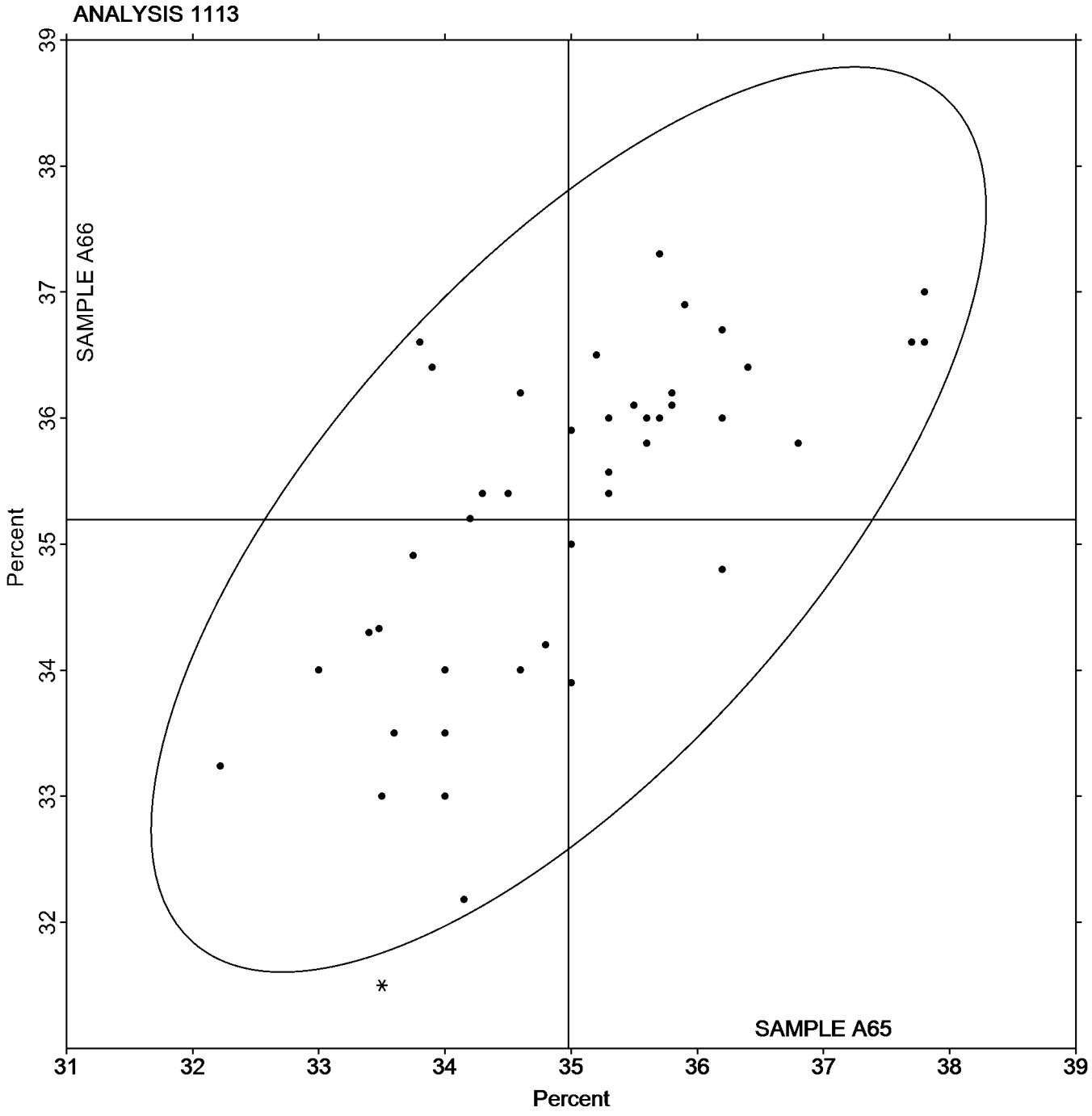
Summary Statistics

	Sample A65		Sample A66	
Grand Means	34.98	Percent	35.20	Percent
Stnd Dev Btwn Labs	1.29	Percent	1.40	Percent

Samples A65, A66 : AISI 1018 (L), AISI 1018 (S)

Statistics based on 43 of 43 reporting participants

SAMPLE A65	SAMPLE A66
34.98 Percent	35.20 Percent



		Sample A65			Sample A66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2CWMDQ		67.10	0.10	0.14	65.90	-0.58	-0.68
3JBXVK		67.00	0.00	0.00	68.20	1.72	2.00
3ZVNVJ		66.00	-1.00	-1.36	65.50	-0.98	-1.15
4UUMEP		67.00	0.00	0.00	66.00	-0.48	-0.57
6F8YJH		68.20	1.20	1.63	66.50	0.02	0.02
7GWRR7		66.61	-0.39	-0.53	66.31	-0.18	-0.21
7NVYRF		66.60	-0.40	-0.54	66.30	-0.18	-0.22
89JVPK		67.10	0.10	0.14	65.80	-0.68	-0.80
8MZQ6G		68.00	1.00	1.36	67.00	0.52	0.60
9FCQZN		66.80	-0.20	-0.27	66.50	0.02	0.02
9R9JPE		65.50	-1.50	-2.03	65.00	-1.48	-1.73
9XWGYN		66.30	-0.70	-0.95	66.40	-0.08	-0.10
B4UPGZ		66.80	-0.20	-0.27	66.20	-0.28	-0.33
BHANNL		66.40	-0.60	-0.81	67.20	0.72	0.84
BR4W9D	*	64.70	-2.30	-3.12	65.20	-1.28	-1.50
CDEFGX		67.20	0.20	0.27	67.40	0.92	1.07
EKNJHG		66.80	-0.20	-0.27	65.60	-0.88	-1.03
EZF849		66.40	-0.60	-0.81	66.90	0.42	0.48
F99YP8		66.90	-0.10	-0.13	66.70	0.22	0.25
GLTRZY		67.40	0.40	0.54	66.40	-0.08	-0.10
GQ46HX		67.50	0.50	0.68	67.40	0.92	1.07
H43EF4		67.10	0.10	0.14	66.20	-0.28	-0.33
H9L6AE		68.00	1.00	1.36	67.00	0.52	0.60
HHT3WX		67.40	0.40	0.54	67.20	0.72	0.84
HVDHYW		66.00	-1.00	-1.36	66.00	-0.48	-0.57
JCC4T3		66.40	-0.60	-0.81	65.10	-1.38	-1.62
MBV494		66.63	-0.37	-0.50	66.43	-0.05	-0.06
MU7TL2		67.23	0.23	0.31	66.75	0.27	0.31
N9HQ48		66.60	-0.40	-0.54	66.40	-0.08	-0.10
P9CWX8		67.20	0.20	0.27	66.20	-0.28	-0.33
Q8KZBX		67.00	0.00	0.00	65.00	-1.48	-1.73
R6AHNM	*	68.80	1.80	2.44	68.60	2.12	2.47
RJ64MM		67.30	0.30	0.41	67.90	1.42	1.65
RLCGD2		68.06	1.06	1.44	67.48	1.00	1.16
UZ7P4E		66.80	-0.20	-0.27	66.60	0.12	0.13
WEJH6Q	*	67.40	0.40	0.54	64.80	-1.68	-1.97
X24AGP		67.70	0.70	0.95	67.20	0.72	0.84
XCRYMP		66.50	-0.50	-0.68	66.10	-0.38	-0.45
XEYEUV		67.40	0.40	0.54	67.40	0.92	1.07
XY4W4X		67.00	0.00	0.00	67.00	0.52	0.60
YVZHUD		67.44	0.44	0.60	66.50	0.02	0.02
ZRRUML		67.70	0.70	0.95	66.10	-0.38	-0.45

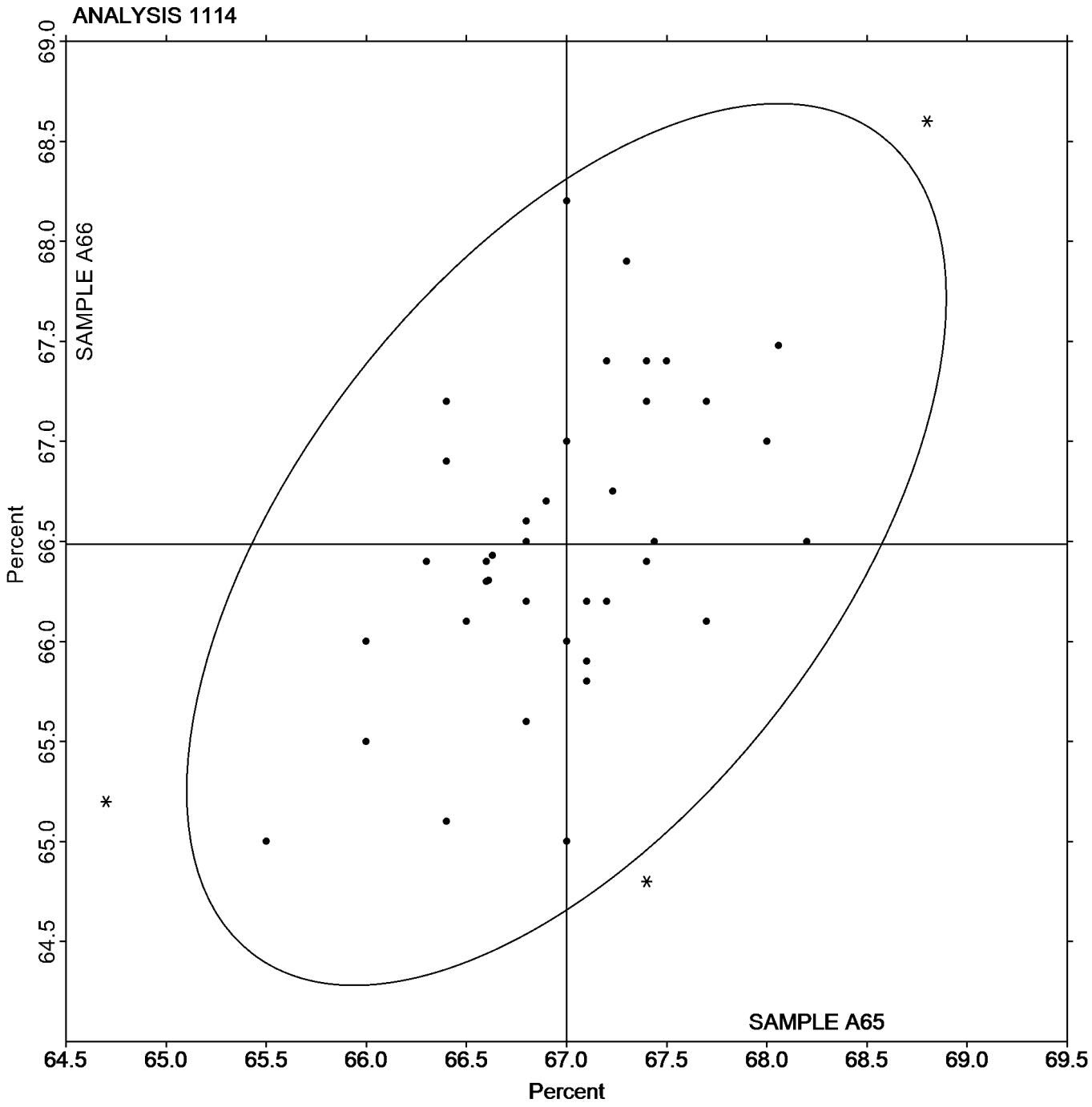
Summary Statistics

	Sample A65		Sample A66	
Grand Means	67.00	Percent	66.48	Percent
Stnd Dev Btwn Labs	0.74	Percent	0.86	Percent

Samples A65, A66 : AISI 1018 (L), AISI 1018 (S)

Statistics based on 42 of 42 reporting participants

SAMPLE A65	SAMPLE A66
67.00 Percent	66.48 Percent



		Sample P65			Sample P66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2238NP		71.00	0.48	0.62	71.20	0.08	0.10
22F3RA	*	71.77	1.25	1.61	73.33	2.21	2.79
22ZLTA		69.71	-0.81	-1.05	69.48	-1.64	-2.08
26ZV3C		69.50	-1.02	-1.32	70.50	-0.62	-0.79
2B6RPW		70.63	0.11	0.14	70.92	-0.20	-0.25
32CV3M		70.30	-0.22	-0.29	70.30	-0.82	-1.05
36CWJJ		71.37	0.85	1.10	71.85	0.72	0.92
3BKB9U		70.30	-0.22	-0.29	70.80	-0.32	-0.41
46N8C9		71.40	0.88	1.13	71.50	0.38	0.48
4UUMEP		70.37	-0.15	-0.19	70.66	-0.47	-0.60
63EDDM		71.40	0.88	1.13	71.40	0.28	0.35
6F8YJH		70.10	-0.42	-0.55	71.00	-0.12	-0.16
6X8MBG		70.00	-0.53	-0.68	70.53	-0.59	-0.75
6ZBHUK		70.00	-0.52	-0.67	70.90	-0.22	-0.28
78QKD7		71.01	0.49	0.63	71.47	0.35	0.44
7YY6QN		69.77	-0.75	-0.97	70.95	-0.17	-0.22
82HN36		70.92	0.40	0.52	71.21	0.09	0.11
8DC6R7		71.66	1.14	1.47	71.65	0.52	0.66
99D2JK	*	69.47	-1.05	-1.35	68.89	-2.23	-2.83
9ARCF4	X	65.50	-5.02	-6.49	68.10	-3.02	-3.83
9VBCP6		70.90	0.38	0.49	71.50	0.38	0.48
AY3YXJ	X	55.60	-14.92	-19.28	56.70	-14.42	-18.28
CDEFGX		70.95	0.43	0.55	72.50	1.38	1.74
CJ4WAB	*	68.89	-1.63	-2.10	70.92	-0.20	-0.25
CNV6BW		69.72	-0.80	-1.04	70.84	-0.29	-0.36
CYEL43		71.10	0.58	0.75	71.50	0.38	0.48
CZQEX6		70.70	0.18	0.23	71.50	0.38	0.48
DGU7J8		69.70	-0.82	-1.06	70.50	-0.62	-0.79
DPH43Y		70.05	-0.47	-0.61	70.92	-0.20	-0.25
E9THWY		71.60	1.08	1.39	71.82	0.70	0.88
ECEZG6		69.80	-0.72	-0.93	71.80	0.68	0.86
F2TDPF		71.47	0.95	1.23	72.55	1.43	1.81
GTCU82		70.70	0.18	0.23	71.40	0.28	0.35
H8RE6Z		70.49	-0.03	-0.04	71.36	0.23	0.30
HFLKX2		70.82	0.30	0.39	71.45	0.32	0.41
JA8B2P		70.37	-0.16	-0.20	70.68	-0.45	-0.57
JXFPVU		71.50	0.98	1.27	72.23	1.10	1.40
K6C4UZ		69.80	-0.72	-0.93	70.20	-0.92	-1.17
KFCP67		70.80	0.28	0.36	70.80	-0.32	-0.41
KKQ3AY		71.20	0.68	0.88	72.60	1.48	1.87
KMVWKP		70.10	-0.42	-0.55	69.60	-1.52	-1.93
KXQ78Y		69.90	-0.62	-0.80	70.60	-0.52	-0.67
KZKR3B		71.90	1.37	1.77	72.75	1.62	2.06
LJQMA8		69.90	-0.62	-0.80	70.90	-0.22	-0.28
LNHQ2Q		69.27	-1.25	-1.62	70.05	-1.07	-1.36
MK3JEC		70.60	0.08	0.10	71.40	0.28	0.35
MM6JFA		70.50	-0.02	-0.03	71.30	0.18	0.22

Fasteners and Metals Interlaboratory Testing Program

Analysis 1121

Tensile Strength: Lab-Machined Round Steel

ASTM E8

WebCode	Data Flag	Sample P65 Lab Mean	Sample P65 Diff. from Grand Mean	Sample P65 CPV	Sample P66 Lab Mean	Sample P66 Diff. from Grand Mean	Sample P66 CPV
MYJJ4P		70.24	-0.28	-0.36	70.49	-0.63	-0.80
NTRQBM		69.40	-1.12	-1.45	70.00	-1.12	-1.43
PTMN3U		70.10	-0.42	-0.55	70.40	-0.72	-0.92
PXWR6P		70.29	-0.23	-0.30	71.04	-0.08	-0.10
QN9BXZ		71.00	0.48	0.62	71.70	0.58	0.73
R8HPTZ		70.52	0.00	0.00	70.67	-0.45	-0.57
RPDHDY		71.20	0.68	0.88	71.20	0.08	0.10
RWUZPK		71.90	1.38	1.78	72.00	0.88	1.11
T7GECN		68.80	-1.72	-2.22	70.30	-0.82	-1.05
T8VNGH		70.18	-0.34	-0.44	70.54	-0.59	-0.75
TWAHNK		69.90	-0.62	-0.80	70.70	-0.42	-0.54
U4AGEZ		71.00	0.48	0.62	72.10	0.98	1.24
U4R8MK		71.80	1.28	1.65	71.10	-0.02	-0.03
UBRP3W		71.30	0.78	1.00	71.30	0.18	0.22
UKENT3		71.00	0.48	0.62	71.94	0.82	1.04
VH6ZVN	X	71.30	0.78	1.01	73.52	2.40	3.04
WA9HUK		69.77	-0.76	-0.98	71.10	-0.02	-0.03
WHG29A	X	73.23	2.71	3.50	73.55	2.42	3.07
WHZ6GA		71.65	1.12	1.45	72.50	1.38	1.74
WMG63H	X	64.17	-6.35	-8.21	65.80	-5.33	-6.75
XCRYMP		70.00	-0.52	-0.67	71.00	-0.12	-0.16
XG6YJG		71.00	0.48	0.62	71.50	0.38	0.48
XRKVF8		71.23	0.71	0.92	70.93	-0.20	-0.25
XRLNEF		68.90	-1.62	-2.10	70.40	-0.72	-0.92
YGGVNL		70.00	-0.52	-0.67	71.00	-0.12	-0.16
YR3ZWK		71.10	0.58	0.74	71.36	0.23	0.30
ZDY367		71.10	0.58	0.75	71.20	0.08	0.10
ZREZA7		69.76	-0.76	-0.98	70.05	-1.07	-1.36

Summary Statistics

	Sample P65		Sample P66	
Grand Means	70.52	ksi	71.12	ksi
Stnd Dev Btwn Labs	0.77	ksi	0.79	ksi

Samples P65, P66 : AISI 1018 (E), AISI 1018 (F)

Statistics based on 70 of 75 reporting participants

Comments on Assigned Data Flags for Test #1121

9ARCF4 (X) - Data for both samples are low. Possible Systematic Error.

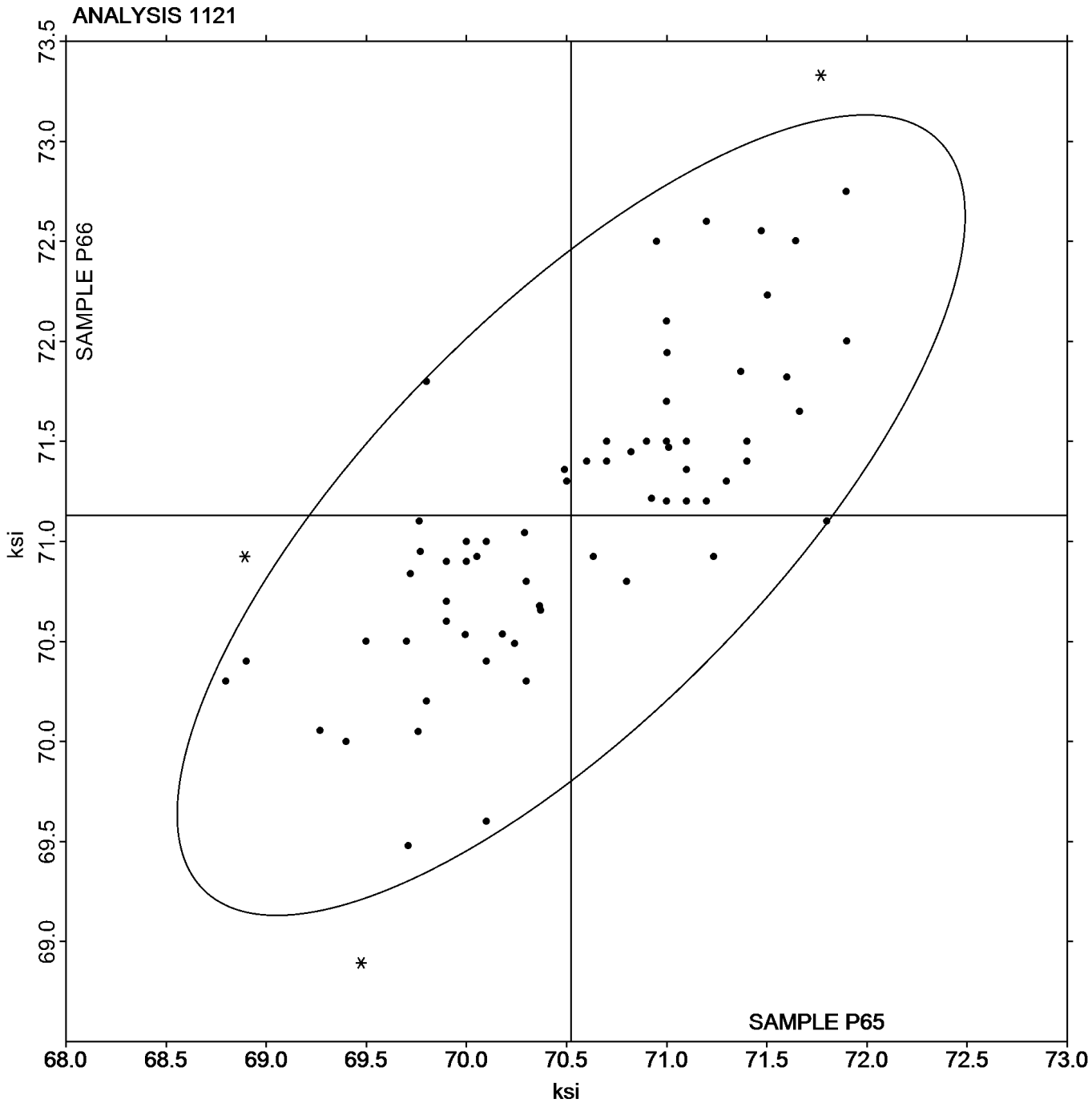
AY3YXJ (X) - Data for both samples are low. Possible Systematic Error.

VH6ZVN (X) - Data for sample P66 are high.

WHG29A (X) - Data for both samples are high. Possible Systematic Error.

WMG63H (X) - Data for both samples are low. Possible Systematic Error.

SAMPLE P65	SAMPLE P66
70.52 ksi	71.12 ksi



		Sample P65			Sample P66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2238NP	*	53.50	7.83	2.57	54.20	6.81	2.43
22F3RA		47.73	2.07	0.68	50.35	2.96	1.05
22ZLTA		47.48	1.81	0.60	47.97	0.58	0.21
26ZV3C		45.90	0.23	0.08	46.20	-1.19	-0.42
2B6RPW		45.25	-0.41	-0.14	46.56	-0.83	-0.30
32CV3M		44.10	-1.57	-0.51	45.30	-2.09	-0.74
36CWJJ		45.08	-0.59	-0.19	46.41	-0.98	-0.35
3BKB9U		42.30	-3.37	-1.10	43.90	-3.49	-1.24
46N8C9		45.10	-0.57	-0.19	45.20	-2.19	-0.78
4UUMEP		44.09	-1.57	-0.52	45.53	-1.85	-0.66
63EDDM		46.30	0.63	0.21	50.50	3.11	1.11
6F8YJH		52.00	6.33	2.08	52.60	5.21	1.86
6X8MBG		45.69	0.02	0.01	47.91	0.52	0.18
6ZBHUK		49.70	4.03	1.32	53.40	6.01	2.14
78QKD7		47.94	2.28	0.75	48.77	1.38	0.49
7YY6QN		43.93	-1.74	-0.57	45.16	-2.23	-0.79
82HN36		47.86	2.20	0.72	47.43	0.04	0.01
8DC6R7		48.86	3.20	1.05	50.79	3.40	1.21
99D2JK		39.83	-5.83	-1.91	40.81	-6.58	-2.34
9ARCF4	*	38.50	-7.17	-2.35	43.10	-4.29	-1.53
9VBCP6		49.50	3.83	1.26	50.80	3.41	1.22
AY3YXJ	X	30.40	-15.27	-5.01	30.20	-17.19	-6.12
CDEFGX		51.02	5.35	1.76	50.25	2.86	1.02
CJ4WAB		43.66	-2.01	-0.66	47.72	0.33	0.12
CNV6BW		42.25	-3.42	-1.12	44.45	-2.93	-1.04
CYEL43		47.40	1.73	0.57	49.10	1.71	0.61
CZQEX6		47.60	1.93	0.63	47.50	0.11	0.04
DGU7J8		46.90	1.23	0.40	48.60	1.21	0.43
DPH43Y		43.51	-2.15	-0.71	45.40	-1.99	-0.71
E9THWY		44.84	-0.83	-0.27	47.83	0.44	0.16
ECEZG6		49.40	3.73	1.22	49.50	2.11	0.75
F2TDPF		44.57	-1.10	-0.36	47.23	-0.16	-0.06
GTCU82		42.80	-2.87	-0.94	44.30	-3.09	-1.10
H8RE6Z		43.80	-1.86	-0.61	46.12	-1.27	-0.45
HFLKX2		48.46	2.79	0.92	48.18	0.79	0.28
JA8B2P		45.79	0.12	0.04	44.34	-3.04	-1.08
JXFPVU		43.66	-2.01	-0.66	46.41	-0.98	-0.35
K6C4UZ		43.80	-1.87	-0.61	45.80	-1.59	-0.57
KFCP67		50.40	4.73	1.55	51.10	3.71	1.32
KKQ3AY	*	42.10	-3.57	-1.17	47.70	0.31	0.11
KMVWKP		44.70	-0.97	-0.32	46.10	-1.29	-0.46
KXQ78Y		51.80	6.13	2.01	52.50	5.11	1.82
KZKR3B		46.16	0.49	0.16	49.08	1.69	0.60
LJQMA8		42.30	-3.37	-1.10	44.80	-2.59	-0.92
LNHQ2Q		44.22	-1.44	-0.47	46.17	-1.22	-0.44
MK3JEC	X	51.40	5.73	1.88	44.80	-2.59	-0.92
MYJJ4P		46.77	1.10	0.36	47.21	-0.18	-0.06

		Sample P65			Sample P66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
NTRQBM		46.30	0.63	0.21	46.90	-0.49	-0.17
PTMN3U		44.40	-1.27	-0.41	47.30	-0.09	-0.03
PXWR6P		44.70	-0.96	-0.32	45.58	-1.81	-0.64
QN9BXZ	*	51.20	5.53	1.82	55.10	7.71	2.75
R8HPTZ		45.42	-0.24	-0.08	47.35	-0.04	-0.01
RPDHDY	X	51.10	5.43	1.78	56.10	8.71	3.10
RWUZPK		45.00	-0.67	-0.22	47.30	-0.09	-0.03
T7GECN		46.60	0.93	0.31	50.60	3.21	1.14
T8VNGH		42.68	-2.99	-0.98	47.05	-0.34	-0.12
TWAHNK		42.20	-3.47	-1.14	44.40	-2.99	-1.06
U4AGEZ		45.80	0.13	0.04	45.90	-1.49	-0.53
U4R8MK		44.70	-0.97	-0.32	43.60	-3.79	-1.35
UBRP3W		53.00	7.33	2.41	52.60	5.21	1.86
UKENT3		43.55	-2.11	-0.69	46.05	-1.34	-0.48
VH6ZVN		44.98	-0.69	-0.23	47.22	-0.16	-0.06
WA9HUK		44.10	-1.57	-0.51	46.14	-1.25	-0.44
WHG29A		44.86	-0.80	-0.26	46.01	-1.38	-0.49
WHZ6GA		44.42	-1.25	-0.41	45.79	-1.60	-0.57
WMG63H		39.19	-6.47	-2.12	41.88	-5.51	-1.96
XCRYMP		45.00	-0.67	-0.22	48.00	0.61	0.22
XG6YJG		45.00	-0.67	-0.22	48.70	1.31	0.47
XRKVF8		45.22	-0.45	-0.15	46.21	-1.18	-0.42
XRLNEF	X	53.80	8.13	2.67	57.20	9.81	3.49
YGGVNL		42.70	-2.97	-0.97	44.80	-2.59	-0.92
YR3ZWK		48.75	3.08	1.01	50.47	3.09	1.10
ZDY367		44.60	-1.07	-0.35	46.40	-0.99	-0.35
ZREZA7		43.66	-2.01	-0.66	45.54	-1.85	-0.66

Summary Statistics

	Sample P65		Sample P66	
Grand Means	45.67	ksi	47.39	ksi
Stnd Dev Btwn Labs	3.05	ksi	2.81	ksi

Samples P65, P66 : AISI 1018 (E), AISI 1018 (F)

Statistics based on 70 of 74 reporting participants

Comments on Assigned Data Flags for Test #1122

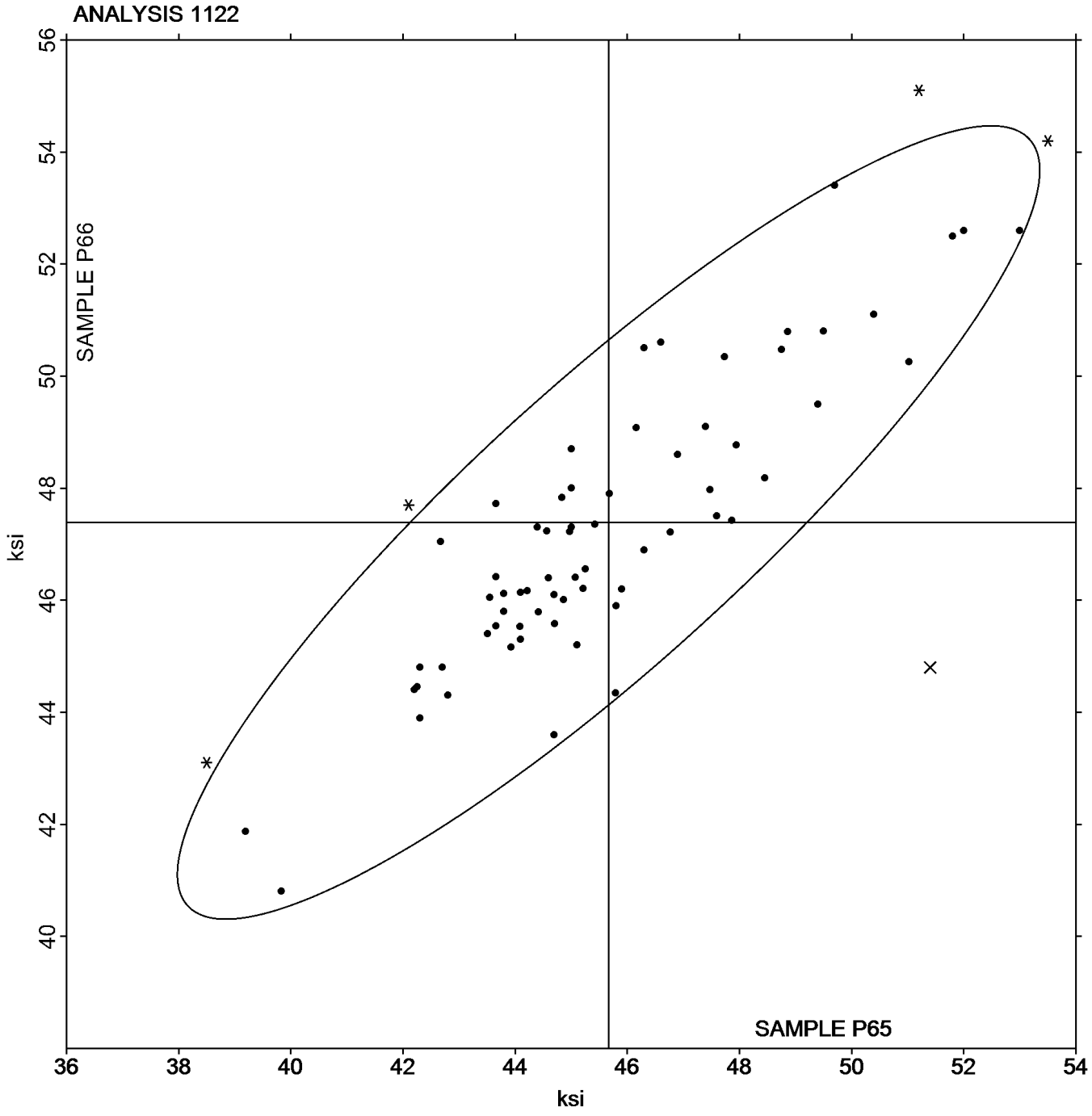
AY3YXJ (X) - Data for both samples are low. Possible Systematic Error.

MK3JEC (X) - Inconsistent in testing between samples.

RPDHDY (X) - Data for sample P66 are high.

XRLNEF (X) - Data for sample P66 are high.

SAMPLE P65	SAMPLE P66
45.67 ksi	47.39 ksi



		Sample P65			Sample P66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2238NP		34.00	-1.06	-0.49	33.50	-1.15	-0.55
22F3RA		35.00	-0.06	-0.03	34.40	-0.25	-0.12
22ZLTA		36.82	1.76	0.81	34.06	-0.59	-0.28
26ZV3C		38.20	3.14	1.45	38.20	3.55	1.71
2B6RPW	*	39.00	3.94	1.82	36.00	1.35	0.65
32CV3M		38.80	3.74	1.72	38.40	3.75	1.80
36CWJJ		36.00	0.94	0.43	36.00	1.35	0.65
3BKB9U		35.00	-0.06	-0.03	34.50	-0.15	-0.07
46N8C9		34.80	-0.26	-0.12	34.20	-0.45	-0.22
4UUMEP		35.00	-0.06	-0.03	34.00	-0.65	-0.31
63EDDM		33.30	-1.76	-0.81	33.00	-1.65	-0.79
6F8YJH		34.10	-0.96	-0.45	34.80	0.15	0.07
6X8MBG		34.20	-0.86	-0.40	34.20	-0.45	-0.22
6ZBHUK		34.00	-1.06	-0.49	33.50	-1.15	-0.55
78QKD7		33.00	-2.06	-0.95	34.00	-0.65	-0.31
7YY6QN	*	29.50	-5.56	-2.57	30.40	-4.25	-2.04
82HN36		34.50	-0.56	-0.26	35.10	0.45	0.22
8DC6R7		33.88	-1.18	-0.55	34.54	-0.11	-0.05
99D2JK		35.00	-0.06	-0.03	35.00	0.35	0.17
9ARCF4		37.80	2.74	1.26	35.80	1.15	0.55
9VBCP6		31.90	-3.16	-1.46	31.00	-3.65	-1.75
AY3YXJ		35.10	0.04	0.02	34.40	-0.25	-0.12
CDEFGX		32.80	-2.26	-1.04	32.10	-2.55	-1.22
CJ4WAB		32.80	-2.26	-1.04	33.30	-1.35	-0.65
CNV6BW	*	41.00	5.94	2.74	39.80	5.15	2.47
CYEL43		32.90	-2.16	-1.00	33.00	-1.65	-0.79
CZQEX6		37.00	1.94	0.89	35.00	0.35	0.17
DGU7J8		36.80	1.74	0.80	36.80	2.15	1.03
DPH43Y		35.00	-0.06	-0.03	34.00	-0.65	-0.31
E9THWY		36.60	1.54	0.71	35.60	0.95	0.46
ECEZG6		33.50	-1.56	-0.72	31.50	-3.15	-1.51
F2TDPF		38.00	2.94	1.35	38.00	3.35	1.61
GTCU82	*	37.50	2.44	1.12	34.60	-0.05	-0.02
H8RE6Z		36.50	1.44	0.66	35.50	0.85	0.41
HFLKX2		35.60	0.54	0.25	35.30	0.65	0.31
JA8B2P		35.45	0.39	0.18	35.70	1.05	0.51
JXFPVU		33.00	-2.06	-0.95	33.00	-1.65	-0.79
K6C4UZ		33.90	-1.16	-0.54	33.90	-0.75	-0.36
KFCP67		34.00	-1.06	-0.49	33.50	-1.15	-0.55
KKQ3AY		31.90	-3.16	-1.46	30.80	-3.85	-1.85
KMVWKP		37.40	2.34	1.08	34.70	0.05	0.02
KXQ78Y		34.80	-0.26	-0.12	34.20	-0.45	-0.22
KZKR3B		35.00	-0.06	-0.03	35.00	0.35	0.17
LJQMA8		38.60	3.54	1.63	38.60	3.95	1.90
LNHQ2Q		36.00	0.94	0.43	37.00	2.35	1.13
MK3JEC		34.00	-1.06	-0.49	33.00	-1.65	-0.79
MYJJ4P		33.90	-1.16	-0.54	33.50	-1.15	-0.55

Fasteners and Metals Interlaboratory Testing Program

Analysis 1123

Elongation: Lab-Machined Round Steel
ASTM E8

		Sample P65			Sample P66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
NTRQBM	X	36.00	0.94	0.43	39.00	4.35	2.09
PTMN3U		37.50	2.44	1.12	38.00	3.35	1.61
PXWR6P		33.00	-2.06	-0.95	33.00	-1.65	-0.79
QN9BXZ		34.00	-1.06	-0.49	34.00	-0.65	-0.31
R8HPTZ	*	35.00	-0.06	-0.03	37.00	2.35	1.13
RPDHDY		34.00	-1.06	-0.49	34.00	-0.65	-0.31
RWUZPK		32.80	-2.26	-1.04	33.20	-1.45	-0.70
T7GECN		38.80	3.74	1.72	39.50	4.85	2.33
T8VNGH		35.00	-0.06	-0.03	36.00	1.35	0.65
TWAHNK		34.90	-0.16	-0.08	34.60	-0.05	-0.02
U4AGEZ		36.30	1.24	0.57	36.90	2.25	1.08
U4R8MK		33.00	-2.06	-0.95	33.00	-1.65	-0.79
UBRP3W		33.50	-1.56	-0.72	33.00	-1.65	-0.79
UKENT3		30.42	-4.64	-2.14	30.73	-3.92	-1.88
VH6ZVN		34.90	-0.16	-0.08	36.40	1.75	0.84
WA9HUK		36.70	1.64	0.75	36.70	2.05	0.99
WHG29A		36.10	1.04	0.48	34.40	-0.25	-0.12
WHZ6GA		34.60	-0.46	-0.21	33.10	-1.55	-0.74
WMG63H		31.35	-3.71	-1.71	30.70	-3.95	-1.90
XCRYMP		33.00	-2.06	-0.95	32.10	-2.55	-1.22
XG6YJG		34.00	-1.06	-0.49	33.00	-1.65	-0.79
XRKVF8		37.00	1.94	0.89	37.00	2.35	1.13
XRLNEF		37.00	1.94	0.89	35.80	1.15	0.55
YGGVNL		32.90	-2.16	-1.00	32.80	-1.85	-0.89
YR3ZWK		36.70	1.64	0.75	36.20	1.55	0.75
ZDY367		35.20	0.14	0.06	34.20	-0.45	-0.22
ZREZA7		39.20	4.14	1.91	37.60	2.95	1.42

Summary Statistics

	Sample P65		Sample P66	
Grand Means	35.06	Percent	34.65	Percent
Stnd Dev Btwn Labs	2.17	Percent	2.08	Percent

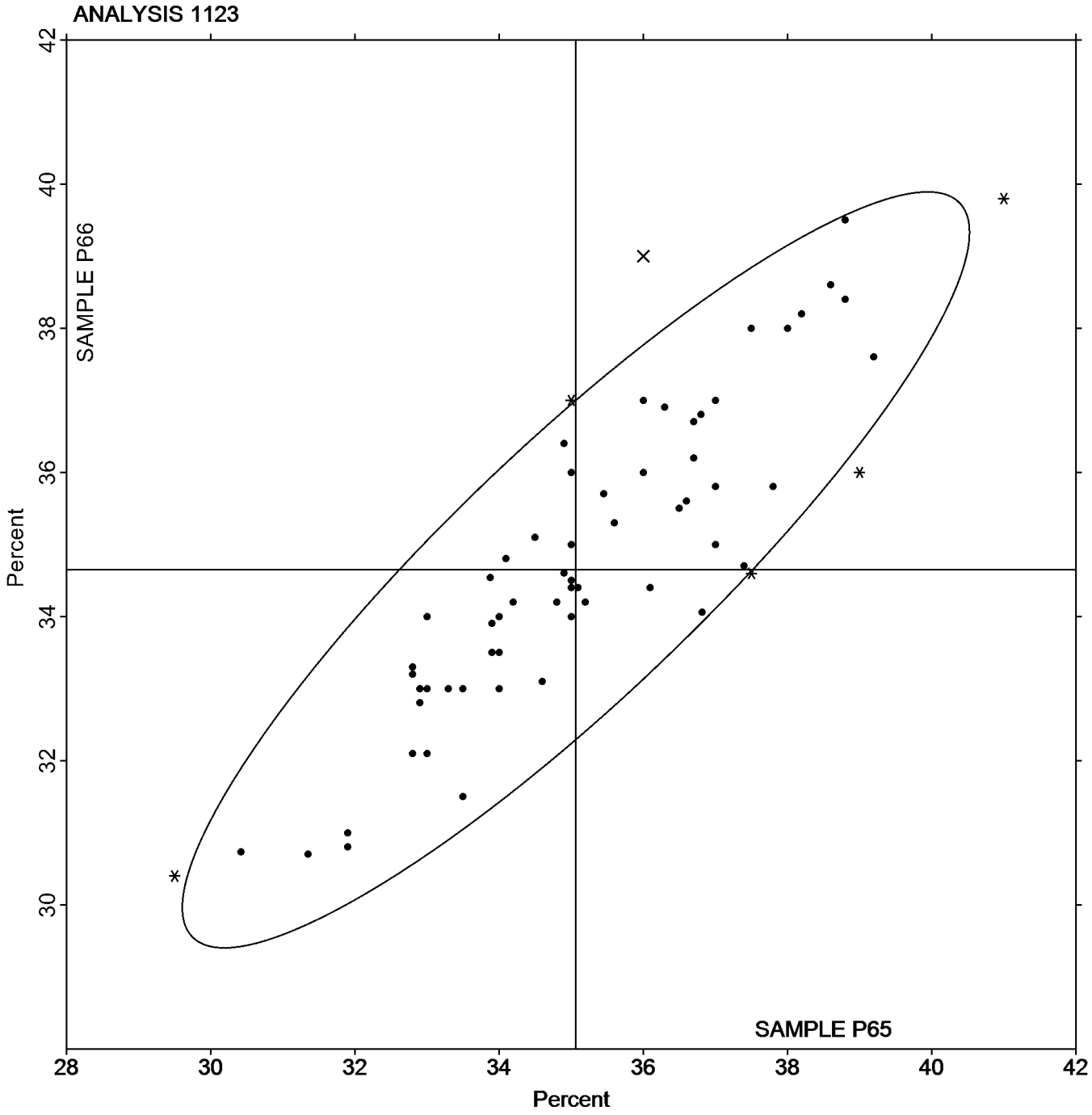
Samples P65, P66 : AISI 1018 (E), AISI 1018 (F)

Statistics based on 73 of 74 reporting participants

Comments on Assigned Data Flags for Test #1123

NTRQBM (X) - Inconsistent in testing between samples.

SAMPLE P65	SAMPLE P66
35.06 Percent	34.65 Percent



		Sample P65			Sample P66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2238NP		66.60	0.19	0.28	66.80	0.01	0.01
22F3RA		66.10	-0.31	-0.46	65.50	-1.29	-1.28
22ZLTA		66.66	0.25	0.37	67.35	0.56	0.55
26ZV3C		66.20	-0.21	-0.31	66.60	-0.19	-0.19
2B6RPW		67.00	0.59	0.87	67.00	0.21	0.20
32CV3M		64.90	-1.51	-2.22	66.10	-0.69	-0.69
36CWJJ		66.00	-0.41	-0.60	65.00	-1.79	-1.78
3BKB9U	X	63.90	-2.51	-3.69	64.80	-1.99	-1.97
46N8C9		66.30	-0.11	-0.16	67.40	0.61	0.60
4UUMEP		66.00	-0.41	-0.60	68.00	1.21	1.19
63EDDM		66.40	-0.01	-0.01	67.50	0.71	0.70
6F8YJH		66.50	0.09	0.13	67.50	0.71	0.70
6X8MBG		65.30	-1.11	-1.63	64.40	-2.39	-2.37
6ZBHUK		66.80	0.39	0.57	67.50	0.71	0.70
78QKD7		65.00	-1.41	-2.08	65.00	-1.79	-1.78
7YY6QN		66.00	-0.41	-0.60	65.40	-1.39	-1.38
82HN36		66.20	-0.21	-0.31	67.00	0.21	0.20
8DC6R7	X	62.64	-3.77	-5.55	63.08	-3.71	-3.67
99D2JK		66.00	-0.41	-0.60	65.00	-1.79	-1.78
9ARCF4		66.40	-0.01	-0.01	67.00	0.21	0.20
9VBCP6		66.70	0.29	0.43	67.40	0.61	0.60
AY3YXJ		66.00	-0.41	-0.60	68.30	1.51	1.49
CDEFGX		67.70	1.29	1.90	67.60	0.81	0.80
CJ4WAB		67.70	1.29	1.90	68.60	1.81	1.79
CNV6BW	X	69.00	2.59	3.81	71.60	4.81	4.75
CYEL43		65.20	-1.21	-1.78	66.40	-0.39	-0.39
CZQEX6		66.40	-0.01	-0.01	66.70	-0.09	-0.09
DGU7J8		66.50	0.09	0.13	68.30	1.51	1.49
DPH43Y	X	62.00	-4.41	-6.49	69.00	2.21	2.18
E9THWY		66.00	-0.41	-0.60	65.00	-1.79	-1.78
ECEZG6		65.10	-1.31	-1.93	66.00	-0.79	-0.79
F2TDPF		67.00	0.59	0.87	68.00	1.21	1.19
GTCU82	X	63.80	-2.61	-3.84	64.40	-2.39	-2.37
H8RE6Z		67.00	0.59	0.87	67.00	0.21	0.20
HFLKX2		66.10	-0.31	-0.46	67.40	0.61	0.60
JA8B2P		66.26	-0.15	-0.22	67.41	0.62	0.61
JXFPVU	*	68.00	1.59	2.34	66.00	-0.79	-0.79
K6C4UZ		67.20	0.79	1.16	66.10	-0.69	-0.69
KFCP67		66.40	-0.01	-0.01	67.70	0.91	0.90
KKQ3AY		66.30	-0.11	-0.16	66.60	-0.19	-0.19
KMVWKP		67.30	0.89	1.31	67.70	0.91	0.90
KXQ78Y		65.70	-0.71	-1.04	66.80	0.01	0.01
KZKR3B		67.00	0.59	0.87	66.00	-0.79	-0.79
LNHQ2Q	X	65.80	-0.61	-0.90	69.70	2.91	2.87
MK3JEC		66.00	-0.41	-0.60	65.50	-1.29	-1.28
MYJJ4P		65.70	-0.71	-1.04	67.80	1.01	0.99
NTRQBM		65.20	-1.21	-1.78	64.60	-2.19	-2.17

		Sample P65			Sample P66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
PTMN3U		65.90	-0.51	-0.75	67.40	0.61	0.60
PXWR6P		67.00	0.59	0.87	67.00	0.21	0.20
QN9BXZ		66.40	-0.01	-0.01	66.60	-0.19	-0.19
R8HPTZ	X	60.00	-6.41	-9.44	61.00	-5.79	-5.73
RPDHDY		66.00	-0.41	-0.60	67.30	0.51	0.50
RWUZPK		66.70	0.29	0.43	67.50	0.71	0.70
T7GECN		67.30	0.89	1.31	66.20	-0.59	-0.59
T8VNGH		67.00	0.59	0.87	67.00	0.21	0.20
TWAHNK		66.70	0.29	0.43	67.40	0.61	0.60
U4AGEZ		66.40	-0.01	-0.01	65.20	-1.59	-1.58
U4R8MK		67.00	0.59	0.87	65.00	-1.79	-1.78
UBRP3W		66.20	-0.21	-0.31	66.70	-0.09	-0.09
UKENT3		67.13	0.72	1.06	67.48	0.69	0.68
VH6ZVN		66.00	-0.41	-0.60	67.30	0.51	0.50
WA9HUK		66.80	0.39	0.57	68.10	1.31	1.29
WHG29A		67.10	0.69	1.02	67.90	1.11	1.09
WHZ6GA		67.15	0.74	1.09	68.39	1.59	1.58
WMG63H		66.53	0.12	0.18	67.22	0.43	0.42
XCRYMP		65.90	-0.51	-0.75	66.10	-0.69	-0.69
XG6YJG		67.00	0.59	0.87	67.00	0.21	0.20
XRKVF8		66.00	-0.41	-0.60	66.00	-0.79	-0.79
XRLNEF		65.40	-1.01	-1.49	66.00	-0.79	-0.79
YGGVNL		67.60	1.19	1.75	66.99	0.20	0.19
YR3ZWK		65.70	-0.71	-1.04	67.40	0.61	0.60
ZDY367		66.40	-0.01	-0.01	66.60	-0.19	-0.19
ZREZA7		66.90	0.49	0.72	67.70	0.91	0.90

Summary Statistics

	Sample P65		Sample P66	
Grand Means	66.41	Percent	66.79	Percent
Stnd Dev Btwn Labs	0.68	Percent	1.01	Percent

Samples P65, P66 : AISI 1018 (E), AISI 1018 (F)

Statistics based on 66 of 73 reporting participants

Comments on Assigned Data Flags for Test #1124

3BKB9U (X) - Data for sample P65 are low.

8DC6R7 (X) - Data for both samples are low.

CNV6BW (X) - Data for both samples are high.

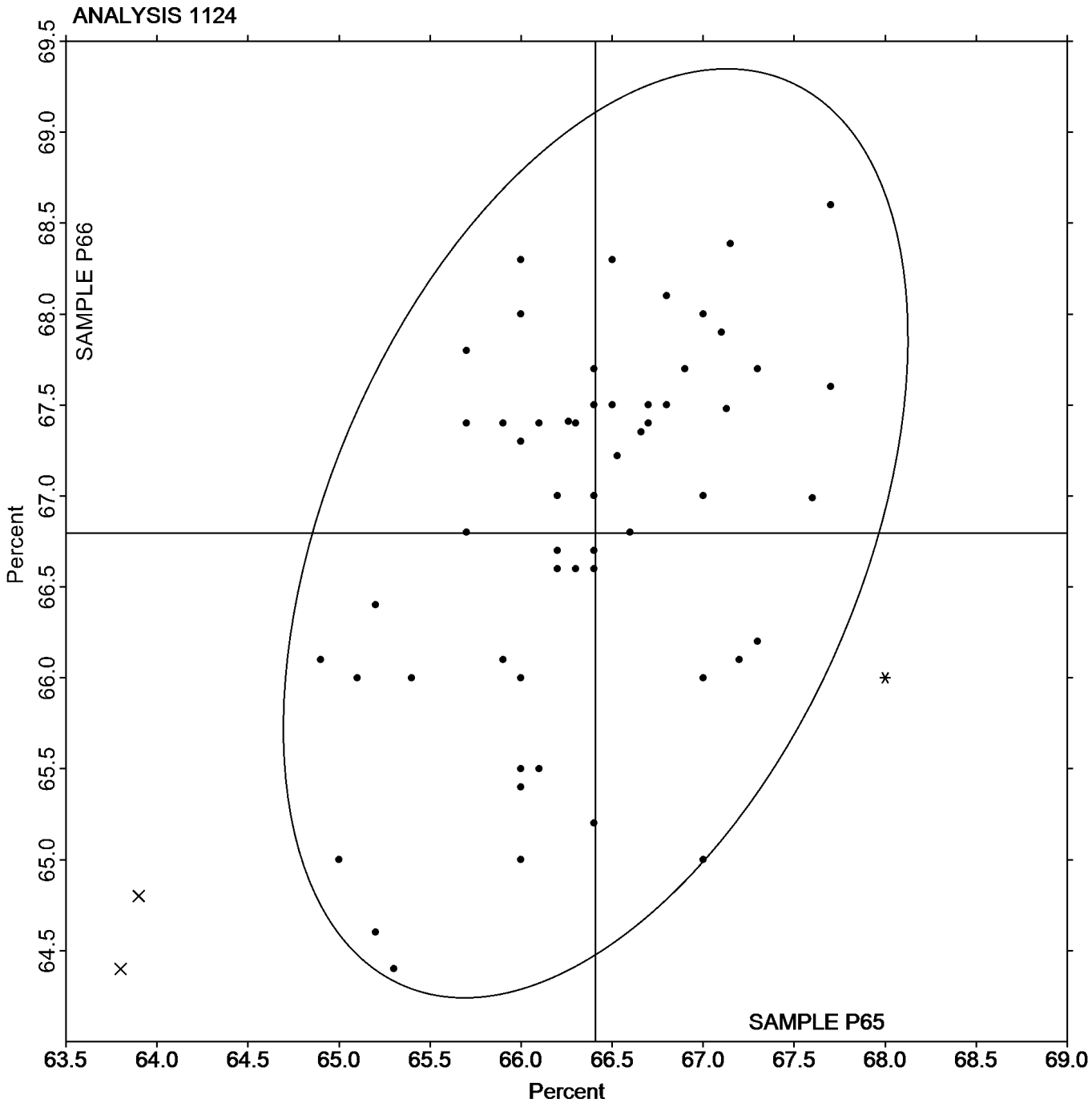
DPH43Y (X) - Data for sample P65 are low.

GTCU82 (X) - Data for sample P65 are low.

LNHQ2Q (X) - Data for sample P66 are high.

R8HPTZ (X) - Data for both samples are low.

SAMPLE P65	SAMPLE P66
66.41 Percent	66.79 Percent



		Sample N65			Sample N66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
2W8FHE		90.42	0.02	0.03	98.16	1.13	1.83
3CW32B		91.15	0.75	1.06	97.00	-0.03	-0.05
3QWQA6		90.26	-0.14	-0.19	96.18	-0.85	-1.38
499VD9		89.64	-0.76	-1.07	96.98	-0.05	-0.08
4VKNKD		90.76	0.36	0.51	96.72	-0.31	-0.50
6F8YJH		90.98	0.58	0.82	96.98	-0.05	-0.08
6H88NT		91.20	0.80	1.13	98.00	0.97	1.57
6LTW96		89.80	-0.60	-0.84	96.90	-0.13	-0.21
6NWRR9		90.00	-0.40	-0.56	96.22	-0.81	-1.31
78QKD7		90.06	-0.34	-0.48	97.44	0.41	0.66
7YY6QN		90.72	0.32	0.45	97.72	0.69	1.12
8UXJDB		90.50	0.10	0.14	97.52	0.49	0.79
96CZG2		89.84	-0.56	-0.79	96.00	-1.03	-1.67
9BFYUC		90.26	-0.14	-0.19	97.20	0.17	0.27
9RPQWH		91.48	1.08	1.53	98.18	1.15	1.86
AF7VW9		90.78	0.38	0.54	97.38	0.35	0.57
AZGKA7		90.26	-0.14	-0.19	96.90	-0.13	-0.21
BGGXH8		91.30	0.90	1.27	98.32	1.29	2.09
C8QVDG		90.43	0.03	0.05	96.97	-0.06	-0.09
CHBZM3		90.48	0.08	0.12	96.74	-0.29	-0.47
CQL393		91.54	1.14	1.61	97.76	0.73	1.18
CZR7WD		90.32	-0.08	-0.11	96.76	-0.27	-0.44
E42BEQ		91.40	1.00	1.41	96.94	-0.09	-0.15
EGP9N2		90.28	-0.12	-0.17	96.92	-0.11	-0.18
FQ9YNY		90.64	0.24	0.34	97.48	0.45	0.73
G88NAU		91.20	0.80	1.13	96.52	-0.51	-0.83
JXYNTR		88.64	-1.76	-2.48	95.80	-1.23	-1.99
K37EVX		88.82	-1.58	-2.22	96.18	-0.85	-1.38
KDARUD		91.48	1.08	1.53	98.04	1.01	1.63
KN46RP		89.56	-0.84	-1.18	97.02	-0.01	-0.02
LA6H39		90.48	0.08	0.12	97.18	0.15	0.24
MK3JEC		89.96	-0.44	-0.62	96.64	-0.39	-0.63
MTT4JP		90.16	-0.24	-0.34	97.04	0.01	0.02
NJ4VC8		90.56	0.16	0.23	97.10	0.07	0.11
PGV3WY		89.32	-1.08	-1.52	96.02	-1.01	-1.64
PTMN3U	*	89.32	-1.08	-1.52	95.42	-1.61	-2.61
PZ7RAW		89.66	-0.74	-1.04	96.68	-0.35	-0.57
QG84AK		91.04	0.64	0.91	96.88	-0.15	-0.24
QQB99T		90.32	-0.08	-0.11	96.92	-0.11	-0.18
R4YXGX		91.52	1.12	1.58	97.68	0.65	1.05
R8GZLH		90.46	0.06	0.09	97.06	0.03	0.05
RCPFV7		89.96	-0.44	-0.62	96.74	-0.29	-0.47
RF8HZQ		90.00	-0.40	-0.56	96.80	-0.23	-0.37
RLCGD2		91.28	0.88	1.24	97.02	-0.01	-0.02
UKENT3		91.32	0.92	1.30	97.18	0.15	0.24
UYWFFN		89.56	-0.84	-1.18	97.04	0.01	0.02
V3QW6M		89.30	-1.10	-1.55	96.60	-0.43	-0.70

WebCode	Data Flag	Sample N65 Lab Mean	Sample N65 Diff. from Grand Mean	Sample N65 CPV	Sample N66 Lab Mean	Sample N66 Diff. from Grand Mean	Sample N66 CPV
WN6YJH		90.44	0.04	0.06	97.20	0.17	0.27
XRLNEF		90.28	-0.12	-0.17	97.42	0.39	0.63
YY3JWV		91.00	0.60	0.85	98.00	0.97	1.57
ZDZV3D		90.14	-0.26	-0.36	97.00	-0.03	-0.05

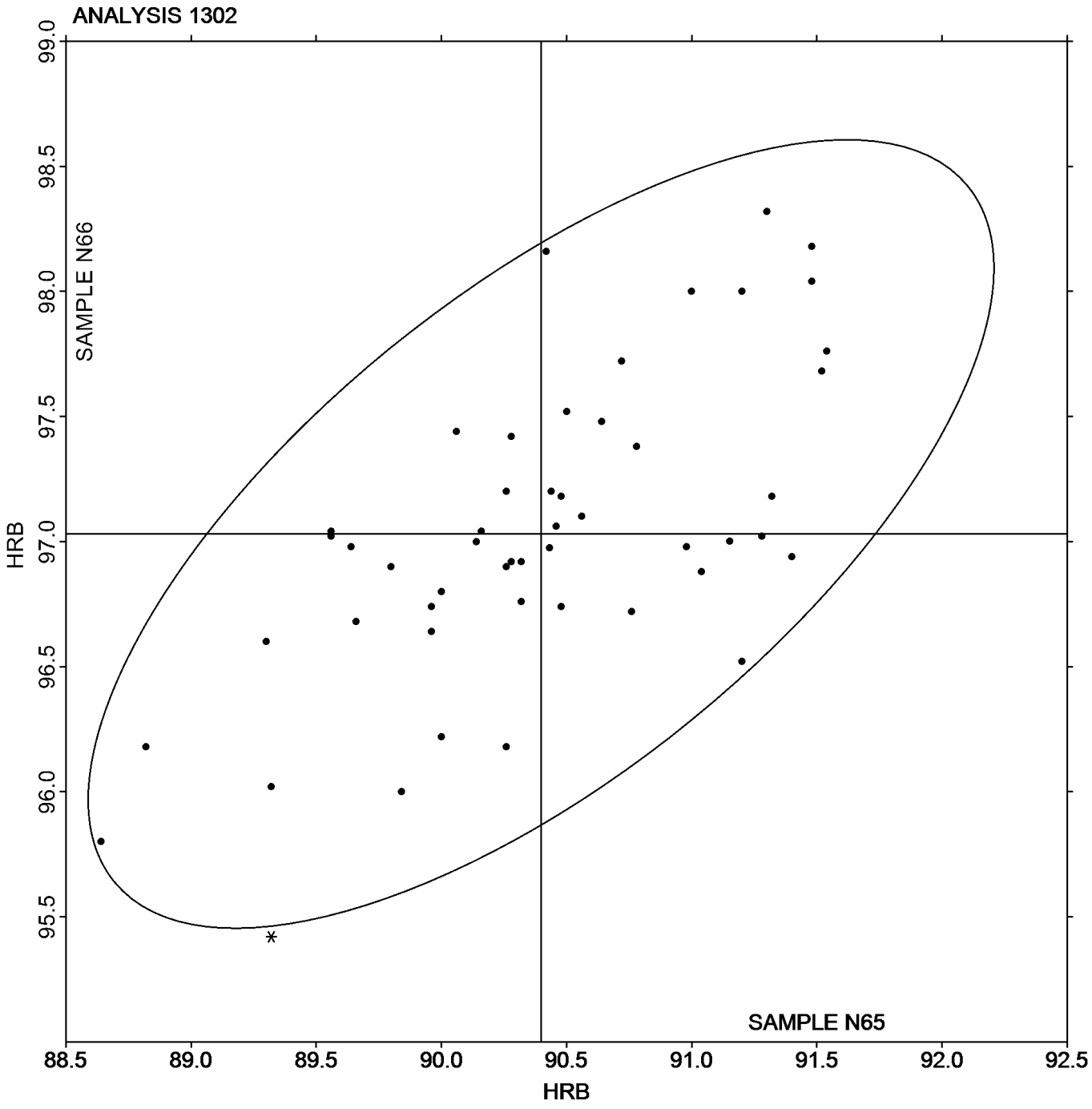
Summary Statistics

	Sample N65		Sample N66	
Grand Means	90.40	HRB	97.03	HRB
Stnd Dev Btwn Labs	0.71	HRB	0.62	HRB

Samples N65, N66 : Brass, Steel

Statistics based on 51 of 51 reporting participants

SAMPLE N65	SAMPLE N66
90.40 HRB	97.03 HRB



		Sample S65			Sample S66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22F3RA		448.20	9.15	0.74	522.80	9.43	0.68
2EMUUG		442.68	3.63	0.29	518.00	4.63	0.34
2JFTAX		449.60	10.55	0.85	531.00	17.63	1.28
2KTMND		442.40	3.35	0.27	506.20	-7.17	-0.52
2PPAJL		445.20	6.15	0.50	516.20	2.83	0.21
32CV3M	*	459.40	20.35	1.65	501.42	-11.95	-0.87
3BKB9U		442.60	3.55	0.29	525.40	12.03	0.87
3PFRYT		437.40	-1.65	-0.13	505.60	-7.77	-0.56
3T2EQF		458.00	18.95	1.54	534.60	21.23	1.54
3VALXE	X	501.14	62.09	5.03	426.98	-86.39	-6.27
6PTZZR		448.20	9.15	0.74	519.00	5.63	0.41
788YKF		437.20	-1.85	-0.15	501.20	-12.17	-0.88
7YY6QN		442.80	3.75	0.30	511.40	-1.97	-0.14
83N7Z2		460.40	21.35	1.73	535.80	22.43	1.63
8DCZG4		437.52	-1.53	-0.12	521.88	8.51	0.62
8G7YP8		440.80	1.75	0.14	505.80	-7.57	-0.55
8UXJDB		413.40	-25.65	-2.08	483.32	-30.05	-2.18
8WPHRA		451.20	12.15	0.98	528.60	15.23	1.11
9EFAQC		439.40	0.35	0.03	511.60	-1.77	-0.13
9FCQZN		432.60	-6.45	-0.52	504.40	-8.97	-0.65
9MXJE9		426.74	-12.31	-1.00	514.10	0.73	0.05
AF7VW9		451.20	12.15	0.98	522.80	9.43	0.68
AKL4K9		445.82	6.77	0.55	524.02	10.65	0.77
B4UPGZ		437.00	-2.05	-0.17	507.00	-6.37	-0.46
BR4W9D		426.60	-12.45	-1.01	495.20	-18.17	-1.32
C8QVDG		445.40	6.35	0.51	507.80	-5.57	-0.40
CZR7WD		427.72	-11.33	-0.92	502.54	-10.83	-0.79
DB2BDT		417.60	-21.45	-1.74	499.64	-13.73	-1.00
DEK3PV		421.40	-17.65	-1.43	519.20	5.83	0.42
ECEZG6		453.40	14.35	1.16	507.00	-6.37	-0.46
EN9CUJ		414.80	-24.25	-1.97	493.20	-20.17	-1.46
F9TPMX		438.60	-0.45	-0.04	507.40	-5.97	-0.43
FMAT32		445.80	6.75	0.55	509.00	-4.37	-0.32
GQ46HX		459.40	20.35	1.65	543.60	30.23	2.19
GTCU82		440.60	1.55	0.13	517.60	4.23	0.31
HJLT3C		437.20	-1.85	-0.15	501.00	-12.37	-0.90
J2ZRMZ		448.54	9.49	0.77	526.48	13.11	0.95
JPZ7CV		426.56	-12.49	-1.01	504.90	-8.47	-0.61
JXFPVU		463.60	24.55	1.99	529.20	15.83	1.15
K824HW		422.20	-16.85	-1.37	497.80	-15.57	-1.13
KDARUD		444.60	5.55	0.45	525.20	11.83	0.86
KXQ78Y	X	481.40	42.35	3.43	537.60	24.23	1.76
LNHQ2Q		438.80	-0.25	-0.02	510.20	-3.17	-0.23
MBV494		431.80	-7.25	-0.59	510.90	-2.47	-0.18
MCNW4M		441.20	2.15	0.17	500.00	-13.37	-0.97
MK3JEC		427.00	-12.05	-0.98	497.60	-15.77	-1.14
NTRQBM		430.64	-8.41	-0.68	508.36	-5.01	-0.36

		Sample S65			Sample S66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
PGV3WY	*	425.80	-13.25	-1.07	533.00	19.63	1.42
PHZRWM	*	465.08	26.03	2.11	553.78	40.41	2.93
PTMN3U		456.40	17.35	1.41	542.40	29.03	2.11
RFQ7HL	*	417.30	-21.75	-1.76	524.92	11.55	0.84
RJ64MM		448.00	8.95	0.73	531.60	18.23	1.32
T8X9CX		444.20	5.15	0.42	513.60	0.23	0.02
TEAR8G		435.20	-3.85	-0.31	495.40	-17.97	-1.30
TWAHNK		440.40	1.35	0.11	518.40	5.03	0.37
U4R8MK		431.80	-7.25	-0.59	505.40	-7.97	-0.58
UBAKLJ		430.20	-8.85	-0.72	508.20	-5.17	-0.37
UQG29C		442.60	3.55	0.29	504.20	-9.17	-0.66
UUZUJE	X	457.17	18.12	1.47	567.54	54.18	3.93
V8MGBR		433.66	-5.39	-0.44	501.70	-11.67	-0.85
VH6ZVN		439.60	0.55	0.04	497.40	-15.97	-1.16
VL8WEQ		434.00	-5.05	-0.41	505.80	-7.57	-0.55
VUXGKP		445.80	6.75	0.55	517.80	4.43	0.32
VYU9QZ		452.37	13.31	1.08	522.80	9.43	0.68
WA9HUK		428.56	-10.49	-0.85	510.26	-3.11	-0.23
WEJH6Q		430.00	-9.05	-0.73	525.40	12.03	0.87
WEX87H		441.80	2.75	0.22	512.20	-1.17	-0.08
XCRYMP		434.20	-4.85	-0.39	508.68	-4.69	-0.34
XHGGYF		412.20	-26.85	-2.18	503.00	-10.37	-0.75
Y7WNMB		421.28	-17.77	-1.44	485.36	-28.01	-2.03
YZCNAJ	X	519.40	80.35	6.51	450.00	-63.37	-4.60
ZRRUML		452.00	12.95	1.05	521.60	8.23	0.60

Summary Statistics

	Sample S65		Sample S66	
Grand Means	439.05	HK 500 gf	513.37	HK 500 gf
Stnd Dev Btwn Labs	12.34	HK 500 gf	13.79	HK 500 gf

Samples S65, S66 : Steel, Steel

Statistics based on 68 of 72 reporting participants

Comments on Assigned Data Flags for Test #1321

3VALXE (X) - Data appear to be transposed between samples.

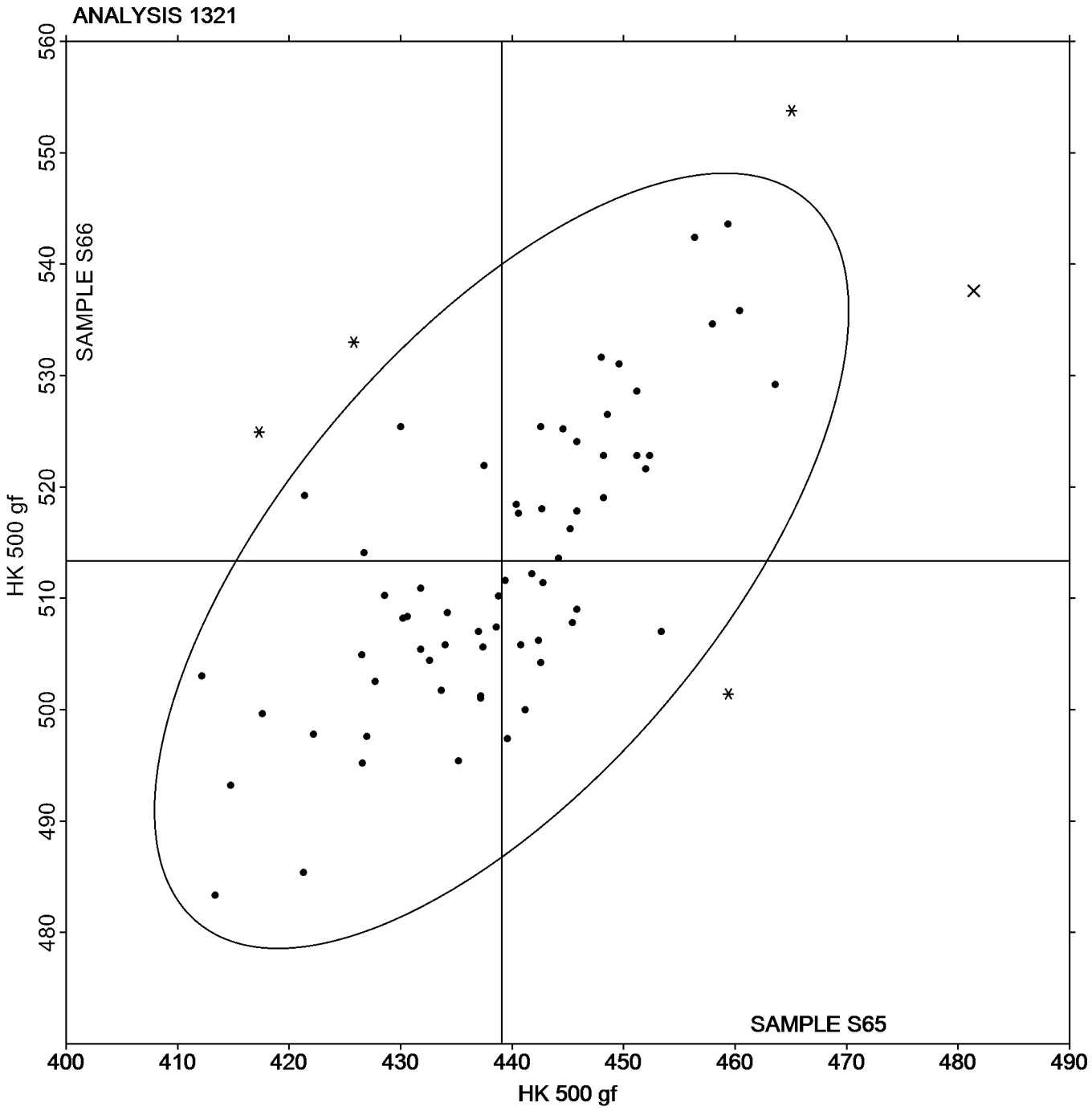
KXQ78Y (X) - Data for sample S65 are high.

UUZUJE (X) - Data for sample S66 are high. Inconsistent within the determinations of sample S66.

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

SAMPLE S65
439.05 HK 500 gf

SAMPLE S66
513.37 HK 500 gf



		Sample S65			Sample S66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22F3RA		455.20	2.14	0.16	524.00	-6.07	-0.39
2EMUUG		443.98	-9.08	-0.67	510.26	-19.81	-1.28
2KTMND		442.80	-10.26	-0.76	508.40	-21.67	-1.40
2PPAJL		451.00	-2.06	-0.15	530.00	-0.07	0.00
3BKB9U		461.20	8.14	0.60	550.40	20.33	1.31
3PFRYT		439.40	-13.66	-1.01	510.60	-19.47	-1.26
6PTZZR		443.80	-9.26	-0.68	544.00	13.93	0.90
788YKF		423.60	-29.46	-2.18	505.60	-24.47	-1.58
7YY6QN		464.20	11.14	0.82	534.60	4.53	0.29
83N7Z2		473.60	20.54	1.52	559.00	28.93	1.87
8G7YP8		450.80	-2.26	-0.17	531.80	1.73	0.11
8WPHRA		484.00	30.94	2.28	555.40	25.33	1.64
9FCQZN		444.40	-8.66	-0.64	524.40	-5.67	-0.37
AF7VW9		470.60	17.54	1.29	549.40	19.33	1.25
B4UPGZ		439.80	-13.26	-0.98	510.40	-19.67	-1.27
C8QVDG		443.80	-9.26	-0.68	513.40	-16.67	-1.08
CZR7WD		443.70	-9.36	-0.69	527.34	-2.73	-0.18
FMAT32		467.20	14.14	1.04	536.20	6.13	0.40
GQ46HX		483.60	30.54	2.25	552.00	21.93	1.42
GTCU82		472.60	19.54	1.44	554.60	24.53	1.58
HJLT3C		458.60	5.54	0.41	535.60	5.53	0.36
JPZ7CV		450.16	-2.90	-0.21	543.52	13.45	0.87
JXFPVU		479.40	26.34	1.94	542.60	12.53	0.81
K824HW		445.60	-7.46	-0.55	528.80	-1.27	-0.08
KDARUD		459.20	6.14	0.45	529.00	-1.07	-0.07
LNHQ2Q		451.00	-2.06	-0.15	525.00	-5.07	-0.33
MBV494		438.48	-14.58	-1.08	530.00	-0.07	0.00
MCNW4M		433.20	-19.86	-1.47	514.60	-15.47	-1.00
NTRQBM		449.00	-4.06	-0.30	527.92	-2.15	-0.14
PTMN3U		449.20	-3.86	-0.29	545.80	15.73	1.02
RFQ7HL		453.46	0.40	0.03	536.48	6.41	0.41
RJ64MM		461.80	8.74	0.65	528.60	-1.47	-0.09
TEAR8G		439.20	-13.86	-1.02	502.80	-27.27	-1.76
TWAHNK		453.80	0.74	0.05	530.00	-0.07	0.00
U4R8MK		440.60	-12.46	-0.92	521.20	-8.87	-0.57
UBAKLJ		433.00	-20.06	-1.48	516.40	-13.67	-0.88
UQG29C		463.60	10.54	0.78	525.20	-4.87	-0.31
UUZUJE	*	468.81	15.75	1.16	571.42	41.35	2.67
V8MGBR		443.52	-9.54	-0.70	508.30	-21.77	-1.41
VUXGKP		443.40	-9.66	-0.71	535.40	5.33	0.34
WA9HUK		449.46	-3.60	-0.27	524.52	-5.55	-0.36
WEJH6Q		459.20	6.14	0.45	528.60	-1.47	-0.09
WEX87H		456.20	3.14	0.23	523.80	-6.27	-0.41
XCRYMP		456.70	3.64	0.27	524.20	-5.87	-0.38
YZCNAJ	X	530.00	76.94	5.68	463.20	-66.87	-4.32
ZRRUML		452.00	-1.06	-0.08	521.60	-8.47	-0.55

Summary Statistics

	Sample S65		Sample S66	
Grand Means	453.06	HK 200 gf	530.07	HK 200 gf
Stnd Dev Btwn Labs	13.54	HK 200 gf	15.48	HK 200 gf

Samples S65, S66 : Steel, Steel

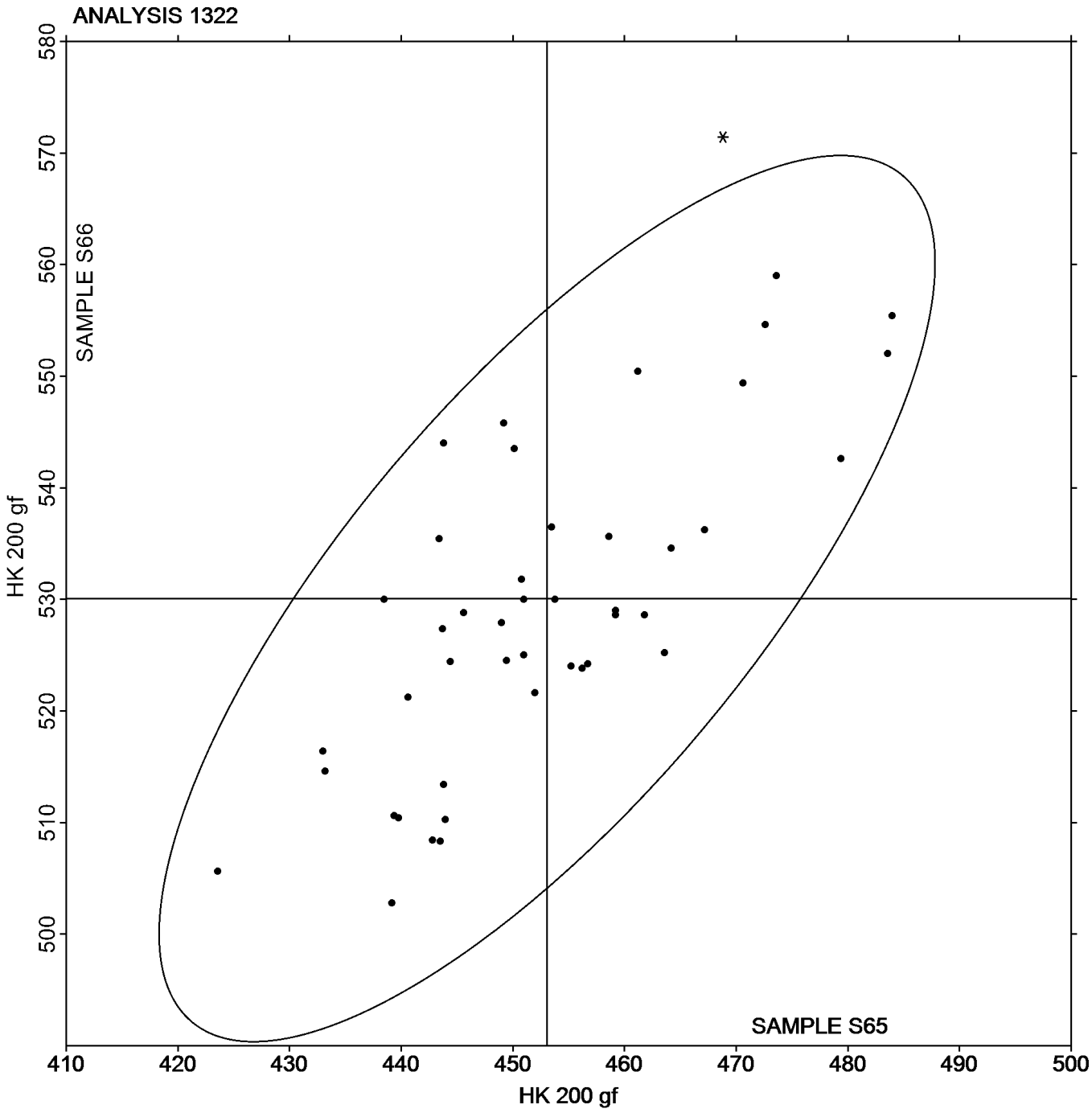
Statistics based on 45 of 46 reporting participants

Comments on Assigned Data Flags for Test #1322

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

SAMPLE S65
453.06 HK 200 gf

SAMPLE S66
530.07 HK 200 gf



		Sample S65			Sample S66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22F3RA		429.54	10.14	1.01	502.44	6.10	0.50
26ZV3C		441.00	21.60	2.14	511.40	15.06	1.24
27AXRV		427.08	7.68	0.76	504.36	8.02	0.66
2B6RPW	X	584.60	165.20	16.39	682.20	185.86	15.34
2EMUUG		403.98	-15.42	-1.53	472.64	-23.70	-1.96
2KTMND		420.40	1.00	0.10	493.80	-2.54	-0.21
2MGUCF		424.82	5.42	0.54	497.34	1.00	0.08
2PPAJL		419.40	0.00	0.00	498.00	1.66	0.14
32CV3M	X	396.32	-23.08	-2.29	496.40	0.06	0.00
3AQK3F		426.00	6.60	0.65	507.80	11.46	0.95
3BKB9U		428.00	8.60	0.85	514.40	18.06	1.49
3CW32B		408.60	-10.80	-1.07	492.80	-3.54	-0.29
3KNKFK		416.80	-2.60	-0.26	493.80	-2.54	-0.21
3PFRYT		421.00	1.60	0.16	494.00	-2.34	-0.19
3QWQA6		421.06	1.66	0.16	510.20	13.86	1.14
4C9799		421.60	2.20	0.22	505.20	8.86	0.73
4UTRVJ		415.20	-4.20	-0.42	490.80	-5.54	-0.46
6FM4EA		412.00	-7.40	-0.73	493.40	-2.94	-0.24
6JQUMB		420.60	1.20	0.12	502.60	6.26	0.52
6PTZZR		417.00	-2.40	-0.24	500.40	4.06	0.34
788YKF		412.00	-7.40	-0.73	490.80	-5.54	-0.46
7GWRR7		425.44	6.04	0.60	502.70	6.36	0.52
7XH9XN		427.96	8.56	0.85	497.88	1.54	0.13
7YY6QN		406.20	-13.20	-1.31	487.20	-9.14	-0.75
8DCZG4		421.68	2.28	0.23	496.38	0.04	0.00
8G7YP8		424.80	5.40	0.54	500.00	3.66	0.30
8NCQZQ		412.92	-6.48	-0.64	490.26	-6.08	-0.50
8WPHRA		421.80	2.40	0.24	492.40	-3.94	-0.33
9FCQZN		414.80	-4.60	-0.46	486.00	-10.34	-0.85
9MXJE9		407.82	-11.58	-1.15	481.06	-15.28	-1.26
AF7VW9		421.40	2.00	0.20	489.80	-6.54	-0.54
AKL4K9		420.78	1.38	0.14	502.28	5.94	0.49
B4UPGZ		424.80	5.40	0.54	491.40	-4.94	-0.41
B8R8VF		419.40	0.00	0.00	495.20	-1.14	-0.09
BR4W9D		436.20	16.80	1.67	514.40	18.06	1.49
C6HG7B		411.00	-8.40	-0.83	484.20	-12.14	-1.00
C8QVDG		422.80	3.40	0.34	493.60	-2.74	-0.23
CPU7J9		432.78	13.38	1.33	503.96	7.62	0.63
CXZ9HE	*	445.40	26.00	2.58	533.60	37.26	3.08
CZQEX6		416.80	-2.60	-0.26	500.40	4.06	0.34
CZR7WD		405.80	-13.60	-1.35	478.54	-17.80	-1.47
DB2BDT		413.90	-5.50	-0.55	493.64	-2.70	-0.22
DEK3PV	*	421.40	2.00	0.20	519.20	22.86	1.89
E42BEQ		422.42	3.02	0.30	493.56	-2.78	-0.23
E8J4X7		434.12	14.72	1.46	504.34	8.00	0.66
EN9CUJ		415.80	-3.60	-0.36	495.40	-0.94	-0.08
EY6EXC		410.00	-9.40	-0.93	493.60	-2.74	-0.23

		Sample S65			Sample S66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
F9TPMX		420.20	0.80	0.08	489.60	-6.74	-0.56
FMAT32	X	451.40	32.00	3.17	514.00	17.66	1.46
GHRQXG		417.08	-2.32	-0.23	492.10	-4.24	-0.35
GKJLMB		426.48	7.08	0.70	493.96	-2.38	-0.20
GQ46HX		435.80	16.40	1.63	521.80	25.46	2.10
GRWVNC		418.60	-0.80	-0.08	485.20	-11.14	-0.92
GTCU82		429.40	10.00	0.99	492.40	-3.94	-0.33
HJLT3C		427.00	7.60	0.75	492.80	-3.54	-0.29
HXHARA	X	420.20	0.80	0.08	420.20	-76.14	-6.28
JDNYFU	*	393.40	-26.00	-2.58	480.80	-15.54	-1.28
JXFPVU		432.20	12.80	1.27	506.00	9.66	0.80
K37EVX		416.60	-2.80	-0.28	483.60	-12.74	-1.05
K824HW	*	392.60	-26.80	-2.66	482.00	-14.34	-1.18
KDARUD		429.60	10.20	1.01	508.60	12.26	1.01
KEZQ8C		429.80	10.40	1.03	509.00	12.66	1.04
KWGY3K		399.98	-19.42	-1.93	472.32	-24.02	-1.98
KXQ78Y		441.00	21.60	2.14	511.20	14.86	1.23
LNHQ2Q		415.60	-3.80	-0.38	476.20	-20.14	-1.66
MCNW4M		416.60	-2.80	-0.28	484.60	-11.74	-0.97
MK3JEC		416.20	-3.20	-0.32	491.80	-4.54	-0.37
MKY4ZQ		414.80	-4.60	-0.46	483.40	-12.94	-1.07
MU7TL2	*	392.90	-26.50	-2.63	462.04	-34.30	-2.83
N938JA	*	423.60	4.20	0.42	519.20	22.86	1.89
NE92E7		412.98	-6.42	-0.64	480.09	-16.25	-1.34
NPQLX3		426.50	7.10	0.70	516.91	20.57	1.70
NTRQBM		402.70	-16.70	-1.66	480.20	-16.14	-1.33
PTMN3U		422.80	3.40	0.34	498.20	1.86	0.15
RFQ7HL		421.82	2.42	0.24	507.76	11.42	0.94
RJ64MM		416.60	-2.80	-0.28	500.60	4.26	0.35
T8VNGH		423.00	3.60	0.36	493.00	-3.34	-0.28
T8X9CX		420.60	1.20	0.12	506.20	9.86	0.81
TBC7HY		415.20	-4.20	-0.42	490.00	-6.34	-0.52
TEAR8G		402.20	-17.20	-1.71	488.40	-7.94	-0.66
TWAHNK		421.60	2.20	0.22	511.40	15.06	1.24
U4R8MK		415.60	-3.80	-0.38	493.40	-2.94	-0.24
UBAKLJ		423.80	4.40	0.44	485.40	-10.94	-0.90
UKB9DG		423.00	3.60	0.36	497.80	1.46	0.12
UQG29C		426.80	7.40	0.73	508.20	11.86	0.98
UUZUJE		431.27	11.87	1.18	516.97	20.63	1.70
UVYVRR		431.20	11.80	1.17	506.40	10.06	0.83
V8MGBR		415.46	-3.94	-0.39	482.20	-14.14	-1.17
VAUYAM		420.60	1.20	0.12	503.80	7.46	0.62
VH6ZVN		406.20	-13.20	-1.31	481.80	-14.54	-1.20
VUXGKP		416.60	-2.80	-0.28	489.20	-7.14	-0.59
VYU9QZ		423.18	3.78	0.37	504.04	7.70	0.64
WA9HUK		412.20	-7.20	-0.71	489.12	-7.22	-0.60
WEJH6Q		409.00	-10.40	-1.03	480.00	-16.34	-1.35

WebCode	Data Flag	Sample S65 Lab Mean	Sample S65 Diff. from Grand Mean	Sample S65 CPV	Sample S66 Lab Mean	Sample S66 Diff. from Grand Mean	Sample S66 CPV
WEX87H		421.60	2.20	0.22	499.20	2.86	0.24
WNNRBF		423.72	4.32	0.43	508.15	11.81	0.98
XCRYMP		421.86	2.46	0.24	507.80	11.46	0.95
XHGGYF		404.60	-14.80	-1.47	492.40	-3.94	-0.33
XPFYDR		426.84	7.44	0.74	507.64	11.30	0.93
XV2W2E		440.00	20.60	2.04	516.80	20.46	1.69
Y27EDD		418.00	-1.40	-0.14	490.40	-5.94	-0.49
YMQYQG		412.40	-7.00	-0.69	488.00	-8.34	-0.69
YZCNAJ	X	499.80	80.40	7.98	425.40	-70.94	-5.86
ZDZV3D		407.20	-12.20	-1.21	481.20	-15.14	-1.25
ZGXGPA		428.18	8.78	0.87	498.50	2.16	0.18
ZL8PYR		417.64	-1.76	-0.18	497.18	0.84	0.07
ZRRUML		402.60	-16.80	-1.67	492.60	-3.74	-0.31

Summary Statistics

	Sample S65		Sample S66	
Grand Means	419.40	HV 500 gf	496.34	HV 500 gf
Stnd Dev Btwn Labs	10.08	HV 500 gf	12.11	HV 500 gf

Samples S65, S66 : Steel, Steel

Statistics based on 102 of 107 reporting participants

Comments on Assigned Data Flags for Test #1323

2B6RPW (X) - Data for both samples are high.

32CV3M (X) - Inconsistent in testing between samples.

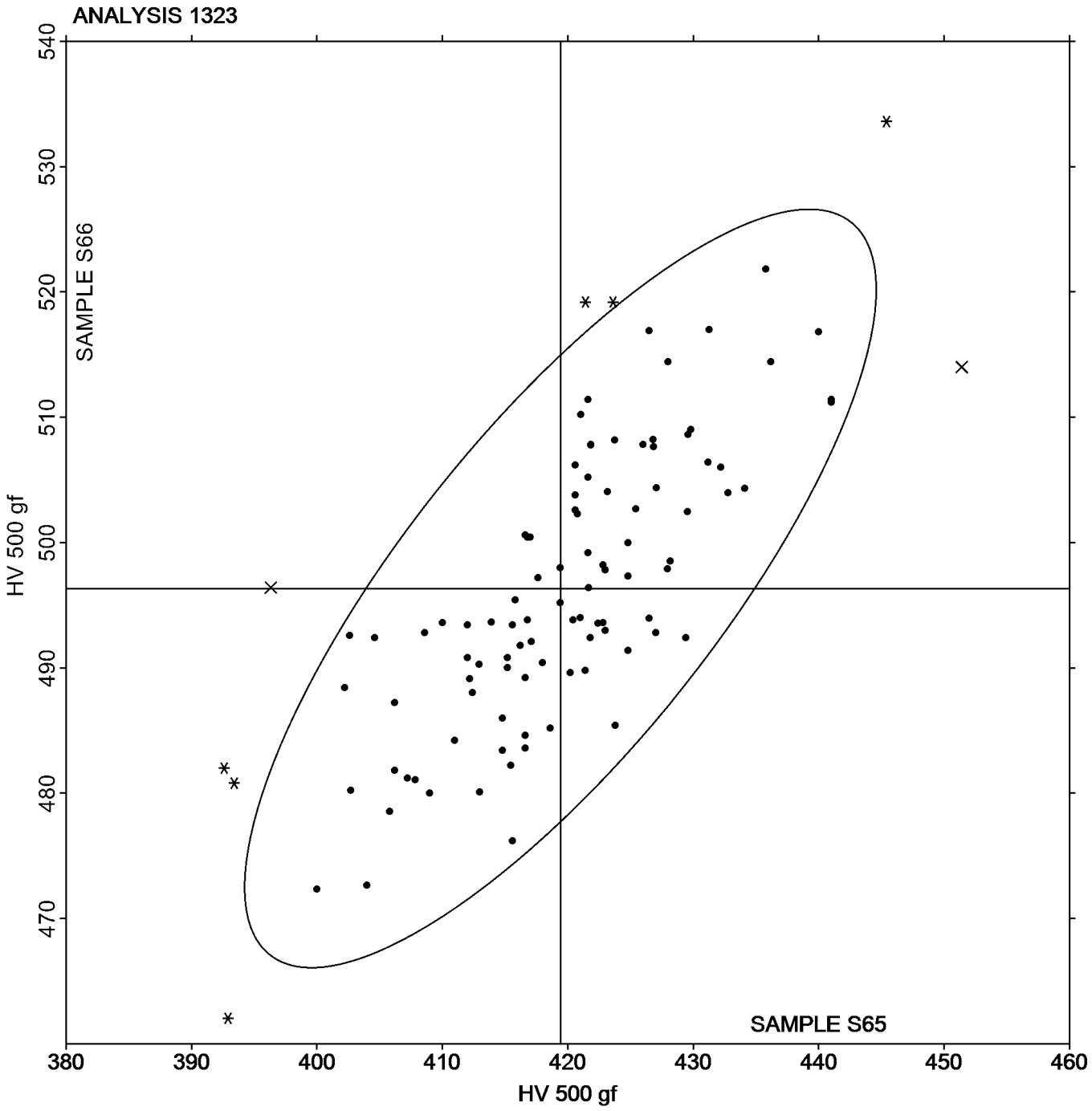
FMAT32 (X) - Data for sample S65 are high.

HXHARA (X) - Data for sample S66 are low.

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

SAMPLE S65
419.40 HV 500 gf

SAMPLE S66
496.34 HV 500 gf



		Sample D65			Sample D66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
22F3RA		375.00	6.01	0.80	429.00	2.65	0.31
22ZLTA		362.20	-6.79	-0.90	427.80	1.45	0.17
2CWMDQ		364.60	-4.39	-0.58	420.00	-6.35	-0.74
3BKB9U		375.20	6.21	0.83	436.80	10.45	1.22
3CW32B		365.60	-3.39	-0.45	425.60	-0.75	-0.09
46N8C9		365.20	-3.79	-0.50	420.80	-5.55	-0.65
4UUMEP		363.00	-5.99	-0.80	426.60	0.25	0.03
6PTZZR		381.40	12.41	1.65	440.40	14.05	1.65
87RYZQ		371.97	2.98	0.40	423.25	-3.10	-0.36
8WPHRA	*	355.60	-13.39	-1.78	401.40	-24.95	-2.93
9VBCP6		352.80	-16.19	-2.16	415.80	-10.55	-1.24
AKL4K9		373.58	4.59	0.61	428.56	2.21	0.26
BR4W9D		363.00	-5.99	-0.80	415.00	-11.35	-1.33
CDEFGX		373.00	4.01	0.53	435.00	8.65	1.01
CJ4WAB		380.40	11.41	1.52	426.20	-0.15	-0.02
CQL393		367.20	-1.79	-0.24	422.40	-3.95	-0.46
CYEL43		363.00	-5.99	-0.80	429.00	2.65	0.31
ECEZG6		380.20	11.21	1.49	429.00	2.65	0.31
ER48AW		365.80	-3.19	-0.42	421.20	-5.15	-0.60
EUV4YQ		365.00	-3.99	-0.53	431.00	4.65	0.54
F4XYE2		363.00	-5.99	-0.80	429.00	2.65	0.31
FMAT32	X	345.00	-23.99	-3.19	435.00	8.65	1.01
GQ46HX		366.00	-2.99	-0.40	425.20	-1.15	-0.13
HJLT3C		367.82	-1.17	-0.16	422.34	-4.01	-0.47
KQFKLP		369.80	0.81	0.11	428.60	2.25	0.26
KXQ78Y	X	388.00	19.01	2.53	415.00	-11.35	-1.33
LFQBFT		363.00	-5.99	-0.80	415.00	-11.35	-1.33
LJQMA8		362.40	-6.59	-0.88	423.20	-3.15	-0.37
LNHQ2Q		367.80	-1.19	-0.16	435.00	8.65	1.01
MK3JEC		366.40	-2.59	-0.34	428.40	2.05	0.24
MM6JFA		367.60	-1.39	-0.18	426.60	0.25	0.03
MU7TL2		364.72	-4.27	-0.57	427.60	1.25	0.15
NKVRZ2		374.73	5.74	0.76	420.77	-5.59	-0.65
NTRQBM		375.00	6.01	0.80	444.00	17.65	2.07
PTMN3U		378.60	9.61	1.28	436.20	9.85	1.15
Q8KZBX		387.00	18.01	2.40	442.80	16.45	1.93
QXX2KT		361.00	-7.99	-1.06	426.00	-0.35	-0.04
R69PPE		366.60	-2.39	-0.32	415.80	-10.55	-1.24
RRQVHV		365.40	-3.59	-0.48	415.80	-10.55	-1.24
T7GECN		375.00	6.01	0.80	429.00	2.65	0.31
TWAHNK		361.00	-7.99	-1.06	418.80	-7.55	-0.89
U4AGEZ		365.80	-3.19	-0.42	432.00	5.65	0.66
U4R8MK		378.00	9.01	1.20	435.00	8.65	1.01
UDVM6C		377.40	8.41	1.12	431.40	5.05	0.59
UKENT3	X	425.20	56.21	7.49	366.80	-59.55	-6.98
UP63BH		357.64	-11.35	-1.51	409.86	-16.49	-1.93
UQG29C		370.40	1.41	0.19	430.40	4.05	0.47

		Sample D65			Sample D66		
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV
VBLUWV		367.00	-1.99	-0.26	430.40	4.05	0.47
VH6ZVN	X	349.80	-19.19	-2.56	388.00	-38.35	-4.50
VP88AQ		367.80	-1.19	-0.16	417.80	-8.55	-1.00
WA9HUK		376.20	7.21	0.96	430.20	3.85	0.45
WEX87H		361.80	-7.19	-0.96	418.80	-7.55	-0.89
WHG29A		374.54	5.55	0.74	432.74	6.39	0.75
WHZ6GA		370.60	1.61	0.21	422.40	-3.95	-0.46
WMG63H		363.00	-5.99	-0.80	415.00	-11.35	-1.33
WNNRBF		384.80	15.81	2.11	444.00	17.65	2.07
X96LE8		381.62	12.63	1.68	434.16	7.81	0.92
XG6YJG		357.80	-11.19	-1.49	414.40	-11.95	-1.40
XRLNEF		376.00	7.01	0.93	435.00	8.65	1.01
XY4W4X		366.60	-2.39	-0.32	433.00	6.65	0.78
Y7YC6P		377.80	8.81	1.17	435.00	8.65	1.01
YVZHUD		375.00	6.01	0.80	429.00	2.65	0.31
YZCNAJ		358.80	-10.19	-1.36	417.60	-8.75	-1.03
ZDY367		364.00	-4.99	-0.66	418.00	-8.35	-0.98

Summary Statistics

	Sample D65		Sample D66	
Grand Means	368.99	HBW	426.35	HBW
Stnd Dev Btwn Labs	7.51	HBW	8.53	HBW

Samples D65, D66 : Steel, Steel

Statistics based on 60 of 64 reporting participants

Samples D65, D66 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

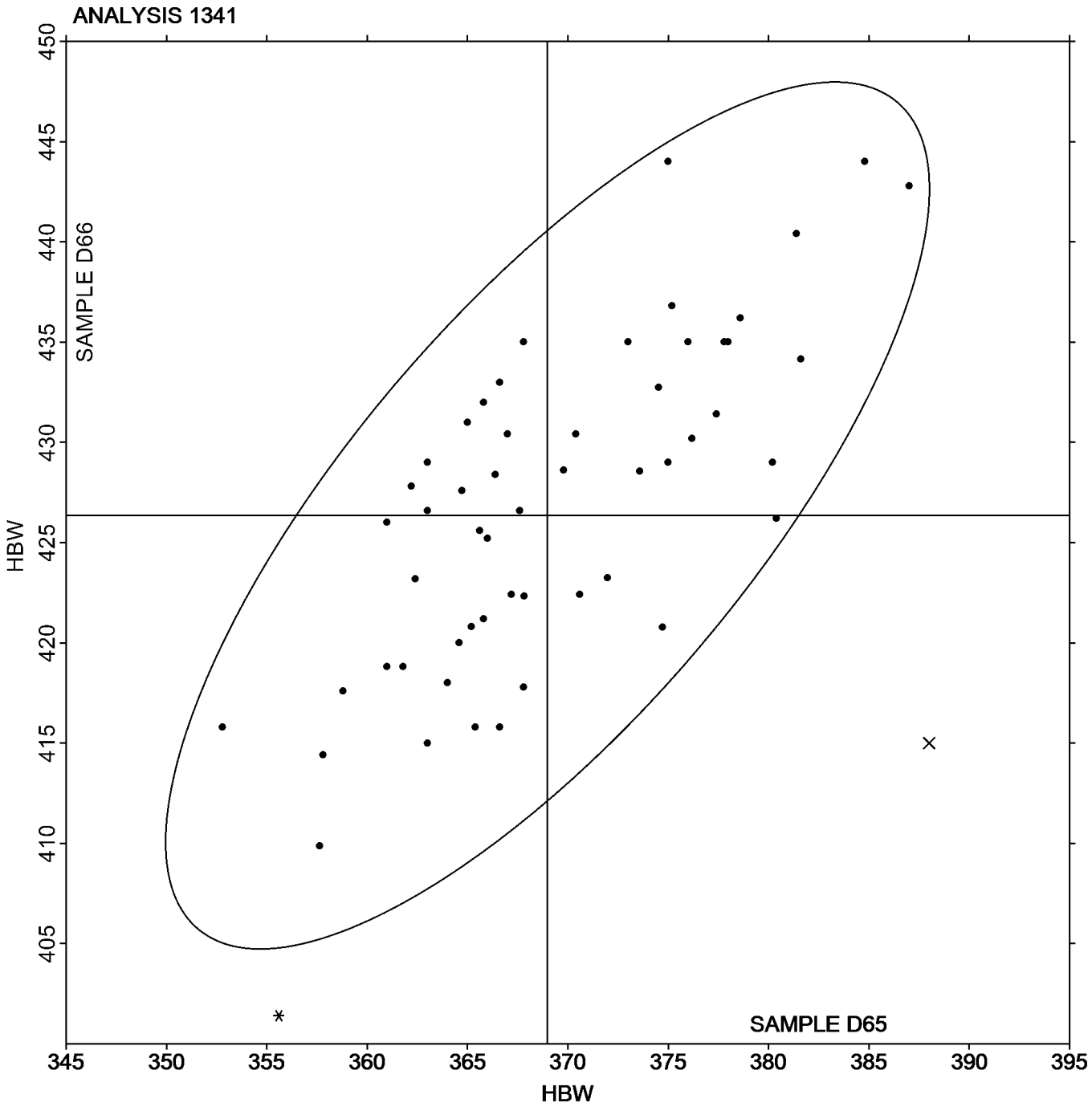
FMAT32 (X) - Data for sample D65 are low.

KXQ78Y (X) - Inconsistent in testing between samples.

UKENT3 (X) - Data appear to be transposed between samples.

VH6ZVN (X) - Data for sample D66 are low. Inconsistent within the determinations of sample D65.

SAMPLE D65	SAMPLE D66
368.99 HBW	426.35 HBW



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA		0.2033	0.0082	0.99	0.2100	0.0106	1.25	CI
26F8LG		0.1951	0.0000	0.00	0.1965	-0.0029	-0.34	AE
2B6RPW		0.1973	0.0022	0.26	0.1950	-0.0044	-0.52	OE
2QG79F	*	0.2087	0.0135	1.63	0.1990	-0.0004	-0.05	XX
3AQK3F		0.1927	-0.0025	-0.30	0.1947	-0.0047	-0.56	OE
3CW32B		0.1918	-0.0033	-0.40	0.1973	-0.0021	-0.25	OE
3EZXKE		0.1956	0.0005	0.06	0.1990	-0.0004	-0.05	CI
4EDV8B		0.1993	0.0041	0.50	0.2046	0.0052	0.61	OE
4UUMEP		0.1998	0.0047	0.56	0.2050	0.0056	0.66	OE
6PTZZR		0.1933	-0.0018	-0.22	0.1963	-0.0031	-0.36	OE
6X8MBG		0.1916	-0.0036	-0.43	0.1953	-0.0041	-0.49	CI
6Y43LT		0.1920	-0.0031	-0.38	0.1977	-0.0017	-0.21	CI
78QKD7		0.1777	-0.0175	-2.11	0.1823	-0.0171	-2.02	OE
7GWRR7		0.1915	-0.0037	-0.44	0.1926	-0.0068	-0.81	OE
7H7ENY		0.2012	0.0061	0.73	0.1987	-0.0007	-0.08	OE
7NTMRP		0.1954	0.0002	0.03	0.1983	-0.0011	-0.13	OE
7YY6QN		0.1917	-0.0035	-0.42	0.2013	0.0019	0.23	CI
8EM333		0.1977	0.0025	0.30	0.2070	0.0076	0.90	OE
99D2JK	M	0.1940	-0.0011	-0.14	No Data Reported			OE
9D8VJ7		0.1912	-0.0040	-0.48	0.1982	-0.0012	-0.15	CO
9RM622		0.1922	-0.0029	-0.35	0.1960	-0.0034	-0.40	OE
9XWGYN		0.2063	0.0112	1.35	0.2073	0.0079	0.94	OE
A2RCF2		0.2080	0.0129	1.55	0.2037	0.0043	0.50	XX
AF7VW9	X	0.2349	0.0397	4.79	0.2436	0.0442	5.24	OE
B4UPGZ		0.1857	-0.0095	-1.14	0.1837	-0.0157	-1.86	OE
BAYPUB		0.1997	0.0046	0.55	0.2035	0.0041	0.48	OE
BHANNL		0.1973	0.0022	0.26	0.2007	0.0013	0.15	OE
BNZ2PA	X	0.2397	0.0445	5.37	0.2147	0.0153	1.81	OE
C6HG7B		0.1937	-0.0015	-0.18	0.1897	-0.0097	-1.15	OE
CFXD33		0.1800	-0.0152	-1.83	0.1840	-0.0154	-1.82	OE
CJ4WAB		0.1907	-0.0045	-0.54	0.1980	-0.0014	-0.17	IR
CPAP47		0.2118	0.0167	2.01	0.2123	0.0129	1.53	OE
D3RMZU		0.1843	-0.0108	-1.30	0.1917	-0.0077	-0.91	CI
DPKNXF		0.1857	-0.0095	-1.14	0.1847	-0.0147	-1.75	XX
E34XV6		0.1937	-0.0015	-0.18	0.2003	0.0009	0.11	GD
EEJNYG		0.1952	0.0001	0.01	0.1985	-0.0009	-0.11	OE
EHJYRV		0.1947	-0.0005	-0.06	0.1973	-0.0021	-0.25	OE
EUV4YQ		0.2134	0.0183	2.20	0.2140	0.0146	1.73	OE
FHGNCH		0.1877	-0.0075	-0.90	0.1943	-0.0051	-0.60	CO
FMAT32		0.1900	-0.0051	-0.62	0.1967	-0.0027	-0.32	OE
G72UX6		0.1883	-0.0068	-0.82	0.1927	-0.0067	-0.80	CO
GRWVNC		0.1943	-0.0008	-0.10	0.2070	0.0076	0.90	CI
GTCU82	*	0.1850	-0.0101	-1.22	0.2043	0.0049	0.58	OE
H3B7L3		0.1881	-0.0071	-0.85	0.1919	-0.0075	-0.89	OE
H8RE6Z		0.2040	0.0089	1.07	0.2107	0.0113	1.33	OE
H9YUB7		0.1930	-0.0021	-0.26	0.1997	0.0003	0.03	OE
HB7CA3		0.1970	0.0019	0.22	0.2030	0.0036	0.43	IR

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
HXHARA	X	0.2167	0.0215	2.59	0.2323	0.0329	3.90	OE
KGTLW6		0.1981	0.0030	0.36	0.2038	0.0044	0.52	XX
KMVWKP		0.1960	0.0009	0.10	0.1933	-0.0061	-0.72	OE
L3YQRP		0.1927	-0.0025	-0.30	0.1927	-0.0067	-0.80	CI
LJN2ER		0.2017	0.0065	0.79	0.2073	0.0079	0.94	XX
LNHQ2Q		0.2100	0.0149	1.79	0.2100	0.0106	1.25	OE
LPWF44		0.1909	-0.0043	-0.52	0.1925	-0.0069	-0.82	OE
M6NBE9		0.1970	0.0019	0.22	0.2021	0.0027	0.32	OE
MAFM8J		0.1866	-0.0085	-1.03	0.1985	-0.0009	-0.11	OE
MBV494		0.1833	-0.0118	-1.42	0.1883	-0.0111	-1.31	OE
MK3JEC		0.1850	-0.0101	-1.22	0.1917	-0.0077	-0.92	OE
MKY4ZQ		0.1910	-0.0041	-0.50	0.1960	-0.0034	-0.40	CI
MU7TL2		0.1967	0.0015	0.18	0.1997	0.0003	0.03	OE
NKVRZ2		0.2010	0.0059	0.71	0.2050	0.0056	0.66	OE
NTRQBM		0.1933	-0.0018	-0.22	0.1967	-0.0027	-0.32	CI
P9CWX8		0.2013	0.0062	0.75	0.2037	0.0043	0.50	OE
PBMN7M		0.2019	0.0068	0.81	0.2145	0.0151	1.78	OE
Q8ZJVV		0.1960	0.0009	0.10	0.2083	0.0089	1.06	XX
QEHPR3		0.2177	0.0225	2.72	0.2177	0.0183	2.16	XX
QN6VHE		0.2037	0.0085	1.03	0.2063	0.0069	0.82	OE
QQB99T		0.1967	0.0015	0.18	0.2067	0.0073	0.86	GD
QXX2KT		0.1950	-0.0001	-0.02	0.1976	-0.0018	-0.22	OE
R69PPE		0.1977	0.0025	0.30	0.1997	0.0003	0.03	OE
R8GZLH		0.1917	-0.0035	-0.42	0.1980	-0.0014	-0.17	CI
RF8HZQ		0.2000	0.0049	0.59	0.2090	0.0096	1.14	OE
RLCGD2		0.1892	-0.0059	-0.71	0.1942	-0.0052	-0.62	OE
RLWZCG		0.1877	-0.0075	-0.90	0.1880	-0.0114	-1.35	OE
RRQVHV	*	0.1930	-0.0021	-0.26	0.1837	-0.0157	-1.86	OE
RZENQK		0.1943	-0.0008	-0.10	0.1963	-0.0031	-0.36	AE
UGHYCV		0.1903	-0.0048	-0.58	0.1957	-0.0037	-0.44	OE
UUZUJE	*	0.2087	0.0135	1.63	0.2209	0.0215	2.54	OE
UVYVRR		0.2007	0.0055	0.66	0.2035	0.0041	0.48	OE
V3QW6M		0.1830	-0.0121	-1.46	0.1883	-0.0111	-1.31	OE
V3RMDQ		0.1943	-0.0008	-0.10	0.2013	0.0019	0.23	CI
VH6ZVN		0.1887	-0.0065	-0.78	0.1950	-0.0044	-0.52	CO
VUXGKP		0.2110	0.0159	1.91	0.2040	0.0046	0.54	OE
WNNRBF		0.1967	0.0015	0.18	0.2000	0.0006	0.07	OE
WPFNXN		0.1810	-0.0141	-1.70	0.1870	-0.0124	-1.47	OE
XG6YJG		0.1863	-0.0088	-1.06	0.1983	-0.0011	-0.13	GD
XV2W2E	*	0.2127	0.0175	2.11	0.2240	0.0246	2.91	XX
XXA7XH		0.1984	0.0032	0.39	0.2064	0.0070	0.83	OE
YMQYQG		0.1929	-0.0022	-0.27	0.2019	0.0025	0.30	CI
YX9TQG		0.1904	-0.0048	-0.58	0.1956	-0.0038	-0.45	OE
ZB77FC		0.2116	0.0164	1.98	0.2079	0.0085	1.00	OE
ZGXGPA	*	0.1727	-0.0225	-2.71	0.1760	-0.0234	-2.77	OE
ZMJ8C6		0.1939	-0.0012	-0.15	0.1948	-0.0046	-0.55	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.1951	Percent	0.1994	Percent
Stnd Dev Btwn Labs	0.0083	Percent	0.0084	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 86 of 93 reporting participants

Key to Method Codes Reported by Participants

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

Comments on Assigned Data Flags for Test #1600

99D2JK (M) - Participant did not submit data for sample L66.

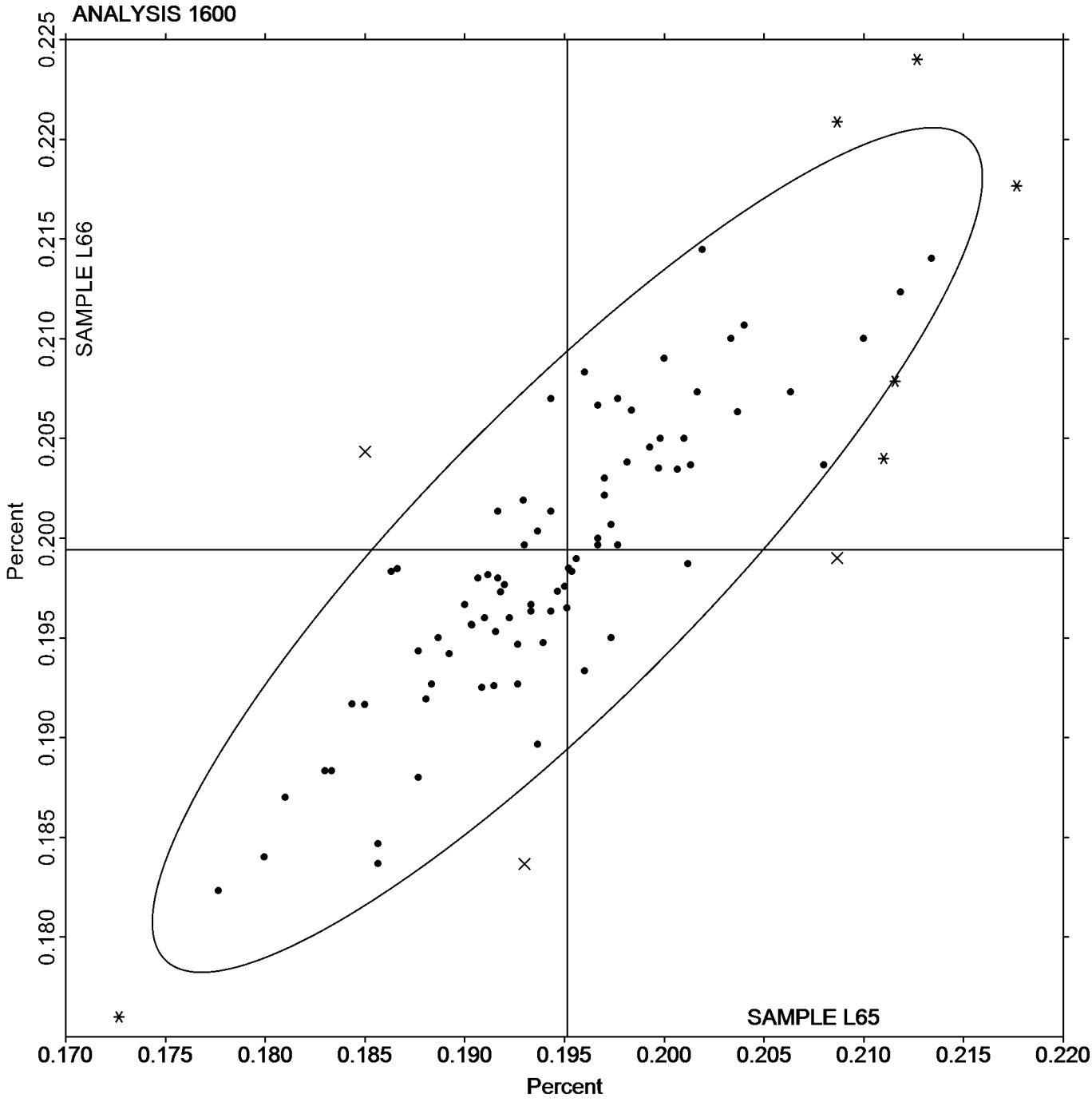
AF7VW9 (X) - Data for both samples are high. Possible Systematic Error.

BNZ2PA (X) - Data for sample L65 are high.

HXHARA (X) - Data for sample L66 are high.

SAMPLE L65
0.1951 Percent

SAMPLE L66
0.1994 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA	*	0.8400	0.0356	2.94	1.047	0.0469	2.81	IC
26F8LG		0.8002	-0.0042	-0.35	0.9929	-0.0068	-0.41	AE
2B6RPW	X	0.7700	-0.0344	-2.84	0.9893	-0.0104	-0.62	OE
2QG79F		0.8053	0.0009	0.07	1.003	0.0033	0.20	XX
3AQK3F		0.8003	-0.0041	-0.34	1.002	0.0026	0.16	OE
3CW32B		0.8121	0.0077	0.64	0.9973	-0.0024	-0.14	OE
3EZXKE		0.8067	0.0022	0.18	0.9747	-0.0251	-1.50	OE
4EDV8B		0.8006	-0.0038	-0.32	0.9971	-0.0026	-0.16	OE
4UUMEP		0.8197	0.0153	1.26	1.026	0.0258	1.55	OE
6PTZZR		0.7900	-0.0144	-1.19	0.9970	-0.0027	-0.16	OE
6X8MBG		0.8050	0.0006	0.05	0.9977	-0.0021	-0.12	OE
6Y43LT		0.8140	0.0096	0.79	0.9983	-0.0014	-0.08	AE
78QKD7		0.7840	-0.0204	-1.69	0.9873	-0.0124	-0.74	OE
7GWRR7		0.8028	-0.0017	-0.14	0.9866	-0.0131	-0.78	OE
7H7ENY		0.8203	0.0159	1.31	0.9965	-0.0032	-0.19	OE
7NTMRP		0.8035	-0.0010	-0.08	0.9967	-0.0030	-0.18	OE
7YY6QN		0.8137	0.0092	0.76	1.004	0.0039	0.24	IC
8EM333		0.8067	0.0022	0.18	0.9967	-0.0031	-0.18	OE
99D2JK		0.8093	0.0049	0.41	1.025	0.0256	1.53	OE
9D8VJ7		0.7970	-0.0074	-0.61	0.9980	-0.0018	-0.11	OE
9RM622		0.8322	0.0278	2.29	1.044	0.0442	2.65	OE
9XWGYN		0.8060	0.0016	0.13	1.001	0.0013	0.08	OE
A2RCF2		0.8280	0.0236	1.95	1.030	0.0303	1.81	XX
AF7VW9	X	0.7633	-0.0411	-3.40	0.9679	-0.0318	-1.91	OE
B4UPGZ		0.7923	-0.0121	-1.00	0.9820	-0.0177	-1.06	OE
BAYPUB		0.8077	0.0033	0.27	1.001	0.0015	0.09	OE
BHANNL		0.7973	-0.0071	-0.59	0.9930	-0.0067	-0.40	OE
BNZ2PA		0.8190	0.0146	1.20	0.9863	-0.0134	-0.80	OE
C6HG7B		0.7980	-0.0064	-0.53	0.9883	-0.0114	-0.68	OE
CFXD33		0.8066	0.0021	0.18	1.022	0.0218	1.30	OE
CJ4WAB		0.7987	-0.0058	-0.48	0.9893	-0.0104	-0.62	OE
CPAP47		0.8144	0.0100	0.82	1.005	0.0049	0.29	OE
D3RMZU		0.8079	0.0034	0.28	0.9999	0.0002	0.01	OE
DPKNXF		0.8233	0.0189	1.56	1.020	0.0203	1.21	XX
E34XV6		0.8067	0.0022	0.18	1.002	0.0019	0.12	GD
EEJNYG		0.8034	-0.0011	-0.09	0.9993	-0.0005	-0.03	OE
EHJYRV		0.8033	-0.0011	-0.09	0.9947	-0.0051	-0.30	OE
EUV4YQ		0.7978	-0.0066	-0.55	1.003	0.0037	0.22	OE
FHGNCH		0.8017	-0.0028	-0.23	1.001	0.0016	0.10	IC
FMAT32		0.8100	0.0056	0.46	1.000	0.0003	0.02	OE
G72UX6		0.8047	0.0002	0.02	0.9853	-0.0144	-0.86	OE
GRWVNC		0.8007	-0.0038	-0.31	1.009	0.0093	0.56	IC
GTCU82		0.8063	0.0019	0.16	0.9887	-0.0111	-0.66	OE
H3B7L3		0.7919	-0.0125	-1.03	0.9891	-0.0106	-0.63	OE
H8RE6Z		0.8030	-0.0014	-0.12	0.9947	-0.0051	-0.30	OE
H9YUB7		0.8073	0.0029	0.24	1.009	0.0096	0.58	OE
HB7CA3		0.7980	-0.0064	-0.53	0.9937	-0.0061	-0.36	IC

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
HXHARA		0.7823	-0.0221	-1.83	0.9930	-0.0067	-0.40	IC
KGTLW6		0.7812	-0.0232	-1.92	0.9738	-0.0259	-1.55	XX
KMVWKP		0.8110	0.0066	0.54	1.006	0.0066	0.40	OE
L3YQRP		0.8187	0.0142	1.18	1.030	0.0303	1.81	OE
LJN2ER		0.7848	-0.0197	-1.62	0.9802	-0.0195	-1.17	OE
LNHQ2Q		0.8100	0.0056	0.46	1.010	0.0103	0.62	OE
LPWF44		0.8049	0.0004	0.04	0.9914	-0.0083	-0.50	OE
M6NBE9		0.8003	-0.0042	-0.34	0.9928	-0.0069	-0.41	OE
MAFM8J		0.7925	-0.0120	-0.99	0.9972	-0.0025	-0.15	OE
MBV494		0.7880	-0.0164	-1.36	0.9867	-0.0131	-0.78	OE
MK3JEC		0.8017	-0.0028	-0.23	0.9983	-0.0014	-0.08	OE
MKY4ZQ		0.7963	-0.0081	-0.67	0.9810	-0.0187	-1.12	IC
MU7TL2		0.8049	0.0004	0.04	0.9970	-0.0027	-0.16	OE
NKVRZ2		0.7967	-0.0078	-0.64	0.9800	-0.0197	-1.18	OE
NTRQBM		0.8027	-0.0018	-0.15	1.017	0.0169	1.01	DR
P9CWX8		0.8010	-0.0034	-0.28	0.9823	-0.0174	-1.04	OE
PBMN7M		0.8106	0.0062	0.51	1.000	0.0004	0.03	OE
Q8ZJVV		0.7973	-0.0071	-0.59	0.9920	-0.0077	-0.46	XX
QEHPR3		0.8173	0.0129	1.07	1.016	0.0159	0.96	XX
QN6VHE		0.8070	0.0026	0.21	1.003	0.0036	0.22	OE
QQB99T	*	0.8400	0.0356	2.94	1.047	0.0469	2.81	GD
QXX2KT		0.8064	0.0019	0.16	0.9980	-0.0018	-0.11	OE
R69PPE		0.8083	0.0039	0.32	0.9950	-0.0047	-0.28	OE
R8GZLH		0.8123	0.0078	0.65	1.008	0.0080	0.48	OE
RF8HZQ		0.7957	-0.0088	-0.72	0.9870	-0.0127	-0.76	OE
RLCGD2		0.7851	-0.0193	-1.60	0.9763	-0.0234	-1.40	OE
RLWZCG	*	0.8297	0.0252	2.08	1.051	0.0513	3.07	OE
RRQVHV		0.8000	-0.0044	-0.37	0.9733	-0.0264	-1.58	OE
RZENQK		0.7963	-0.0081	-0.67	1.006	0.0059	0.36	AE
UGHYCV		0.7947	-0.0098	-0.81	0.9883	-0.0114	-0.68	OE
UUZUJE	*	0.7750	-0.0294	-2.43	0.9756	-0.0242	-1.45	OE
UVYVRR		0.8116	0.0072	0.59	1.004	0.0043	0.26	OE
V3QW6M		0.7907	-0.0138	-1.14	0.9793	-0.0204	-1.22	OE
V3RMDQ		0.8030	-0.0014	-0.12	0.9917	-0.0081	-0.48	OE
VH6ZVN		0.7880	-0.0164	-1.36	0.9810	-0.0187	-1.12	OE
VUXGKP	*	0.8190	0.0146	1.20	1.043	0.0436	2.61	OE
WNNRBF		0.7900	-0.0144	-1.19	0.9967	-0.0031	-0.18	OE
WPFNXN		0.8000	-0.0044	-0.37	0.9900	-0.0097	-0.58	OE
XG6YJG	*	0.8120	0.0076	0.63	0.9653	-0.0344	-2.06	GD
XV2W2E		0.7900	-0.0144	-1.19	0.9923	-0.0074	-0.44	XX
XXA7XH		0.8016	-0.0028	-0.23	1.003	0.0036	0.21	OE
YX9TQG		0.8120	0.0076	0.63	0.9982	-0.0015	-0.09	OE
ZB77FC		0.8161	0.0117	0.97	1.007	0.0070	0.42	OE
ZGXGPA		0.8057	0.0012	0.10	0.9863	-0.0134	-0.80	OE
ZMJ8C6		0.8166	0.0122	1.01	1.016	0.0158	0.95	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.8044	Percent	0.9997	Percent
Stnd Dev Btwn Labs	0.0121	Percent	0.0167	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 89 of 92 reporting participants

Key to Method Codes Reported by Participants

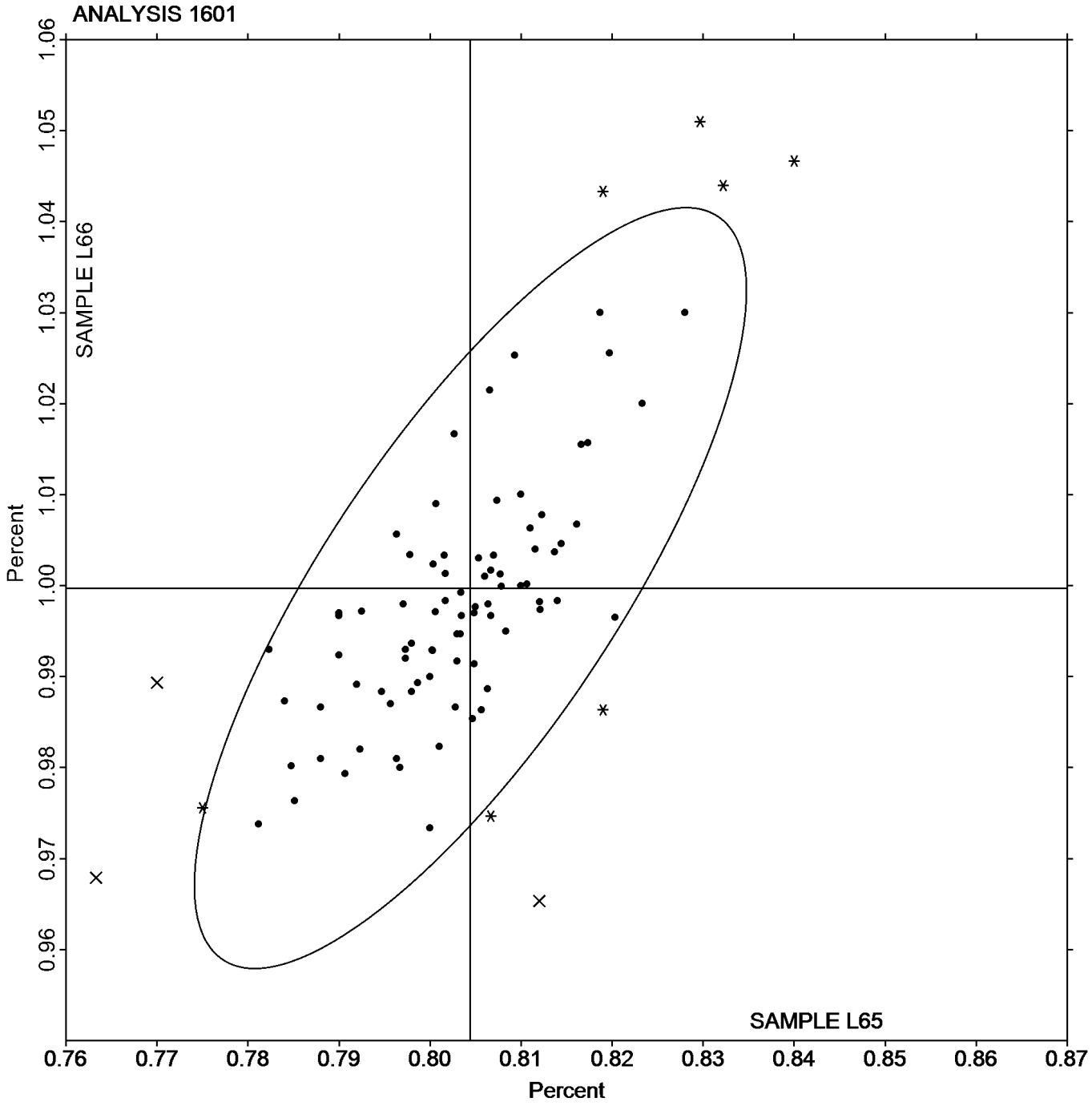
AE	Spectrometry - Atomic Emission (AES)	DR	Spectrometry - Direct Reading OE (DROES)
GD	Spectrometry - Glow Discharge (GDS)	IC	Spectrometry - Inductively Coupled Plasma (ICP)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1601

2B6RPW (X) - Data for sample L65 are low.

AF7VW9 (X) - Data for sample L65 are low.

SAMPLE L65	SAMPLE L66
0.8044 Percent	0.9997 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA		0.0110	0.0005	0.42	0.0313	-0.0012	-0.58	IC
26F8LG		0.0123	0.0018	1.57	0.0376	0.0051	2.52	AE
2B6RPW		0.0103	-0.0003	-0.22	0.0314	-0.0011	-0.53	OE
2QG79F		0.0113	0.0008	0.72	0.0327	0.0002	0.08	XX
3AQK3F		0.0110	0.0005	0.42	0.0340	0.0015	0.74	OE
3CW32B		0.00987	-0.0007	-0.57	0.0331	0.0006	0.31	OE
3EZXKE		0.0101	-0.0004	-0.34	0.0352	0.0027	1.33	OE
4EDV8B		0.0112	0.0007	0.63	0.0345	0.0020	0.98	OE
4UUMEP		0.0106	0.0000	0.04	0.0344	0.0019	0.94	OE
6PTZZR		0.0104	-0.0002	-0.13	0.0380	0.0055	2.74	OE
6X8MBG		0.0110	0.0004	0.39	0.0325	0.0000	-0.01	OE
6Y43LT		0.0105	0.0000	0.01	0.0338	0.0013	0.65	AE
78QKD7		0.00853	-0.0020	-1.74	0.0338	0.0013	0.65	OE
7GWRR7		0.0109	0.0003	0.30	0.0283	-0.0042	-2.07	OE
7H7ENY		0.0106	0.0001	0.10	0.0311	-0.0014	-0.70	OE
7NTMRP		0.0115	0.0010	0.86	0.0332	0.0007	0.35	OE
7YY6QN		0.0106	0.0001	0.10	0.0341	0.0016	0.80	IC
8EM333		0.0100	-0.0005	-0.45	0.0327	0.0002	0.08	OE
99D2JK		0.00967	-0.0009	-0.75	0.0312	-0.0013	-0.63	OE
9D8VJ7		0.0101	-0.0005	-0.40	0.0332	0.0007	0.34	OE
9RM622		0.0113	0.0008	0.69	0.0296	-0.0029	-1.44	OE
9XWGYN		0.00987	-0.0007	-0.57	0.0310	-0.0015	-0.77	OE
A2RCF2		0.0123	0.0018	1.60	0.0320	-0.0005	-0.25	XX
AF7VW9		0.0123	0.0017	1.54	0.0324	-0.0001	-0.04	OE
B4UPGZ		0.0111	0.0006	0.51	0.0348	0.0023	1.12	OE
BAYPUB		0.0118	0.0013	1.13	0.0339	0.0014	0.67	OE
BHANNL		0.0104	-0.0002	-0.13	0.0318	-0.0007	-0.35	OE
BNZ2PA	X	0.0118	0.0012	1.10	0.0200	-0.0125	-6.18	OE
C6HG7B		0.0103	-0.0002	-0.16	0.0297	-0.0028	-1.41	OE
CFXD33		0.00957	-0.0010	-0.84	0.0276	-0.0049	-2.45	OE
CJ4WAB		0.0108	0.0003	0.28	0.0325	0.0000	-0.01	OE
CPAP47		0.0118	0.0013	1.13	0.0320	-0.0005	-0.25	OE
D3RMZU		0.0102	-0.0003	-0.28	0.0323	-0.0002	-0.12	OE
DPKNXF	X	0.00667	-0.0039	-3.38	0.0280	-0.0045	-2.24	XX
E34XV6		0.0134	0.0029	2.53	0.0341	0.0016	0.79	GD
EEJNYG		0.0108	0.0003	0.25	0.0326	0.0001	0.03	OE
EHJYRV		0.0108	0.0002	0.22	0.0325	0.0000	0.01	OE
EUV4YQ		0.0119	0.0014	1.21	0.0339	0.0014	0.70	OE
FHGNCH		0.00973	-0.0008	-0.69	0.0311	-0.0014	-0.72	IC
FMAT32		0.0110	0.0005	0.42	0.0333	0.0008	0.41	OE
G72UX6		0.0100	-0.0005	-0.45	0.0317	-0.0008	-0.42	OE
GRWVNC		0.0100	-0.0005	-0.45	0.0317	-0.0008	-0.39	IC
GTCU82		0.0117	0.0011	1.01	0.0293	-0.0032	-1.58	OE
H3B7L3		0.0103	-0.0002	-0.19	0.0298	-0.0027	-1.34	OE
H8RE6Z		0.0120	0.0015	1.30	0.0343	0.0018	0.90	OE
H9YUB7		0.0103	-0.0002	-0.16	0.0314	-0.0011	-0.57	OE
HB7CA3		0.0106	0.0001	0.07	0.0356	0.0031	1.53	IC

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
HXHARA		0.0112	0.0006	0.57	0.0313	-0.0012	-0.62	IC
KGTLW6		0.0102	-0.0003	-0.30	0.0326	0.0001	0.05	XX
KMVWKP	*	0.00703	-0.0035	-3.06	0.0307	-0.0018	-0.88	OE
L3YQRP	X	0.0113	0.0008	0.69	0.0210	-0.0115	-5.70	OE
LJN2ER		0.00983	-0.0007	-0.60	0.0323	-0.0002	-0.11	OE
LNHQ2Q		0.0110	0.0005	0.42	0.0337	0.0012	0.57	OE
LPWF44	*	0.00730	-0.0032	-2.83	0.0331	0.0006	0.31	OE
M6NBE9		0.00977	-0.0008	-0.66	0.0311	-0.0014	-0.70	OE
MAFM8J		0.00863	-0.0019	-1.66	0.0276	-0.0049	-2.42	OE
MBV494		0.0104	-0.0001	-0.07	0.0350	0.0025	1.23	OE
MK3JEC		0.00990	-0.0006	-0.54	0.0310	-0.0015	-0.77	OE
MKY4ZQ		0.0100	-0.0005	-0.43	0.0331	0.0006	0.29	IC
MU7TL2		0.0107	0.0002	0.19	0.0340	0.0015	0.74	OE
NKVRZ2		0.0100	-0.0005	-0.45	0.0327	0.0002	0.08	OE
NTRQBM		0.0110	0.0005	0.42	0.0351	0.0026	1.27	DR
P9CWX8		0.0100	-0.0005	-0.43	0.0327	0.0002	0.08	OE
PBMN7M		0.00853	-0.0020	-1.74	0.0319	-0.0006	-0.29	OE
Q8ZJVV		0.0107	0.0001	0.13	0.0357	0.0032	1.56	XX
QEHPR3		0.0107	0.0001	0.13	0.0343	0.0018	0.90	XX
QN6VHE		0.0129	0.0024	2.12	0.0334	0.0009	0.42	OE
QQB99T		0.00967	-0.0009	-0.75	0.0307	-0.0018	-0.91	GD
QXX2KT		0.0104	-0.0001	-0.10	0.0346	0.0021	1.02	OE
R69PPE		0.0110	0.0005	0.45	0.0336	0.0011	0.52	OE
R8GZLH		0.0104	-0.0001	-0.12	0.0319	-0.0006	-0.30	OE
RF8HZQ		0.0103	-0.0002	-0.16	0.0337	0.0012	0.57	OE
RLCGD2		0.00963	-0.0009	-0.78	0.0309	-0.0016	-0.78	OE
RLWZCG		0.00900	-0.0015	-1.33	0.0297	-0.0028	-1.41	OE
RRQVHV		0.0113	0.0008	0.72	0.0323	-0.0002	-0.09	OE
RZENQK		0.0127	0.0022	1.95	0.0330	0.0005	0.24	AE
UGHYCV		0.0100	-0.0005	-0.45	0.0330	0.0005	0.24	OE
UUZUJE		0.00890	-0.0016	-1.42	0.0342	0.0017	0.84	OE
UVYVRR		0.0111	0.0006	0.50	0.0323	-0.0002	-0.11	OE
V3QW6M		0.0103	-0.0002	-0.16	0.0293	-0.0032	-1.58	OE
V3RMDQ		0.00943	-0.0011	-0.95	0.0314	-0.0011	-0.53	OE
VH6ZVN		0.0106	0.0001	0.10	0.0333	0.0008	0.37	OE
VUXGKP	*	0.0139	0.0034	2.97	0.0326	0.0001	0.03	OE
WNNRBF		0.0100	-0.0005	-0.45	0.0353	0.0028	1.40	OE
WPFNXN		0.0110	0.0005	0.42	0.0310	-0.0015	-0.75	OE
XG6YJG		0.0120	0.0015	1.30	0.0320	-0.0005	-0.25	GD
XV2W2E		0.0108	0.0003	0.25	0.0304	-0.0021	-1.06	XX
XXA7XH		0.00990	-0.0006	-0.54	0.0370	0.0045	2.22	OE
YX9TQG		0.0100	-0.0005	-0.45	0.0312	-0.0013	-0.67	OE
ZB77FC		0.00983	-0.0007	-0.60	0.0321	-0.0004	-0.22	OE
ZGXGPA		0.00813	-0.0024	-2.10	0.0276	-0.0049	-2.45	OE
ZMJ8C6		0.0100	-0.0005	-0.43	0.0323	-0.0002	-0.09	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.0105	Percent	0.0325	Percent
Stnd Dev Btwn Labs	0.0011	Percent	0.0020	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 89 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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1602

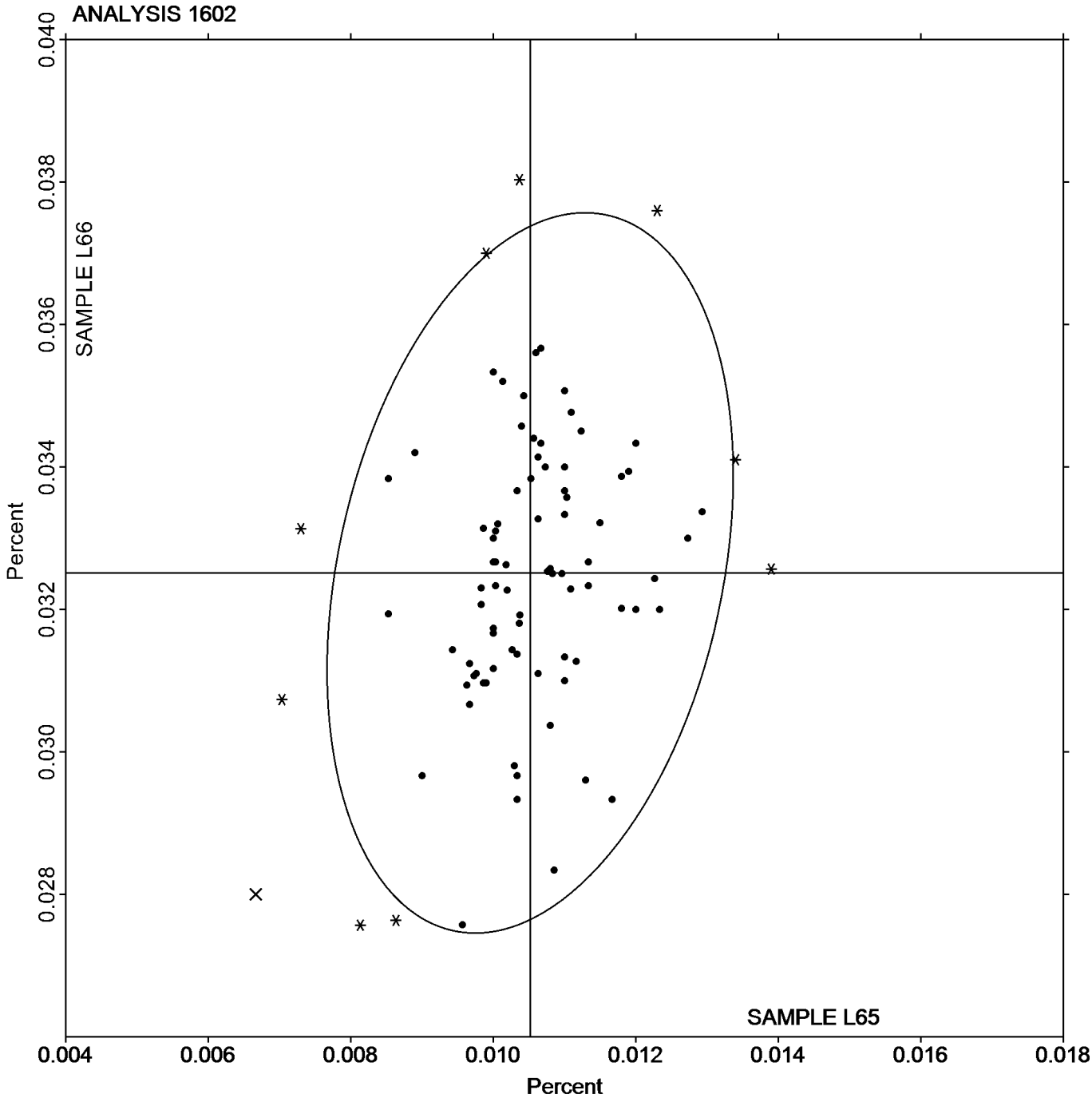
BNZ2PA (X) - Data for sample L66 are low. Inconsistent within the determinations of sample L66.

DPKNXF (X) - Data for sample L65 are low.

L3YQRP (X) - Data for sample L66 are low.

SAMPLE L65
0.0105 Percent

SAMPLE L66
0.0325 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA		0.0313	-0.0008	-0.27	0.0187	-0.0018	-0.82	CI
26F8LG		0.0306	-0.0015	-0.53	0.0189	-0.0015	-0.71	AE
2B6RPW		0.0380	0.0059	2.08	0.0216	0.0012	0.57	OE
2QG79F		0.0380	0.0059	2.08	0.0233	0.0029	1.36	XX
3AQK3F		0.0330	0.0009	0.32	0.0210	0.0006	0.27	OE
3CW32B		0.0336	0.0015	0.52	0.0207	0.0002	0.12	OE
3EZXKE		0.0326	0.0005	0.17	0.0197	-0.0007	-0.34	CI
4EDV8B		0.0335	0.0014	0.49	0.0220	0.0016	0.74	OE
4UUMEP		0.0333	0.0012	0.44	0.0227	0.0023	1.08	OE
6PTZZR		0.0316	-0.0005	-0.19	0.0218	0.0014	0.65	OE
6X8MBG		0.0321	0.0000	-0.01	0.0204	0.0000	0.01	CI
6Y43LT		0.0309	-0.0012	-0.41	0.0188	-0.0016	-0.74	CI
78QKD7		0.0329	0.0008	0.27	0.0198	-0.0007	-0.30	OE
7GWRR7		0.0346	0.0025	0.88	0.0187	-0.0017	-0.80	OE
7H7ENY		0.0267	-0.0054	-1.91	0.0171	-0.0033	-1.55	OE
7NTMRP		0.0322	0.0001	0.03	0.0208	0.0004	0.19	OE
7YY6QN		0.0300	-0.0021	-0.75	0.0205	0.0001	0.04	CI
8EM333		0.0320	-0.0001	-0.03	0.0210	0.0006	0.27	XX
99D2JK	M	0.0283	-0.0038	-1.33	No Data Reported			OE
9D8VJ7		0.0343	0.0022	0.79	0.0218	0.0014	0.66	CO
9RM622		0.0320	-0.0001	-0.03	0.0199	-0.0006	-0.26	OE
9XWGYN		0.0312	-0.0009	-0.32	0.0191	-0.0014	-0.63	OE
A2RCF2	X	0.0450	0.0129	4.55	0.0267	0.0062	2.92	XX
AF7VW9		0.0316	-0.0005	-0.19	0.0198	-0.0006	-0.27	OE
B4UPGZ		0.0333	0.0012	0.44	0.0210	0.0006	0.27	OE
BAYPUB		0.0323	0.0002	0.07	0.0205	0.0001	0.05	OE
BHANNL		0.0321	0.0000	-0.01	0.0203	-0.0001	-0.04	OE
BNZ2PA		0.0337	0.0016	0.58	0.0211	0.0007	0.33	OE
C6HG7B		0.0310	-0.0011	-0.39	0.0180	-0.0024	-1.13	OE
CFXD33		0.0347	0.0026	0.92	0.0221	0.0017	0.79	OE
CJ4WAB		0.0318	-0.0003	-0.10	0.0206	0.0002	0.10	IR
CPAP47		0.0373	0.0052	1.82	0.0243	0.0039	1.80	OE
D3RMZU		0.0294	-0.0027	-0.94	0.0185	-0.0019	-0.89	CI
DPKNXF		0.0297	-0.0024	-0.86	0.0180	-0.0024	-1.13	XX
E34XV6		0.0336	0.0015	0.52	0.0203	-0.0001	-0.05	GD
EEJNYG		0.0325	0.0004	0.13	0.0207	0.0003	0.13	OE
EHJYRV		0.0358	0.0037	1.31	0.0228	0.0024	1.13	OE
EUV4YQ		0.0327	0.0006	0.20	0.0214	0.0009	0.44	OE
FHGNCH		0.0314	-0.0007	-0.26	0.0201	-0.0003	-0.13	CO
FMAT32		0.0293	-0.0028	-0.97	0.0200	-0.0004	-0.20	OE
G72UX6	X	0.00400	-0.0281	-9.90	0.0227	0.0022	1.05	CO
GRWVNC		0.0305	-0.0016	-0.55	0.0203	-0.0001	-0.05	CI
GTCU82		0.0283	-0.0038	-1.33	0.0183	-0.0021	-0.98	OE
H3B7L3		0.0272	-0.0049	-1.73	0.0162	-0.0043	-1.99	OE
H8RE6Z		0.0327	0.0006	0.20	0.0203	-0.0001	-0.04	OE
H9YUB7		0.0350	0.0029	1.04	0.0215	0.0011	0.52	OE
HB7CA3		0.0310	-0.0011	-0.39	0.0201	-0.0004	-0.16	IR

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
HXHARA		0.0350	0.0029	1.02	0.0197	-0.0008	-0.35	IC
KGTLW6		0.0332	0.0011	0.39	0.0218	0.0013	0.63	XX
KMVWKP		0.0321	0.0000	0.00	0.0194	-0.0010	-0.46	OE
L3YQRP		0.0366	0.0045	1.59	0.0214	0.0010	0.46	CI
LJN2ER		0.0323	0.0002	0.08	0.0200	-0.0005	-0.21	XX
LNHQ2Q		0.0340	0.0019	0.67	0.0233	0.0029	1.36	OE
LPWF44		0.0316	-0.0005	-0.19	0.0204	0.0000	-0.01	OE
M6NBE9		0.0293	-0.0028	-0.97	0.0183	-0.0021	-0.98	OE
MAFM8J		0.0312	-0.0009	-0.30	0.0176	-0.0028	-1.32	OE
MBV494		0.0316	-0.0005	-0.16	0.0188	-0.0016	-0.76	OE
MK3JEC		0.0292	-0.0029	-1.03	0.0201	-0.0004	-0.16	OE
MKY4ZQ		0.0333	0.0012	0.42	0.0203	-0.0001	-0.05	CI
MU7TL2		0.0336	0.0015	0.52	0.0224	0.0019	0.91	OE
NKVRZ2		0.0360	0.0039	1.38	0.0240	0.0036	1.68	OE
NTRQBM		0.0336	0.0015	0.53	0.0232	0.0028	1.32	CI
P9CWX8		0.0324	0.0003	0.10	0.0218	0.0014	0.65	OE
PBMN7M	*	0.0280	-0.0041	-1.43	0.0213	0.0009	0.41	OE
Q8ZJVV		0.0333	0.0012	0.44	0.0227	0.0022	1.05	XX
QEHPR3		0.0377	0.0056	1.96	0.0260	0.0056	2.61	XX
QN6VHE		0.0287	-0.0034	-1.21	0.0189	-0.0015	-0.71	OE
QQB99T		0.0280	-0.0041	-1.44	0.0173	-0.0031	-1.44	GD
QXX2KT		0.0328	0.0007	0.24	0.0192	-0.0012	-0.55	OE
R69PPE		0.0340	0.0019	0.67	0.0217	0.0013	0.62	OE
R8GZLH		0.0272	-0.0049	-1.74	0.0167	-0.0037	-1.74	CI
RF8HZQ		0.0334	0.0013	0.47	0.0233	0.0029	1.35	OE
RLCGD2		0.0302	-0.0019	-0.66	0.0216	0.0012	0.55	OE
RLWZCG		0.0280	-0.0041	-1.44	0.0173	-0.0031	-1.44	OE
RRQVHV		0.0360	0.0039	1.38	0.0217	0.0012	0.58	XX
RZENQK		0.0340	0.0019	0.66	0.0209	0.0004	0.21	AE
UGHYCV		0.0357	0.0036	1.26	0.0230	0.0026	1.21	OE
UUZUJE	*	0.0270	-0.0051	-1.78	0.0147	-0.0057	-2.68	OE
UVYVRR		0.0291	-0.0030	-1.06	0.0207	0.0003	0.12	OE
V3QW6M		0.0263	-0.0058	-2.03	0.0190	-0.0014	-0.66	OE
V3RMDQ		0.0377	0.0056	1.96	0.0217	0.0012	0.58	CI
VH6ZVN		0.0333	0.0012	0.44	0.0197	-0.0007	-0.32	CO
VUXGKP		0.0335	0.0014	0.48	0.0247	0.0042	1.99	OE
WNNRBF	X	0.0433	0.0112	3.96	0.0290	0.0086	4.02	OE
WPFNXN		0.0290	-0.0031	-1.09	0.0180	-0.0024	-1.13	OE
XG6YJG		0.0303	-0.0018	-0.62	0.0187	-0.0018	-0.82	GD
XV2W2E		0.0368	0.0047	1.65	0.0250	0.0046	2.14	XX
XXA7XH		0.0333	0.0012	0.42	0.0245	0.0040	1.89	OE
YX9TQG		0.0296	-0.0025	-0.88	0.0178	-0.0026	-1.22	OE
ZB77FC		0.0310	-0.0011	-0.37	0.0196	-0.0008	-0.38	OE
ZGXGPA		0.0304	-0.0017	-0.59	0.0184	-0.0021	-0.96	OE
ZMJ8C6	*	0.0240	-0.0081	-2.84	0.0155	-0.0049	-2.29	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.0321	Percent	0.0204	Percent
Stnd Dev Btwn Labs	0.0028	Percent	0.0021	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 88 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)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	IR	IR (Absorption / Detection)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1603

99D2JK (M) - Participant did not submit data for sample L66.

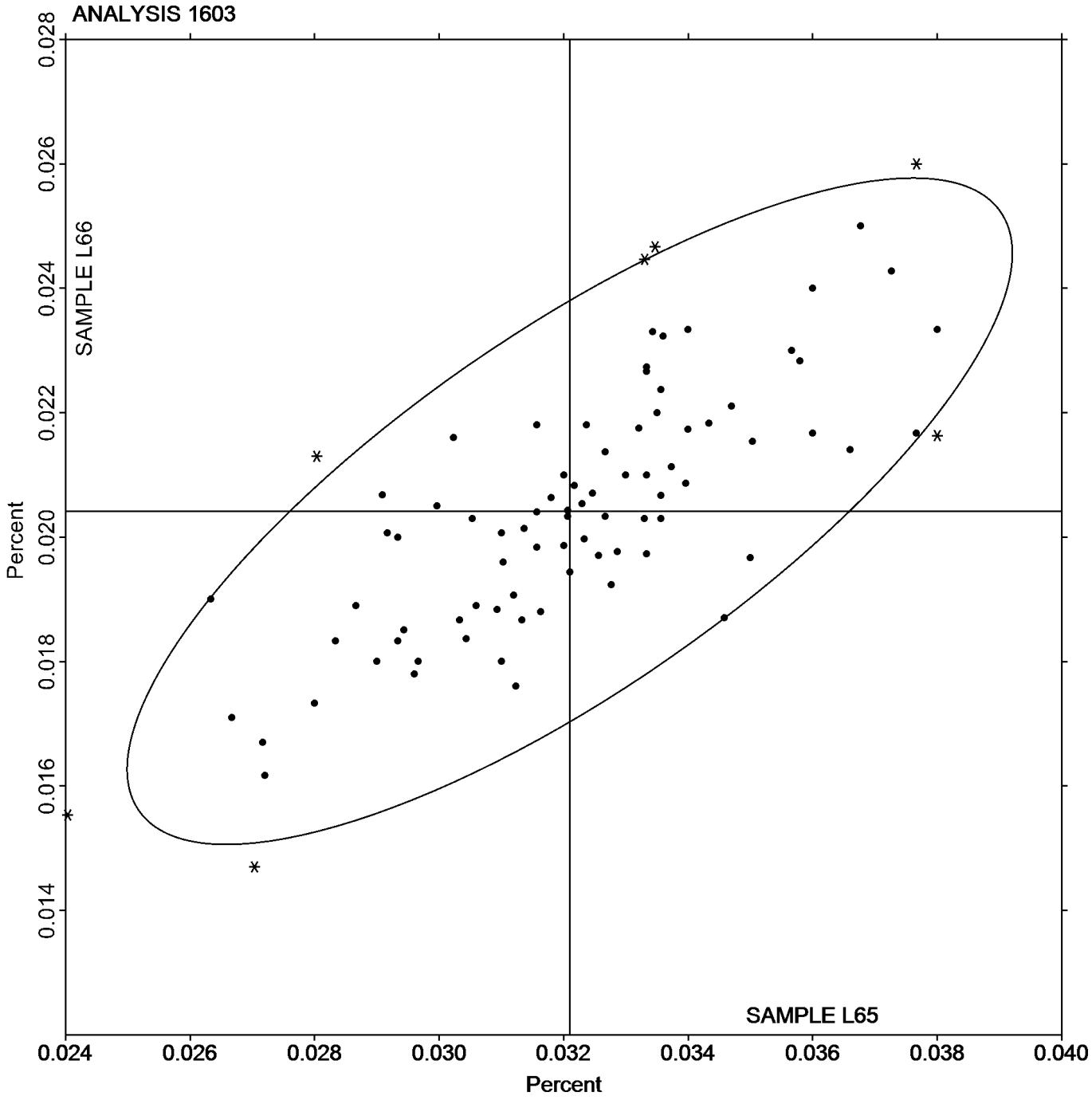
A2RCF2 (X) - Data for both samples are high.

G72UX6 (X) - Data for sample L65 are low.

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

SAMPLE L65
0.0321 Percent

SAMPLE L66
0.0204 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA	X	0.3123	0.0281	3.71	0.2023	0.0222	4.58	IC
26F8LG		0.2923	0.0081	1.06	0.1866	0.0065	1.33	AE
2B6RPW		0.2783	-0.0059	-0.78	0.1777	-0.0025	-0.51	OE
2QG79F		0.2910	0.0068	0.90	0.1847	0.0045	0.94	XX
3AQK3F		0.2827	-0.0015	-0.20	0.1803	0.0002	0.04	OE
3CW32B		0.2774	-0.0068	-0.90	0.1716	-0.0085	-1.76	OE
3EZXKE		0.2770	-0.0072	-0.95	0.1783	-0.0018	-0.37	OE
4EDV8B		0.2880	0.0038	0.50	0.1858	0.0056	1.16	OE
4UUMEP		0.2924	0.0082	1.08	0.1826	0.0025	0.52	OE
6PTZZR		0.2797	-0.0045	-0.60	0.1773	-0.0028	-0.58	OE
6X8MBG		0.2837	-0.0005	-0.07	0.1803	0.0002	0.04	OE
6Y43LT		0.2887	0.0045	0.59	0.1837	0.0035	0.73	AE
78QKD7		0.2903	0.0061	0.81	0.1863	0.0062	1.28	OE
7GWRR7		0.2831	-0.0011	-0.15	0.1798	-0.0003	-0.06	OE
7H7ENY		0.2847	0.0005	0.07	0.1804	0.0002	0.05	OE
7NTMRP		0.2827	-0.0015	-0.20	0.1811	0.0010	0.20	OE
7YY6QN	*	0.3073	0.0231	3.05	0.1913	0.0112	2.31	IC
8EM333		0.2800	-0.0042	-0.56	0.1767	-0.0035	-0.72	OE
99D2JK		0.2823	-0.0019	-0.25	0.1752	-0.0049	-1.02	OE
9D8VJ7		0.2854	0.0012	0.15	0.1805	0.0004	0.08	OE
9RM622	X	0.3005	0.0163	2.14	0.1990	0.0188	3.89	OE
9XWGYN		0.2800	-0.0042	-0.56	0.1830	0.0029	0.59	OE
A2RCF2		0.2810	-0.0032	-0.42	0.1787	-0.0015	-0.30	XX
AF7VW9	X	0.3191	0.0349	4.60	0.2098	0.0296	6.12	OE
B4UPGZ		0.2860	0.0018	0.24	0.1843	0.0042	0.87	OE
BAYPUB		0.2837	-0.0005	-0.07	0.1818	0.0017	0.34	OE
BHANNL		0.2827	-0.0015	-0.20	0.1820	0.0019	0.38	OE
BNZ2PA		0.2813	-0.0029	-0.38	0.1777	-0.0025	-0.51	OE
C6HG7B		0.2870	0.0028	0.37	0.1833	0.0032	0.66	OE
CFXD33		0.2718	-0.0124	-1.63	0.1746	-0.0055	-1.14	OE
CJ4WAB		0.2893	0.0051	0.68	0.1810	0.0009	0.18	OE
CPAP47	X	0.2929	0.0087	1.15	0.1994	0.0192	3.97	OE
D3RMZU		0.2846	0.0004	0.05	0.1804	0.0002	0.05	DR
DPKNXF		0.2647	-0.0195	-2.58	0.1690	-0.0111	-2.30	XX
E34XV6		0.2850	0.0008	0.10	0.1813	0.0012	0.25	GD
EEJNYG		0.2841	-0.0001	-0.02	0.1812	0.0011	0.22	OE
EHJYRV		0.2727	-0.0115	-1.52	0.1773	-0.0028	-0.58	OE
EUV4YQ		0.2905	0.0063	0.83	0.1846	0.0044	0.91	OE
FHGNCH		0.2877	0.0035	0.46	0.1827	0.0025	0.52	IC
FMAT32		0.2800	-0.0042	-0.56	0.1800	-0.0001	-0.03	OE
G72UX6		0.2797	-0.0045	-0.60	0.1777	-0.0025	-0.51	OE
GRWVNC		0.2876	0.0034	0.45	0.1804	0.0003	0.05	GR
GTCU82		0.2830	-0.0012	-0.16	0.1730	-0.0071	-1.47	OE
H3B7L3		0.2787	-0.0055	-0.73	0.1791	-0.0011	-0.22	OE
H8RE6Z		0.2917	0.0075	0.98	0.1820	0.0019	0.38	OE
H9YUB7		0.2810	-0.0032	-0.42	0.1730	-0.0071	-1.47	OE
HB7CA3		0.2827	-0.0015	-0.20	0.1830	0.0029	0.59	IC

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
HXHARA		0.2810	-0.0032	-0.42	0.1797	-0.0005	-0.10	IC
KGTLW6	X	0.2943	0.0101	1.33	0.1959	0.0157	3.25	XX
KMVWKP		0.2937	0.0095	1.25	0.1810	0.0009	0.18	OE
L3YQRP	X	0.4013	0.1171	15.46	0.00500	-0.1751	-36.17	OE
LJN2ER		0.2807	-0.0035	-0.47	0.1787	-0.0014	-0.30	OE
LNHQ2Q		0.2700	-0.0142	-1.88	0.1700	-0.0101	-2.09	OE
LPWF44		0.2875	0.0033	0.43	0.1782	-0.0019	-0.39	OE
M6NBE9		0.2757	-0.0085	-1.13	0.1716	-0.0086	-1.77	OE
MAFM8J		0.2848	0.0006	0.08	0.1816	0.0015	0.30	OE
MBV494		0.2837	-0.0005	-0.07	0.1810	0.0009	0.18	OE
MK3JEC		0.2873	0.0031	0.41	0.1823	0.0022	0.45	OE
MKY4ZQ		0.2967	0.0125	1.64	0.1833	0.0032	0.66	IC
MU7TL2		0.2844	0.0002	0.02	0.1815	0.0014	0.29	OE
NKVRZ2		0.2830	-0.0012	-0.16	0.1790	-0.0011	-0.24	OE
NTRQBM		0.2823	-0.0019	-0.25	0.1803	0.0002	0.04	DR
P9CWX8		0.2863	0.0021	0.28	0.1810	0.0009	0.18	OE
PBMN7M		0.2855	0.0013	0.17	0.1779	-0.0022	-0.46	OE
Q8ZJVV		0.2967	0.0125	1.64	0.1920	0.0119	2.45	XX
QEHPR3		0.2700	-0.0142	-1.88	0.1697	-0.0105	-2.16	XX
QN6VHE		0.2857	0.0015	0.19	0.1800	-0.0001	-0.03	OE
QQB99T	X	0.3100	0.0258	3.40	0.2000	0.0199	4.10	GD
QXX2KT		0.2821	-0.0021	-0.28	0.1783	-0.0018	-0.38	OE
R69PPE		0.2838	-0.0004	-0.05	0.1796	-0.0005	-0.10	OE
R8GZLH		0.2937	0.0095	1.25	0.1864	0.0063	1.29	OE
RF8HZQ		0.2993	0.0151	2.00	0.1873	0.0072	1.49	OE
RLCGD2		0.2928	0.0086	1.13	0.1839	0.0038	0.78	OE
RLWZCG		0.2987	0.0145	1.91	0.1833	0.0032	0.66	OE
RRQVHV		0.2867	0.0025	0.32	0.1790	-0.0011	-0.24	OE
RZENQK		0.2830	-0.0012	-0.16	0.1817	0.0015	0.32	AE
UGHYCV		0.2713	-0.0129	-1.70	0.1717	-0.0085	-1.75	OE
UUZUJE	X	0.2591	-0.0251	-3.32	0.1704	-0.0097	-2.00	XX
UVYVRR		0.2788	-0.0054	-0.71	0.1794	-0.0007	-0.15	OE
V3QW6M		0.2653	-0.0189	-2.49	0.1690	-0.0111	-2.30	OE
V3RMDQ		0.2963	0.0121	1.60	0.1873	0.0072	1.49	OE
VH6ZVN		0.2800	-0.0042	-0.56	0.1780	-0.0021	-0.44	OE
VUXGKP	X	0.3093	0.0251	3.32	0.1970	0.0169	3.48	OE
WNNRBF		0.2800	-0.0042	-0.56	0.1733	-0.0068	-1.41	OE
WPFNXN		0.2880	0.0038	0.50	0.1850	0.0049	1.00	OE
XG6YJG	X	0.2940	0.0098	1.29	0.1947	0.0145	3.00	GD
XV2W2E		0.2823	-0.0019	-0.25	0.1827	0.0025	0.52	XX
XXA7XH		0.2905	0.0063	0.82	0.1858	0.0056	1.16	OE
YX9TQG		0.2994	0.0152	2.01	0.1900	0.0099	2.04	OE
ZB77FC		0.2749	-0.0093	-1.23	0.1722	-0.0079	-1.63	OE
ZGXGPA		0.2853	0.0011	0.15	0.1820	0.0019	0.38	OE
ZMJ8C6		0.2754	-0.0088	-1.17	0.1752	-0.0050	-1.03	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.2842	Percent	0.1801	Percent
Stnd Dev Btwn Labs	0.0076	Percent	0.0048	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 82 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)
XX	Please Indicate Method Used for Current Element		

Comments on Assigned Data Flags for Test #1604

22F3RA (X) - Data for both samples are high. Inconsistent within the determinations of both samples.

9RM622 (X) - Data for sample L66 are high.

AF7VW9 (X) - Data for both samples are high. Inconsistent within the determinations of sample L65.

CPAP47 (X) - Data for sample L66 are high.

KGTLW6 (X) - Data for sample L66 are high.

L3YQRP (X) - Data for sample L65 are high and data for sample L66 are low. Inconsistent within the determinations of sample L65.

QQB99T (X) - Data for both samples are high.

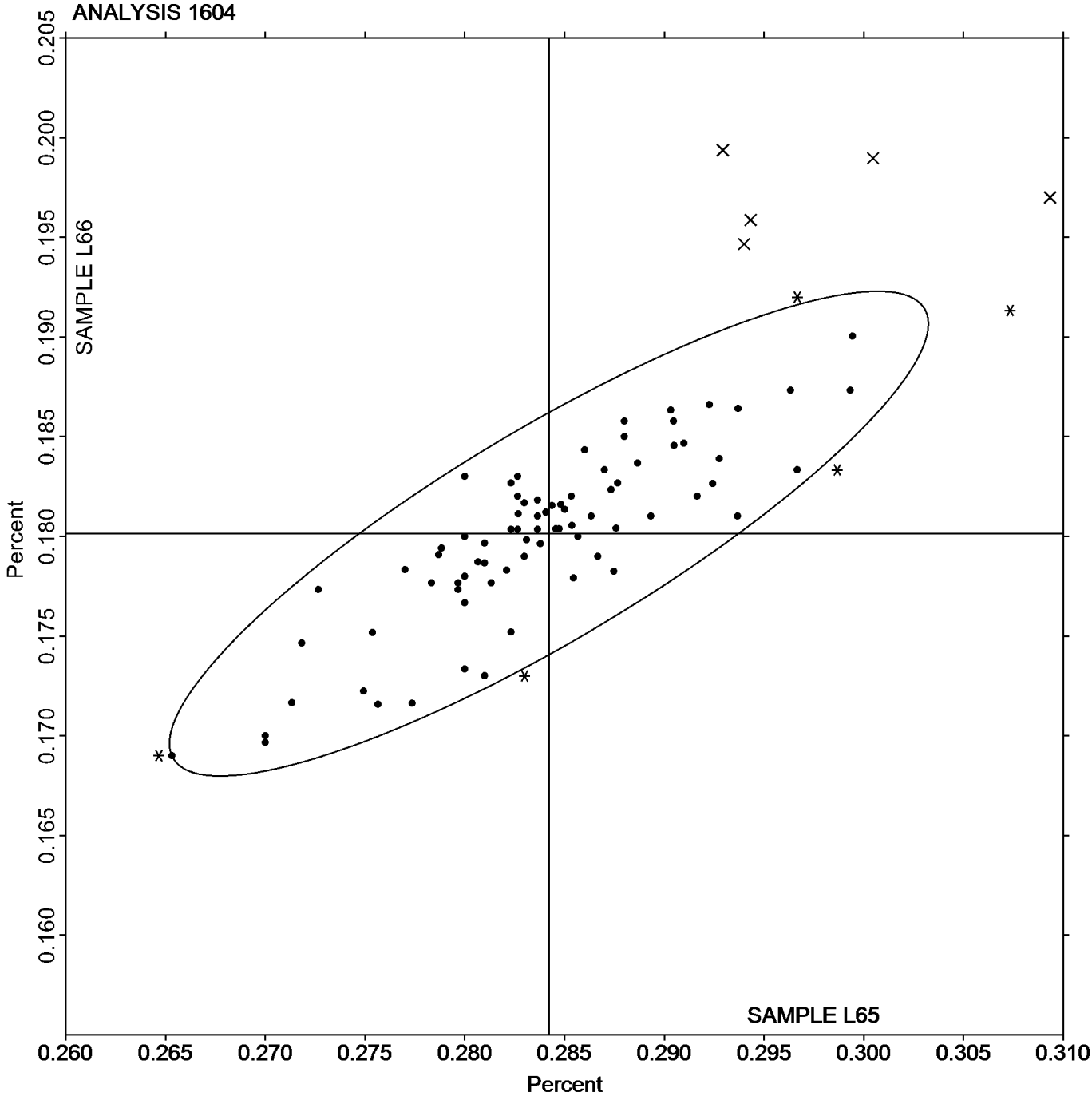
UUZUJE (X) - Data for sample L65 are low. Inconsistent within the determinations of both samples.

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

XG6YJG (X) - Data for sample L66 are high.

SAMPLE L65
0.2842 Percent

SAMPLE L66
0.1801 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA	M	0.0237	0.0017	1.14	No Data Reported			IC
26F8LG		0.0212	-0.0008	-0.52	0.000367	-0.00136	-0.87	AE
2B6RPW		0.0208	-0.0012	-0.81	0.00107	-0.00066	-0.42	OE
2QG79F		0.0230	0.0010	0.69	0.00133	-0.00039	-0.25	XX
3AQK3F		0.0220	0.0000	0.02	0.00200	0.00027	0.17	OE
3CW32B		0.0215	-0.0005	-0.32	0.000767	-0.00096	-0.61	OE
3EZXKE		0.0180	-0.0040	-2.66	0.00100	-0.00073	-0.46	OE
4EDV8B	M	0.0232	0.0013	0.85	No Data Reported			OE
4UUMEP	M	0.0216	-0.0004	-0.27	No Data Reported			OE
6PTZZR	M	0.0246	0.0026	1.76	No Data Reported			XX
6Y43LT	M	0.0212	-0.0008	-0.54	No Data Reported			AE
78QKD7		0.0235	0.0015	1.00	0.00220	0.00047	0.30	OE
7GWRR7		0.0222	0.0002	0.14	0.00299	0.00126	0.80	OE
7H7ENY		0.0238	0.0019	1.25	0.00147	-0.00026	-0.17	OE
7NTMRP		0.0224	0.0004	0.27	0.00174	0.00002	0.01	OE
7YY6QN		0.0260	0.0040	2.70	0.00500	0.00327	2.09	IC
8EM333	X	0.0310	0.0090	6.06	0.0130	0.01127	7.19	OE
99D2JK		0.0247	0.0027	1.81	0.000100	-0.00163	-1.04	OE
9D8VJ7		0.0219	-0.0001	-0.07	0.00177	0.00004	0.03	OE
9RM622		0.0203	-0.0017	-1.12	0.00150	-0.00023	-0.14	OE
9XWGYN		0.0212	-0.0007	-0.49	0.000267	-0.00146	-0.93	OE
A2RCF2		0.0213	-0.0006	-0.43	0.00167	-0.00006	-0.04	XX
AF7VW9	X	0.00953	-0.0124	-8.34	0.00100	-0.00073	-0.46	OE
BAYPUB		0.0216	-0.0004	-0.25	0.000800	-0.00093	-0.59	OE
BHANNL		0.0221	0.0001	0.09	0.000633	-0.00109	-0.70	OE
BNZ2PA		0.0181	-0.0039	-2.62	0.000030	-0.00170	-1.08	OE
C6HG7B	M	0.0203	-0.0016	-1.10	No Data Reported			OE
CFXD33		0.0215	-0.0005	-0.34	0.00260	0.00087	0.56	OE
CJ4WAB	X	0.000933	-0.0210	-14.11	0.0228	0.02107	13.44	OE
CPAP47	M	0.0149	-0.0071	-4.77	No Data Reported			OE
D3RMZU		0.0220	0.0000	0.02	0.000633	-0.00109	-0.70	OE
DPKNXF		0.0240	0.0020	1.36	0.00400	0.00227	1.45	XX
E34XV6	M	0.0203	-0.0017	-1.12	No Data Reported			GD
EHJYRV		0.0226	0.0006	0.40	0.00160	-0.00013	-0.08	OE
EUV4YQ		0.0200	-0.0020	-1.32	0.00150	-0.00023	-0.14	OE
FHGNCH	M	0.0215	-0.0004	-0.29	No Data Reported			IC
FMAT32	M	0.0200	-0.0020	-1.32	No Data Reported			OE
G72UX6	M	0.0220	0.0000	0.02	No Data Reported			OE
GRWVNC		0.0218	-0.0002	-0.14	0.000400	-0.00133	-0.85	IC
GTCU82	M	0.0193	-0.0026	-1.77	No Data Reported			OE
H3B7L3	M	0.0189	-0.0031	-2.06	No Data Reported			OE
H8RE6Z	M	0.0220	0.0000	0.02	No Data Reported			OE
H9YUB7		0.0219	-0.0001	-0.05	0.000400	-0.00133	-0.85	OE
HB7CA3		0.0228	0.0008	0.56	0.00123	-0.00049	-0.31	IC
HXHARA		0.0217	-0.0002	-0.16	0.000800	-0.00093	-0.59	IC
KGTLW6	M	0.0219	-0.0001	-0.07	No Data Reported			XX
KMVWKP		0.0210	-0.0010	-0.67	0.00580	0.00407	2.60	OE

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
L3YQRP		0.0236	0.0016	1.07	0.00573	0.00401	2.56	OE
LJN2ER		0.0198	-0.0021	-1.43	0.000733	-0.00099	-0.63	OE
LNHQ2Q		0.0200	-0.0020	-1.32	0.000183	-0.00154	-0.98	OE
LPWF44		0.0225	0.0006	0.38	0.000333	-0.00139	-0.89	OE
M6NBE9		0.0214	-0.0006	-0.40	0.00100	-0.00073	-0.46	OE
MAFM8J		0.0231	0.0011	0.74	0.00177	0.00004	0.03	OE
MBV494	M	0.0215	-0.0005	-0.34	No Data Reported			OE
MK3JEC	M	0.0210	-0.0009	-0.63	No Data Reported			OE
MKY4ZQ	M	0.0222	0.0002	0.13	No Data Reported			IC
MU7TL2		0.0224	0.0005	0.31	0.000667	-0.00106	-0.68	OE
NKVRZ2	M	0.0220	0.0000	0.02	No Data Reported			OE
P9CWX8		0.0221	0.0001	0.09	0.000133	-0.00159	-1.02	OE
PBMN7M	*	0.0236	0.0016	1.07	0.00663	0.00491	3.13	OE
Q8ZJVV		0.0243	0.0024	1.59	0.00200	0.00027	0.17	XX
QEHPR3		0.0207	-0.0013	-0.87	0.00400	0.00227	1.45	XX
QN6VHE		0.0225	0.0005	0.33	0.000733	-0.00099	-0.63	OE
QQB99T		0.0230	0.0010	0.69	0.00100	-0.00073	-0.46	GD
QXX2KT	M	0.0214	-0.0005	-0.36	No Data Reported			OE
R69PPE		0.0219	-0.0001	-0.07	0.000600	-0.00113	-0.72	OE
R8GZLH	M	0.0210	-0.0009	-0.62	No Data Reported			OE
RF8HZQ		0.0220	0.0000	0.02	0.00100	-0.00073	-0.46	OE
RLCGD2	M	0.0199	-0.0020	-1.37	No Data Reported			OE
RLWZCG		0.0247	0.0027	1.81	0.00533	0.00361	2.30	OE
RRQVHV		0.0197	-0.0023	-1.55	0.00300	0.00127	0.81	OE
RZENQK		0.0199	-0.0021	-1.41	0.00107	-0.00066	-0.42	AE
UGHYCV	M	0.0210	-0.0010	-0.65	No Data Reported			OE
UUZUJE		0.0233	0.0013	0.89	0.00373	0.00201	1.28	OE
UVYVRR	M	0.0210	-0.0010	-0.65	No Data Reported			OE
V3QW6M	X	0.0220	0.0000	0.02	0.0100	0.00827	5.28	OE
V3RMDQ		0.0224	0.0004	0.27	0.000700	-0.00103	-0.65	OE
VH6ZVN	M	0.0218	-0.0002	-0.14	No Data Reported			OE
VUXGKP	M	0.0197	-0.0023	-1.55	No Data Reported			OE
WNNRBF		0.0220	0.0000	0.02	0.00100	-0.00073	-0.46	OE
WPFNXN		0.0210	-0.0010	-0.65	0.00200	0.00027	0.17	OE
XG6YJG		0.0227	0.0007	0.47	0.00233	0.00061	0.39	GD
XXA7XH		0.0223	0.0003	0.20	0.000833	-0.00089	-0.57	OE
YX9TQG		0.0227	0.0007	0.47	0.00227	0.00054	0.34	WD
ZB77FC		0.0212	-0.0008	-0.54	0.00110	-0.00063	-0.40	OE
ZGXGPA		0.0213	-0.0007	-0.47	0.00240	0.00067	0.43	OE
ZMJ8C6		0.0219	-0.0001	-0.05	0.000433	-0.00129	-0.82	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.0220	Percent	0.00173	Percent
Stnd Dev Btwn Labs	0.0015	Percent	0.00157	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 57 of 87 reporting participants

Key to Method Codes Reported by Participants

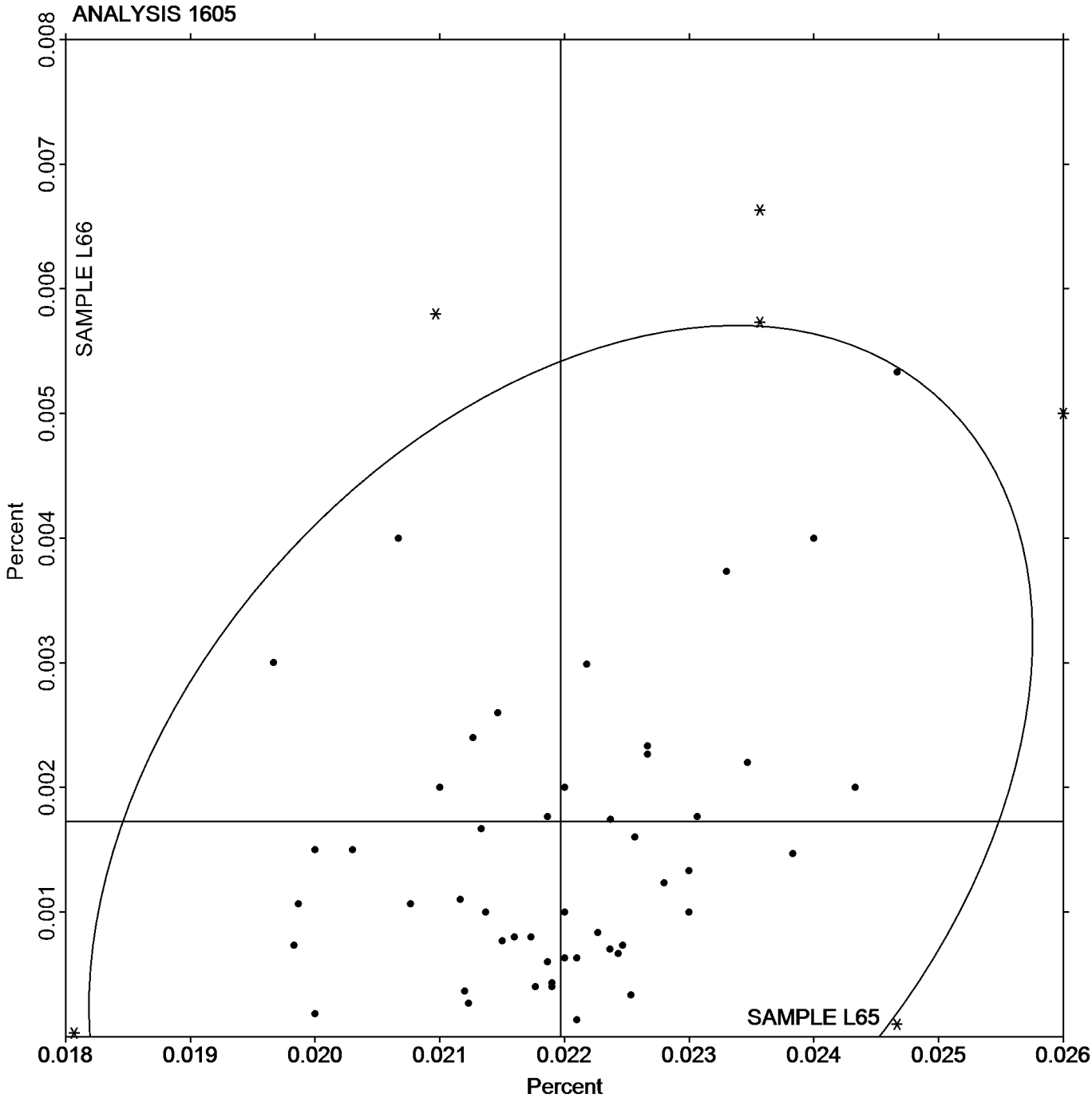
AE	Spectrometry - Atomic Emission (AES)	GD	Spectrometry - Glow Discharge (GDS)
IC	Spectrometry - Inductively Coupled Plasma (ICP)	OE	Spectrometry - Optical Emission (OES)
WD	X-Ray Fluorescence - Wavelength Dispersive (WDX)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1605

22F3RA (M) - Participant did not submit data for sample L66.
4EDV8B (M) - Participant did not submit data for sample L66.
4UUMEP (M) - Participant did not submit data for sample L66.
6PTZZR (M) - Participant did not submit data for sample L66.
6Y43LT (M) - Participant did not submit data for sample L66.
8EM333 (X) - Data for both samples are high.
AF7VW9 (X) - Data for sample L65 are low.
C6HG7B (M) - Participant did not submit data for sample L66.
CJ4WAB (X) - Data for sample L65 are low and data for sample L66 are high.
CPAP47 (M) - Participant did not submit data for sample L66.
E34XV6 (M) - Participant did not submit data for sample L66.
FHGNCH (M) - Participant did not submit data for sample L66.
FMAT32 (M) - Participant did not submit data for sample L66.
G72UX6 (M) - Participant did not submit data for sample L66.
GTCU82 (M) - Participant did not submit data for sample L66.
H3B7L3 (M) - Participant did not submit data for sample L66.
H8RE6Z (M) - Participant did not submit data for sample L66.
KGTLW6 (M) - Participant did not submit data for sample L66.
MBV494 (M) - Participant did not submit data for sample L66.
MK3JEC (M) - Participant did not submit data for sample L66.
MKY4ZQ (M) - Participant did not submit data for sample L66.
NKVRZ2 (M) - Participant did not submit data for sample L66.
QXX2KT (M) - Participant did not submit data for sample L66.
R8GZLH (M) - Participant did not submit data for sample L66.
RLCGD2 (M) - Participant did not submit data for sample L66.
UGHYCV (M) - Participant did not submit data for sample L66.
UVYVRR (M) - Participant did not submit data for sample L66.
V3QW6M (X) - Data for sample L66 are high.
VH6ZVN (M) - Participant did not submit data for sample L66.
VUXGKP (M) - Participant did not submit data for sample L66.

SAMPLE L65
0.0220 Percent

SAMPLE L66
0.00173 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA	M	0.0727	0.0001	0.05	No Data Reported			IC
26F8LG		0.0709	-0.0016	-0.54	0.00667	0.00003	0.01	AE
2B6RPW		0.0723	-0.0002	-0.07	0.00480	-0.00184	-0.71	OE
2QG79F		0.0700	-0.0025	-0.85	0.00833	0.00169	0.66	XX
3AQK3F		0.0710	-0.0015	-0.51	0.00900	0.00236	0.91	OE
3CW32B		0.0765	0.0040	1.33	0.00637	-0.00027	-0.11	OE
3EZXKE		0.0750	0.0025	0.83	0.00800	0.00136	0.53	OE
4EDV8B		0.0729	0.0004	0.12	0.00730	0.00066	0.26	OE
4UUMEP		0.0738	0.0013	0.44	0.00720	0.00056	0.22	OE
6PTZZR	*	0.0753	0.0028	0.94	0.0139	0.00723	2.80	OE
6X8MBG		0.0730	0.0005	0.16	0.00717	0.00053	0.20	OE
6Y43LT		0.0740	0.0015	0.49	0.00433	-0.00231	-0.89	AE
78QKD7		0.0681	-0.0044	-1.47	0.00627	-0.00037	-0.14	OE
7GWRR7		0.0720	-0.0005	-0.17	0.00681	0.00017	0.06	OE
7H7ENY		0.0743	0.0018	0.60	0.00483	-0.00181	-0.70	OE
7NTMRP		0.0727	0.0002	0.07	0.00669	0.00005	0.02	OE
7YY6QN		0.0737	0.0011	0.38	0.00850	0.00186	0.72	IC
8EM333	*	0.0800	0.0075	2.50	0.0133	0.00669	2.59	OE
99D2JK		0.0773	0.0048	1.61	0.00367	-0.00297	-1.15	OE
9D8VJ7		0.0733	0.0008	0.26	0.00643	-0.00021	-0.08	OE
9RM622		0.0682	-0.0043	-1.45	0.00500	-0.00164	-0.63	OE
9XWGYN		0.0767	0.0041	1.38	0.00617	-0.00047	-0.18	OE
A2RCF2		0.0673	-0.0052	-1.74	0.00533	-0.00131	-0.51	XX
AF7VW9	X	0.0952	0.0227	7.59	0.0261	0.01949	7.55	OE
BAYPUB		0.0710	-0.0016	-0.52	0.00913	0.00249	0.97	OE
BHANNL		0.0713	-0.0012	-0.40	0.00170	-0.00494	-1.91	OE
BNZ2PA		0.0736	0.0010	0.35	0.00450	-0.00214	-0.83	OE
C6HG7B		0.0703	-0.0022	-0.73	0.00760	0.00096	0.37	OE
CFXD33		0.0713	-0.0013	-0.42	0.00723	0.00059	0.23	OE
CJ4WAB		0.0717	-0.0009	-0.29	0.00603	-0.00061	-0.23	OE
CPAP47		0.0803	0.0078	2.60	0.0126	0.00599	2.32	OE
D3RMZU		0.0738	0.0013	0.42	0.00703	0.00039	0.15	OE
DPKNXF		0.0787	0.0061	2.05	0.00967	0.00303	1.17	XX
E34XV6		0.0728	0.0003	0.10	0.00383	-0.00281	-1.09	GD
EEJNYG		0.0732	0.0007	0.22	0.00713	0.00049	0.19	OE
EHJYRV		0.0720	-0.0005	-0.18	0.00533	-0.00131	-0.51	OE
EUV4YQ		0.0710	-0.0016	-0.52	0.00557	-0.00107	-0.42	OE
FHGNCH	M	0.0713	-0.0012	-0.40	No Data Reported			IC
FMAT32		0.0700	-0.0025	-0.85	0.0100	0.00336	1.30	OE
G72UX6	M	0.0707	-0.0019	-0.62	No Data Reported			OE
GRWVNC		0.0719	-0.0006	-0.21	0.00533	-0.00131	-0.51	IC
GTCU82	M	0.0680	-0.0045	-1.51	No Data Reported			OE
H3B7L3		0.0687	-0.0038	-1.27	0.00870	0.00206	0.80	OE
H8RE6Z		0.0730	0.0005	0.16	0.00600	-0.00064	-0.25	OE
H9YUB7		0.0720	-0.0005	-0.18	0.00567	-0.00097	-0.38	OE
HB7CA3		0.0730	0.0005	0.16	0.00700	0.00036	0.14	IC
HXHARA		0.0706	-0.0019	-0.63	0.00513	-0.00151	-0.58	XX

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
KGTLW6	M	0.0690	-0.0035	-1.17	No Data Reported			XX
KMVWKP		0.0687	-0.0039	-1.29	0.0114	0.00479	1.86	OE
L3YQRP	X	0.0758	0.0032	1.08	0.0175	0.01083	4.19	OE
LJN2ER		0.0757	0.0032	1.07	0.00563	-0.00101	-0.39	OE
LNHQ2Q		0.0700	-0.0025	-0.85	0.00284	-0.00380	-1.47	OE
LPWF44		0.0708	-0.0017	-0.58	0.00477	-0.00187	-0.73	OE
M6NBE9		0.0714	-0.0012	-0.39	0.00503	-0.00161	-0.62	OE
MAFM8J		0.0724	-0.0002	-0.05	0.00213	-0.00451	-1.74	OE
MBV494	M	0.0697	-0.0029	-0.96	No Data Reported			OE
MK3JEC	M	0.0743	0.0018	0.60	No Data Reported			OE
MKY4ZQ		0.0692	-0.0034	-1.12	0.00503	-0.00161	-0.62	IC
MU7TL2		0.0761	0.0036	1.20	0.00543	-0.00121	-0.47	OE
NKVRZ2		0.0780	0.0055	1.83	0.00600	-0.00064	-0.25	OE
NTRQBM		0.0720	-0.0005	-0.18	0.00720	0.00056	0.22	DR
P9CWX8		0.0757	0.0031	1.05	0.00500	-0.00164	-0.63	OE
PBMN7M		0.0743	0.0018	0.59	0.0129	0.00626	2.42	OE
Q8ZJVV	*	0.0640	-0.0085	-2.85	0.00433	-0.00231	-0.89	XX
QEHPR3		0.0733	0.0008	0.27	0.00800	0.00136	0.53	XX
QN6VHE		0.0736	0.0011	0.37	0.00550	-0.00114	-0.44	OE
QQB99T	X	0.0863	0.0138	4.61	0.00800	0.00136	0.53	GD
QXX2KT	M	0.0736	0.0011	0.37	No Data Reported			OE
R69PPE		0.0733	0.0008	0.27	0.00710	0.00046	0.18	OE
R8GZLH		0.0724	-0.0002	-0.06	0.00623	-0.00041	-0.16	OE
RF8HZQ		0.0740	0.0015	0.49	0.00600	-0.00064	-0.25	OE
RLCGD2		0.0690	-0.0035	-1.17	0.00927	0.00263	1.02	OE
RLWZCG		0.0733	0.0008	0.27	0.00500	-0.00164	-0.63	OE
RZENQK		0.0687	-0.0039	-1.29	0.00463	-0.00201	-0.78	AE
UGHYCV		0.0747	0.0021	0.71	0.00600	-0.00064	-0.25	OE
UUZUJE		0.0710	-0.0015	-0.50	0.00157	-0.00507	-1.96	OE
UVYVRR		0.0740	0.0015	0.50	0.00886	0.00222	0.86	OE
V3QW6M		0.0717	-0.0009	-0.29	0.0100	0.00336	1.30	OE
V3RMDQ		0.0677	-0.0049	-1.63	0.00553	-0.00111	-0.43	OE
VH6ZVN		0.0747	0.0021	0.71	0.00490	-0.00174	-0.67	OE
VUXGKP		0.0728	0.0003	0.10	0.00653	-0.00011	-0.04	OE
WNNRBF		0.0737	0.0011	0.38	0.00600	-0.00064	-0.25	OE
WPFNXN	X	0.0810	0.0085	2.83	0.0210	0.01436	5.56	OE
XG6YJG		0.0650	-0.0075	-2.52	0.00100	-0.00564	-2.18	GD
XV2W2E		0.0760	0.0035	1.16	0.0127	0.00603	2.33	XX
XXA7XH		0.0701	-0.0024	-0.81	0.00903	0.00239	0.93	OE
YX9TQG		0.0720	-0.0005	-0.18	0.00617	-0.00047	-0.18	OE
ZB77FC		0.0758	0.0033	1.09	0.00567	-0.00097	-0.38	OE
ZGXGPA		0.0708	-0.0018	-0.59	0.00833	0.00169	0.66	OE
ZMJ8C6		0.0728	0.0003	0.09	0.00490	-0.00174	-0.67	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.0725	Percent	0.00664	Percent
Stnd Dev Btwn Labs	0.0030	Percent	0.00258	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 78 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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1606

22F3RA (M) - Participant did not submit data for sample L66.

AF7VW9 (X) - Data for both samples are high.

FHGNCH (M) - Participant did not submit data for sample L66.

G72UX6 (M) - Participant did not submit data for sample L66.

GTCU82 (M) - Participant did not submit data for sample L66.

KGTLW6 (M) - Participant did not submit data for sample L66.

L3YQRP (X) - Data for sample L66 are high. Inconsistent within the determinations of both samples.

MBV494 (M) - Participant did not submit data for sample L66.

MK3JEC (M) - Participant did not submit data for sample L66.

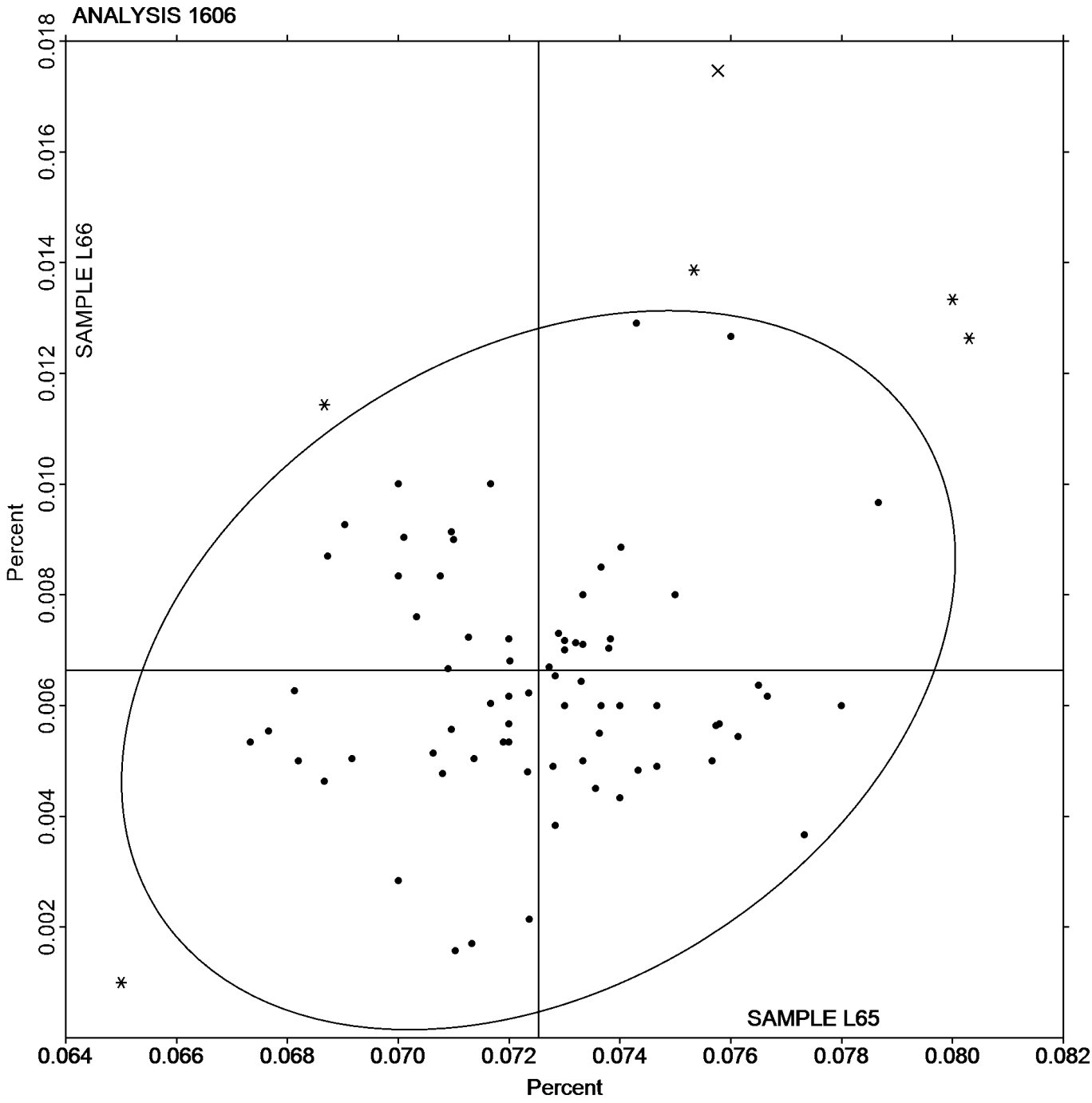
QQB99T (X) - Data for sample L65 are high.

QXX2KT (M) - Participant did not submit data for sample L66.

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

SAMPLE L65
0.0725 Percent

SAMPLE L66
0.00664 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA	*	0.1490	0.0113	2.75	0.00967	-0.0008	-0.35	IC
26F8LG		0.1410	0.0033	0.81	0.0108	0.0003	0.14	AE
2B6RPW		0.1313	-0.0063	-1.54	0.0102	-0.0003	-0.12	OE
2QG79F		0.1430	0.0053	1.30	0.00900	-0.0015	-0.64	XX
3AQK3F		0.1360	-0.0017	-0.41	0.00733	-0.0031	-1.37	OE
3CW32B		0.1341	-0.0035	-0.86	0.00947	-0.0010	-0.44	OE
3EZXKE		0.1397	0.0020	0.49	0.0120	0.0015	0.67	OE
4EDV8B		0.1397	0.0020	0.49	0.0118	0.0013	0.56	OE
4UUMEP		0.1398	0.0021	0.52	0.0114	0.0009	0.40	OE
6PTZZR		0.1373	-0.0003	-0.08	0.00890	-0.0016	-0.69	OE
6X8MBG		0.1380	0.0003	0.08	0.0100	-0.0005	-0.21	OE
6Y43LT		0.1417	0.0040	0.97	0.0103	-0.0001	-0.06	AE
78QKD7		0.1367	-0.0010	-0.24	0.0100	-0.0005	-0.21	OE
7GWRR7	X	0.1347	-0.0030	-0.73	0.0195	0.0091	3.96	OE
7H7ENY		0.1388	0.0011	0.27	0.0111	0.0007	0.29	OE
7NTMRP		0.1347	-0.0030	-0.72	0.0109	0.0004	0.19	OE
7YY6QN		0.1363	-0.0013	-0.33	0.00633	-0.0041	-1.81	IC
8EM333		0.1343	-0.0033	-0.81	0.0140	0.0035	1.54	OE
99D2JK		0.1400	0.0023	0.57	0.00977	-0.0007	-0.31	OE
9D8VJ7		0.1401	0.0024	0.58	0.00957	-0.0009	-0.40	OE
9RM622		0.1430	0.0054	1.30	0.00970	-0.0008	-0.34	OE
9XWGYN		0.1460	0.0083	2.02	0.00493	-0.0055	-2.42	OE
A2RCF2		0.1390	0.0013	0.32	0.00967	-0.0008	-0.35	XX
AF7VW9	X	0.2128	0.0751	18.25	0.0875	0.0770	33.57	OE
BAYPUB		0.1374	-0.0003	-0.07	0.0118	0.0013	0.58	OE
BHANNL		0.1333	-0.0043	-1.05	0.0124	0.0019	0.84	OE
BNZ2PA		0.1350	-0.0027	-0.65	0.00533	-0.0051	-2.24	OE
C6HG7B		0.1453	0.0077	1.86	0.00943	-0.0010	-0.45	OE
CFXD33		0.1267	-0.0110	-2.67	0.0135	0.0031	1.33	OE
CJ4WAB		0.1390	0.0013	0.32	0.0121	0.0016	0.71	OE
CPAP47		0.1369	-0.0008	-0.19	0.0136	0.0032	1.38	OE
D3RMZU		0.1360	-0.0017	-0.41	0.0103	-0.0002	-0.09	OE
DPKNXF		0.1367	-0.0010	-0.24	0.0110	0.0005	0.23	XX
E34XV6		0.1353	-0.0023	-0.57	0.00997	-0.0005	-0.22	GD
EEJNYG		0.1381	0.0004	0.10	0.0102	-0.0003	-0.12	OE
EHJYRV		0.1330	-0.0047	-1.14	0.00757	-0.0029	-1.27	OE
EUV4YQ		0.1353	-0.0024	-0.58	0.00950	-0.0010	-0.42	OE
FHGNCH	M	0.1397	0.0020	0.49	No Data Reported			IC
FMAT32		0.1400	0.0023	0.57	0.0100	-0.0005	-0.21	OE
G72UX6	M	0.1397	0.0020	0.49	No Data Reported			OE
GRWVNC		0.1407	0.0031	0.74	0.00890	-0.0016	-0.69	IC
GTCU82		0.1417	0.0040	0.97	0.00967	-0.0008	-0.35	OE
H3B7L3		0.1311	-0.0066	-1.61	0.0139	0.0035	1.51	OE
H8RE6Z		0.1367	-0.0010	-0.24	0.00867	-0.0018	-0.79	OE
H9YUB7		0.1347	-0.0030	-0.73	0.0110	0.0005	0.23	OE
HB7CA3		0.1343	-0.0033	-0.81	0.0120	0.0015	0.67	OE
HXHARA		0.1353	-0.0023	-0.57	0.00913	-0.0013	-0.58	XX

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
KGTLW6		0.1345	-0.0032	-0.78	0.0115	0.0010	0.43	XX
KMVWKP		0.1407	0.0030	0.73	0.00920	-0.0013	-0.56	OE
L3YQRP	X	0.1490	0.0113	2.75	0.1073	0.0969	42.24	OE
LJN2ER		0.1427	0.0051	1.23	0.00690	-0.0036	-1.56	OE
LNHQ2Q		0.1400	0.0023	0.57	0.00840	-0.0021	-0.90	OE
LPWF44		0.1377	0.0000	0.01	0.00980	-0.0007	-0.29	OE
M6NBE9		0.1407	0.0031	0.74	0.0159	0.0054	2.37	OE
MAFM8J		0.1466	0.0090	2.18	0.00863	-0.0018	-0.80	OE
MBV494	M	0.1387	0.0010	0.24	No Data Reported			OE
MK3JEC	M	0.1413	0.0037	0.89	No Data Reported			OE
MKY4ZQ		0.1370	-0.0007	-0.16	0.00907	-0.0014	-0.61	IC
MU7TL2		0.1407	0.0030	0.73	0.0100	-0.0005	-0.21	OE
NKVRZ2		0.1393	0.0017	0.40	0.0117	0.0012	0.52	OE
NTRQBM		0.1363	-0.0013	-0.33	0.0130	0.0025	1.10	DR
P9CWX8		0.1420	0.0043	1.05	0.00993	-0.0005	-0.24	OE
PBMN7M		0.1354	-0.0023	-0.56	0.0149	0.0044	1.93	OE
Q8ZJVV		0.1290	-0.0087	-2.11	0.00967	-0.0008	-0.35	XX
QEHPR3		0.1267	-0.0110	-2.67	0.0120	0.0015	0.67	XX
QN6VHE		0.1360	-0.0017	-0.41	0.00930	-0.0012	-0.51	OE
QQB99T	X	0.1900	0.0523	12.72	0.0130	0.0025	1.10	GD
QXX2KT	M	0.1357	-0.0019	-0.47	No Data Reported			OE
R69PPE		0.1370	-0.0007	-0.16	0.0111	0.0006	0.26	OE
R8GZLH		0.1363	-0.0014	-0.33	0.0120	0.0015	0.64	OE
RF8HZQ		0.1337	-0.0040	-0.97	0.0100	-0.0005	-0.21	OE
RLCGD2		0.1375	-0.0002	-0.05	0.0157	0.0052	2.28	OE
RLWZCG		0.1433	0.0057	1.38	0.00500	-0.0055	-2.39	OE
RZENQK		0.1430	0.0053	1.30	0.00863	-0.0018	-0.80	AE
UGHYCV		0.1367	-0.0010	-0.24	0.0150	0.0045	1.97	OE
UUZUJE		0.1360	-0.0017	-0.41	0.0110	0.0006	0.24	OE
UVYVRR		0.1370	-0.0007	-0.17	0.0135	0.0030	1.33	OE
V3QW6M		0.1307	-0.0070	-1.70	0.0160	0.0055	2.41	OE
V3RMDQ		0.1379	0.0002	0.06	0.00960	-0.0009	-0.38	OE
VH6ZVN		0.1447	0.0070	1.70	0.0107	0.0003	0.11	OE
VUXGKP		0.1377	0.0000	0.00	0.0112	0.0007	0.32	OE
WNNRBF		0.1367	-0.0010	-0.24	0.0107	0.0002	0.08	OE
WPFNXN	X	0.1410	0.0033	0.81	0.0190	0.0085	3.72	OE
XG6YJG	*	0.1280	-0.0097	-2.35	0.00600	-0.0045	-1.95	GD
XV2W2E		0.1340	-0.0037	-0.89	0.00627	-0.0042	-1.83	XX
XXA7XH		0.1355	-0.0022	-0.54	0.0119	0.0014	0.62	OE
YX9TQG		0.1388	0.0012	0.28	0.00923	-0.0012	-0.54	OE
ZB77FC		0.1353	-0.0024	-0.58	0.0120	0.0015	0.67	OE
ZGXGPA		0.1390	0.0013	0.32	0.00993	-0.0005	-0.24	OE
ZMJ8C6		0.1381	0.0004	0.10	0.0112	0.0008	0.33	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.1377	Percent	0.0105	Percent
Stnd Dev Btwn Labs	0.0041	Percent	0.0023	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 79 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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1607

7GWRR7 (X) - Data for sample L66 are high.

AF7VW9 (X) - Data for both samples are high.

FHGNCH (M) - Participant did not submit data for sample L66.

G72UX6 (M) - Participant did not submit data for sample L66.

L3YQRP (X) - Data for both samples are high. Inconsistent within the determinations of sample L66.

MBV494 (M) - Participant did not submit data for sample L66.

MK3JEC (M) - Participant did not submit data for sample L66.

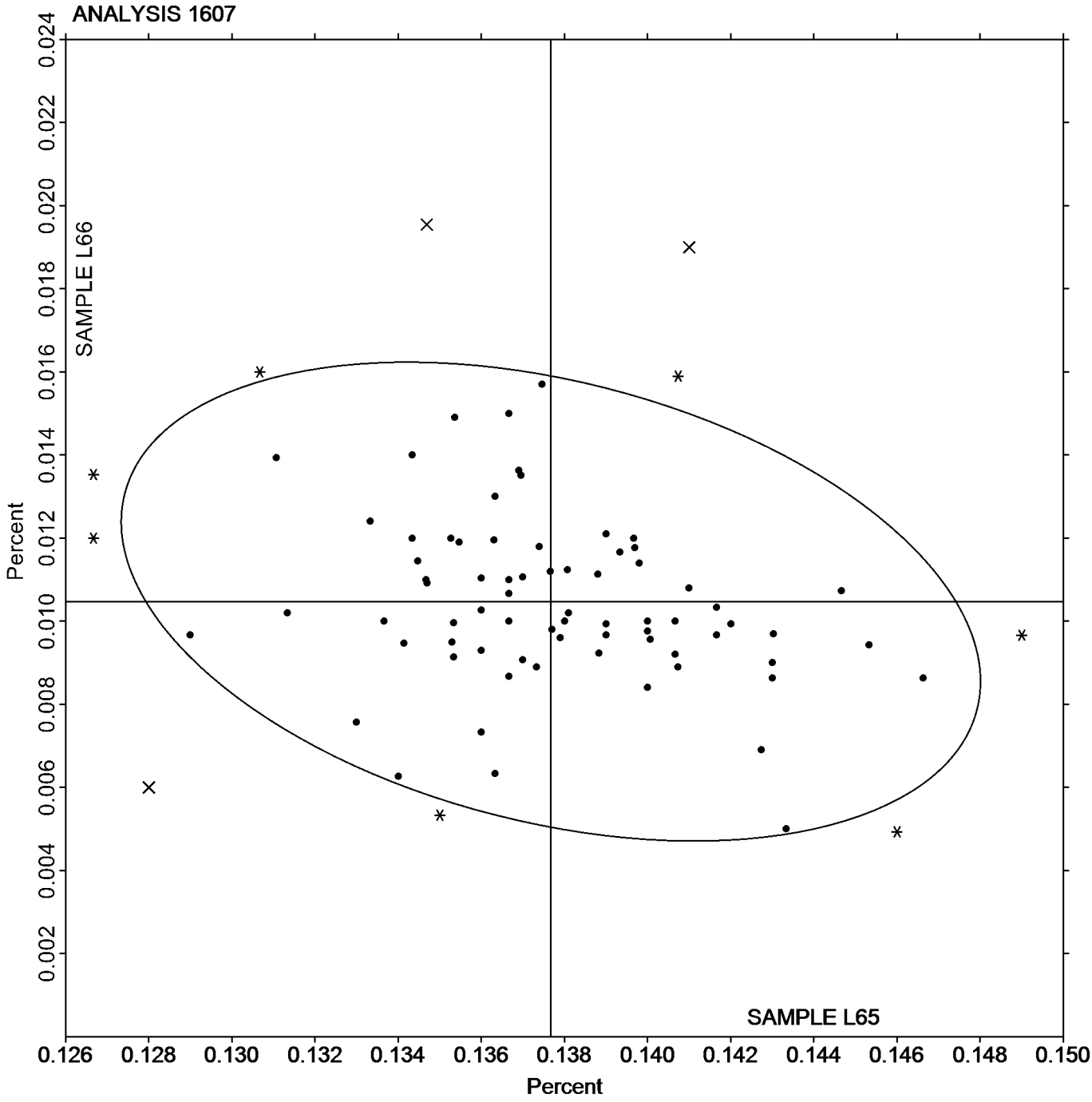
QQB99T (X) - Data for sample L65 are high.

QXX2KT (M) - Participant did not submit data for sample L66.

WPFNXN (X) - Data for sample L66 are high.

SAMPLE L65
0.1377 Percent

SAMPLE L66
0.0105 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA	M	0.2257	0.0142	2.76	No Data Reported			IC
26F8LG		0.2037	-0.0078	-1.52	0.00310	-0.00123	-0.91	AE
2B6RPW	X	0.1237	-0.0878	-17.13	0.00180	-0.00253	-1.86	OE
2QG79F		0.2030	-0.0085	-1.66	0.00500	0.00067	0.49	XX
3AQK3F		0.2083	-0.0032	-0.62	0.00400	-0.00033	-0.25	OE
3CW32B		0.2164	0.0049	0.96	0.00463	0.00030	0.22	OE
3EZXKE		0.2067	-0.0048	-0.94	0.00300	-0.00133	-0.98	OE
4EDV8B		0.2080	-0.0035	-0.68	0.00487	0.00053	0.39	OE
4UUMEP	M	0.2062	-0.0053	-1.03	No Data Reported			OE
6PTZZR	M	0.2103	-0.0012	-0.23	No Data Reported			XX
6Y43LT		0.2110	-0.0005	-0.10	0.00433	0.00000	0.00	AE
78QKD7	M	0.2013	-0.0102	-1.98	No Data Reported			OE
7GWRR7		0.2096	-0.0019	-0.37	0.00558	0.00124	0.91	OE
7H7ENY		0.2183	0.0068	1.33	0.00320	-0.00113	-0.83	OE
7NTMRP		0.2166	0.0051	0.99	0.00418	-0.00016	-0.12	OE
7YY6QN		0.2090	-0.0025	-0.49	0.00667	0.00233	1.71	IC
8EM333	X	0.0210	-0.1905	-37.16	0.00333	-0.00100	-0.74	OE
99D2JK		0.2150	0.0035	0.68	0.00450	0.00017	0.12	OE
9D8VJ7		0.2069	-0.0046	-0.90	0.00397	-0.00037	-0.27	OE
9RM622		0.2117	0.0002	0.03	0.00443	0.00010	0.07	OE
9XWGYN		0.2160	0.0045	0.88	0.00207	-0.00227	-1.67	OE
A2RCF2		0.2090	-0.0025	-0.49	0.00500	0.00067	0.49	XX
AF7VW9	X	0.3503	0.1388	27.08	0.1350	0.13063	96.01	OE
B4UPGZ		0.2073	-0.0042	-0.81	0.00400	-0.00033	-0.25	OE
BAYPUB		0.2107	-0.0008	-0.15	0.00270	-0.00163	-1.20	OE
BHANNL		0.2070	-0.0045	-0.88	0.00570	0.00137	1.00	OE
BNZ2PA		0.2177	0.0062	1.20	0.00447	0.00013	0.10	OE
C6HG7B		0.2113	-0.0002	-0.03	0.00383	-0.00050	-0.37	OE
CFXD33	X	0.2053	-0.0062	-1.21	0.0117	0.00737	5.41	OE
CJ4WAB		0.2093	-0.0022	-0.42	0.00767	0.00333	2.45	OE
CPAP47		0.2187	0.0072	1.41	0.00253	-0.00180	-1.32	OE
D3RMZU		0.2228	0.0113	2.21	0.00407	-0.00027	-0.20	OE
DPKNXF		0.2143	0.0028	0.55	0.00533	0.00100	0.73	XX
E34XV6		0.2103	-0.0012	-0.23	0.00413	-0.00020	-0.15	GD
EHJYRV	X	0.2220	0.0105	2.05	0.00840	0.00407	2.99	OE
EUV4YQ		0.2132	0.0017	0.33	0.00413	-0.00020	-0.15	OE
FHGNCH	M	0.2073	-0.0042	-0.81	No Data Reported			IC
FMAT32	X	0.2033	-0.0082	-1.59	0.0100	0.00567	4.16	OE
G72UX6	M	0.2120	0.0005	0.10	No Data Reported			OE
GRWVNC		0.2128	0.0013	0.25	0.00410	-0.00023	-0.17	IC
GTCU82		0.2103	-0.0012	-0.23	0.00333	-0.00100	-0.74	OE
H3B7L3		0.2070	-0.0045	-0.88	0.00517	0.00083	0.61	OE
H8RE6Z		0.2160	0.0045	0.88	0.00500	0.00067	0.49	OE
H9YUB7		0.2117	0.0002	0.03	0.00633	0.00200	1.47	OE
HB7CA3		0.2097	-0.0018	-0.36	0.00553	0.00120	0.88	IC
HXHARA		0.2140	0.0025	0.49	0.00403	-0.00030	-0.22	XX
KGTLW6	M	0.2085	-0.0030	-0.59	No Data Reported			XX

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
KMVWKP		0.2213	0.0098	1.92	0.00687	0.00253	1.86	OE
L3YQRP		0.2067	-0.0048	-0.94	0.00117	-0.00317	-2.33	OE
LJN2ER		0.2058	-0.0057	-1.10	0.00407	-0.00027	-0.20	OE
LNHQ2Q		0.2100	-0.0015	-0.29	0.00430	-0.00003	-0.03	OE
LPWF44		0.2081	-0.0034	-0.66	0.00483	0.00050	0.37	OE
M6NBE9		0.2190	0.0075	1.46	0.00353	-0.00080	-0.59	OE
MAFM8J		0.2100	-0.0015	-0.29	0.00343	-0.00090	-0.66	OE
MBV494	M	0.2023	-0.0092	-1.79	No Data Reported			OE
MK3JEC	M	0.2093	-0.0022	-0.42	No Data Reported			OE
MKY4ZQ		0.2057	-0.0058	-1.14	0.00423	-0.00010	-0.07	IC
MU7TL2		0.2197	0.0082	1.59	0.00287	-0.00147	-1.08	OE
NKVRZ2		0.2150	0.0035	0.68	0.00367	-0.00067	-0.49	OE
P9CWX8		0.2097	-0.0018	-0.36	0.00410	-0.00023	-0.17	OE
PBMN7M	X	0.1879	-0.0236	-4.60	0.0191	0.01473	10.83	OE
Q8ZJVV		0.2087	-0.0028	-0.55	0.00500	0.00067	0.49	XX
QEHPR3		0.2143	0.0028	0.55	0.00100	-0.00333	-2.45	XX
QN6VHE		0.2120	0.0005	0.10	0.00407	-0.00027	-0.20	OE
QQB99T	X	0.2500	0.0385	7.51	0.00600	0.00167	1.22	GD
QXX2KT	M	0.2121	0.0006	0.12	No Data Reported			XX
R69PPE		0.2127	0.0012	0.23	0.00507	0.00073	0.54	OE
R8GZLH	M	0.2191	0.0076	1.49	No Data Reported			OE
RF8HZQ		0.2033	-0.0082	-1.59	0.00300	-0.00133	-0.98	OE
RLCGD2	M	0.2089	-0.0026	-0.50	No Data Reported			OE
RLWZCG		0.2167	0.0052	1.01	0.00300	-0.00133	-0.98	OE
RZENQK		0.2123	0.0008	0.16	0.00437	0.00003	0.02	AE
UGHYCV		0.2080	-0.0035	-0.68	0.00633	0.00200	1.47	OE
UUZUJE	*	0.2199	0.0084	1.65	0.00727	0.00293	2.15	OE
UVYVRR		0.2068	-0.0047	-0.91	0.00728	0.00294	2.16	OE
V3QW6M	X	0.1960	-0.0155	-3.02	0.0100	0.00567	4.16	OE
V3RMDQ		0.2109	-0.0006	-0.12	0.00763	0.00330	2.42	OE
VH6ZVN		0.2207	0.0092	1.79	0.00400	-0.00033	-0.25	OE
VUXGKP		0.2130	0.0015	0.29	0.00400	-0.00033	-0.25	OE
WNNRBF		0.2100	-0.0015	-0.29	0.00400	-0.00033	-0.25	OE
WPFNXN		0.2170	0.0055	1.07	0.00240	-0.00193	-1.42	OE
XG6YJG		0.2227	0.0112	2.18	0.00400	-0.00033	-0.25	GD
XV2W2E		0.2010	-0.0105	-2.05	0.00500	0.00067	0.49	XX
XXA7XH		0.2116	0.0001	0.03	0.00397	-0.00037	-0.27	OE
YX9TQG		0.2078	-0.0037	-0.72	0.00437	0.00003	0.02	OE
ZB77FC		0.2085	-0.0030	-0.59	0.00360	-0.00073	-0.54	OE
ZGXGPA		0.2070	-0.0045	-0.88	0.00303	-0.00130	-0.96	OE
ZMJ8C6		0.2011	-0.0104	-2.03	0.00440	0.00007	0.05	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.2115	Percent	0.00433	Percent
Stnd Dev Btwn Labs	0.0051	Percent	0.00136	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 67 of 88 reporting participants

Key to Method Codes Reported by Participants

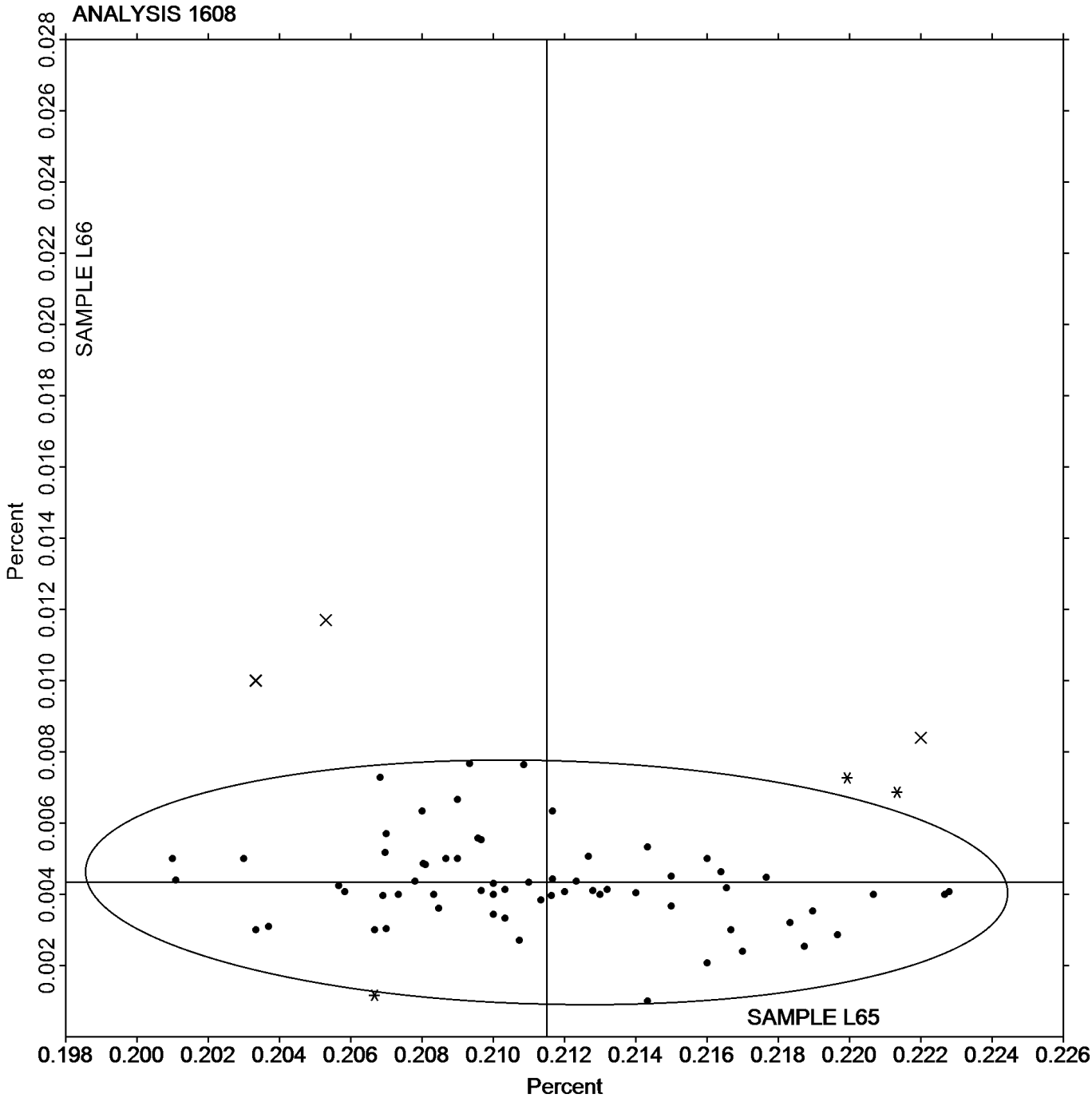
AE Spectrometry - Atomic Emission (AES)
GD Spectrometry - Glow Discharge (GDS)
IC Spectrometry - Inductively Coupled Plasma (ICP)
OE Spectrometry - Optical Emission (OES)
XX Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1608

22F3RA (M) - Participant did not submit data for sample L66.
2B6RPW (X) - Data for sample L65 are low.
4UUMEP (M) - Participant did not submit data for sample L66.
6PTZZR (M) - Participant did not submit data for sample L66.
78QKD7 (M) - Participant did not submit data for sample L66.
8EM333 (X) - Data for sample L65 are low. Inconsistent within the determinations of sample L66.
AF7VW9 (X) - Data for both samples are high. Inconsistent within the determinations of sample L66.
CFXD33 (X) - Data for sample L66 are high.
EHJYRV (X) - Data for sample L66 are high.
FHGNCH (M) - Participant did not submit data for sample L66.
FMAT32 (X) - Data for sample L66 are high. Inconsistent within the determinations of sample L65.
G72UX6 (M) - Participant did not submit data for sample L66.
KGTLW6 (M) - Participant did not submit data for sample L66.
MBV494 (M) - Participant did not submit data for sample L66.
MK3JEC (M) - Participant did not submit data for sample L66.
PBMN7M (X) - Data for sample L65 are low and data for sample L66 are high. Inconsistent within the determinations of sample L66.
QQB99T (X) - Data for sample L65 are high.
QXX2KT (M) - Participant did not submit data for sample L66.
R8GZLH (M) - Participant did not submit data for sample L66.
RLCGD2 (M) - Participant did not submit data for sample L66.
V3QW6M (X) - Data for sample L65 are low and data for sample L66 are high. Inconsistent within the determinations of sample L65.

SAMPLE L65
0.2115 Percent

SAMPLE L66
0.00433 Percent



Fasteners and Metals Interlaboratory Testing Program

Analysis 1611

Carbon & Low Alloy Steel, TUNGSTEN (W)
TUNGSTEN (W)

Cycle 129
1st Qtr 2020

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
26F8LG		0.00100	-0.00330	-0.79	0.00100	-0.00216	-0.47	XX
2B6RPW		0.00113	-0.00317	-0.76	0.000200	-0.00296	-0.64	OE
3EZXKE		0.00300	-0.00130	-0.31	0.00100	-0.00216	-0.47	OE
7NTMRP		0.00366	-0.00064	-0.15	0.00194	-0.00122	-0.27	OE
7YY6QN		0.00133	-0.00297	-0.71	0.000333	-0.00283	-0.62	IC
AF7VW9		0.0125	0.00820	1.97	0.0121	0.00894	1.95	OE
BNZ2PA		0.000200	-0.00410	-0.98	0.000200	-0.00296	-0.64	OE
CJ4WAB		0.00260	-0.00170	-0.41	0.000200	-0.00296	-0.64	OE
D3RMZU		0.00193	-0.00237	-0.57	0.000633	-0.00253	-0.55	OE
EHJYRV		0.00230	-0.00200	-0.48	0.000233	-0.00293	-0.64	OE
EUV4YQ		0.0113	0.00696	1.67	0.0103	0.00714	1.56	OE
KGTLW6	M	0.00291	-0.00139	-0.33	No Data Reported			XX
LJN2ER		0.00293	-0.00137	-0.33	0.000500	-0.00266	-0.58	OE
LNHQ2Q		0.00137	-0.00294	-0.70	0.000280	-0.00288	-0.63	OE
LPWF44		0.00543	0.00113	0.27	0.00277	-0.00039	-0.09	OE
M6NBE9		0.00240	-0.00190	-0.46	0.000133	-0.00303	-0.66	OE
MAFM8J		0.0133	0.00896	2.15	0.0130	0.00981	2.14	OE
MKY4ZQ	M	0.00130	-0.00300	-0.72	No Data Reported			IC
P9CWX8		0.00233	-0.00197	-0.47	0.000567	-0.00259	-0.56	OE
Q8ZJVV		0.00533	0.00103	0.25	0.00233	-0.00083	-0.18	XX
QN6VHE		0.000967	-0.00334	-0.80	0.000367	-0.00279	-0.61	OE
QQB99T	X	0.0257	0.02136	5.12	0.0247	0.02151	4.69	GD
RLWZCG	*	0.00733	0.00303	0.73	0.0103	0.00717	1.56	OE
UUZUJE		0.000933	-0.00337	-0.81	0.000967	-0.00219	-0.48	OE
VH6ZVN		0.00357	-0.00074	-0.18	0.00157	-0.00159	-0.35	OE
WPFNXN	X	0.0160	0.01170	2.81	0.0210	0.01784	3.89	OE
XG6YJG		0.0137	0.00936	2.25	0.0130	0.00984	2.14	GD
YX9TQG		0.00280	-0.00150	-0.36	0.00190	-0.00126	-0.27	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.00430	Percent	0.00316	Percent
Stnd Dev Btwn Labs	0.00417	Percent	0.00459	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 24 of 28 reporting participants

Key to Method Codes Reported by Participants

GD	Spectrometry - Glow Discharge (GDS)	IC	Spectrometry - Inductively Coupled Plasma (ICP)
OE	Spectrometry - Optical Emission (OES)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1611

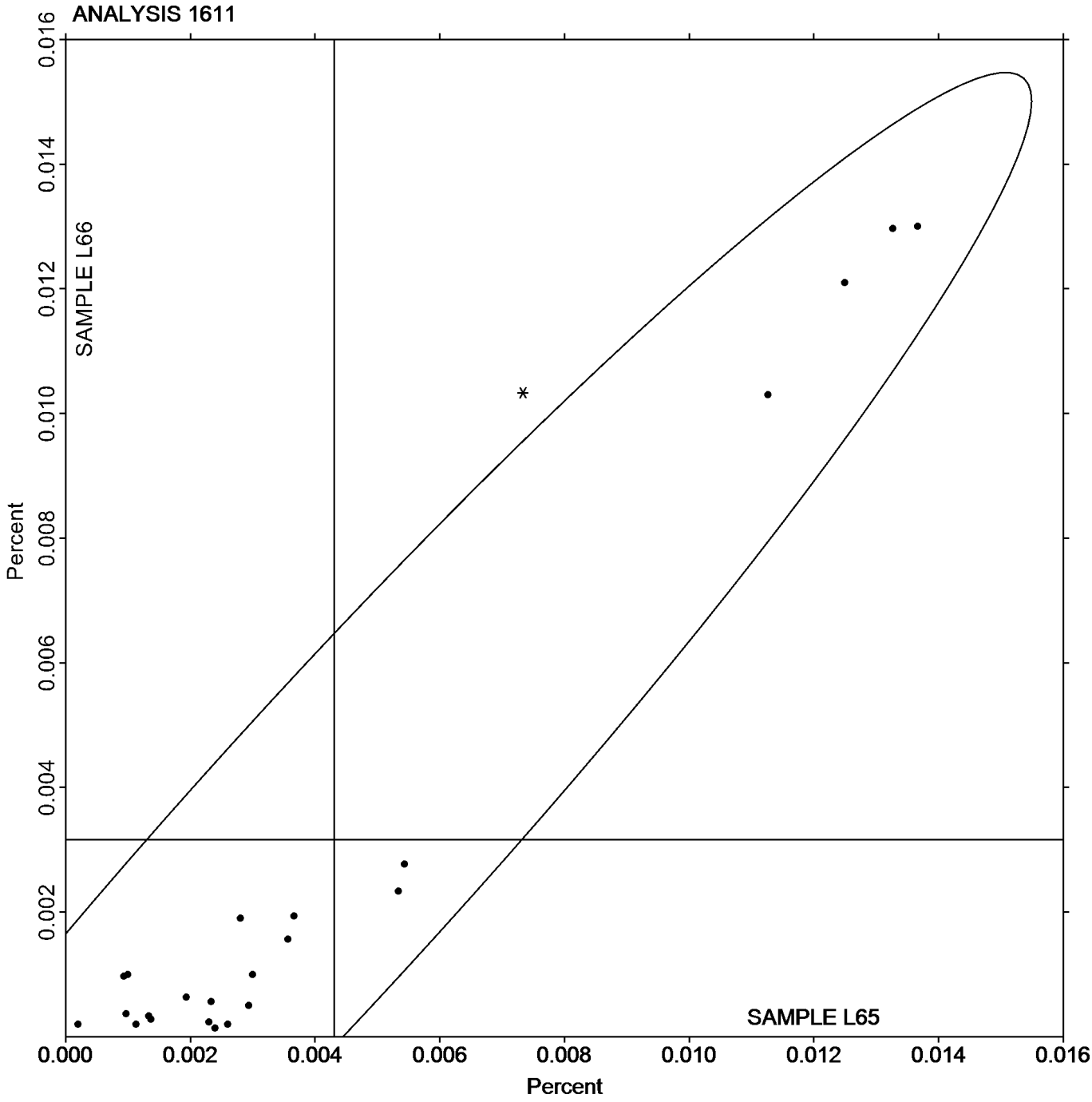
KGTLW6 (M) - Participant did not submit data for sample L66.

MKY4ZQ (M) - Participant did not submit data for sample L66.

QQB99T (X) - Data for both samples are high. Possible Systematic Error.

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

SAMPLE L65	SAMPLE L66
0.00430 Percent	0.00316 Percent



		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
22F3RA	M	0.00600	-0.00048	-0.86	No Data Reported			IC
26F8LG		0.00620	-0.00028	-0.50	0.00360	-0.00058	-0.96	AE
2B6RPW		0.00610	-0.00038	-0.68	0.00390	-0.00028	-0.47	OE
3AQK3F		0.00600	-0.00048	-0.86	0.00400	-0.00018	-0.30	OE
3EZXKE		0.00700	0.00052	0.94	0.00500	0.00082	1.36	OE
4EDV8B		0.00620	-0.00028	-0.50	0.00407	-0.00011	-0.19	OE
4UUMEP	M	0.00637	-0.00011	-0.20	No Data Reported			OE
6X8MBG		0.00627	-0.00021	-0.38	0.00387	-0.00031	-0.52	OE
6Y43LT		0.00670	0.00022	0.40	0.00420	0.00002	0.03	AE
78QKD7		0.00653	0.00006	0.10	0.00467	0.00049	0.81	OE
7GWRR7	X	0.00670	0.00022	0.40	0.00560	0.00142	2.36	OE
7H7ENY		0.00650	0.00002	0.04	0.00383	-0.00035	-0.58	OE
7NTMRP		0.00606	-0.00042	-0.75	0.00396	-0.00022	-0.37	OE
7YY6QN	X	0.00367	-0.00281	-5.06	0.00100	-0.00318	-5.28	XX
99D2JK	M	0.00700	0.00052	0.94	No Data Reported			OE
9D8VJ7		0.00577	-0.00071	-1.28	0.00343	-0.00075	-1.24	OE
9RM622	X	0.00850	0.00202	3.64	0.00660	0.00242	4.02	OE
9XWGYN		0.00623	-0.00024	-0.44	0.00383	-0.00035	-0.58	OE
AF7VW9	X	0.0121	0.00562	10.12	0.00793	0.00375	6.23	OE
BNZ2PA	X	0.00457	-0.00191	-3.44	0.00373	-0.00045	-0.74	OE
C6HG7B		0.00577	-0.00071	-1.28	0.00433	0.00015	0.25	OE
CJ4WAB		0.00670	0.00022	0.40	0.00443	0.00025	0.42	OE
D3RMZU		0.00773	0.00126	2.26	0.00553	0.00135	2.25	OE
EEJNYG		0.00645	-0.00003	-0.06	0.00405	-0.00013	-0.22	OE
EHJYRV		0.00690	0.00042	0.76	0.00443	0.00025	0.42	OE
EUV4YQ	X	0.00917	0.00269	4.84	0.00163	-0.00255	-4.23	OE
FMAT32	M	0.0100	0.00352	6.34	No Data Reported			XX
G72UX6		0.00700	0.00052	0.94	0.00500	0.00082	1.36	OE
GRWVNC		0.00657	0.00009	0.16	0.00373	-0.00045	-0.74	IC
HB7CA3		0.00650	0.00002	0.04	0.00410	-0.00008	-0.13	IC
HXHARA		0.00720	0.00072	1.30	0.00503	0.00085	1.42	IC
KGTLW6		0.00676	0.00029	0.51	0.00487	0.00069	1.14	XX
LJN2ER		0.00637	-0.00011	-0.20	0.00377	-0.00041	-0.69	OE
LNHQ2Q		0.00640	-0.00008	-0.14	0.00370	-0.00048	-0.80	OE
LPWF44		0.00647	-0.00001	-0.02	0.00407	-0.00011	-0.19	OE
M6NBE9		0.00583	-0.00064	-1.16	0.00360	-0.00058	-0.96	OE
MBV494	M	0.00630	-0.00018	-0.32	No Data Reported			OE
MKY4ZQ	M	0.00667	0.00019	0.34	No Data Reported			IC
MU7TL2		0.00650	0.00002	0.04	0.00403	-0.00015	-0.24	OE
NKVRZ2		0.00660	0.00012	0.22	0.00420	0.00002	0.03	OE
NTRQBM		0.00657	0.00009	0.16	0.00457	0.00039	0.64	DR
P9CWX8		0.00650	0.00002	0.04	0.00403	-0.00015	-0.24	OE
Q8ZJVV		0.00567	-0.00081	-1.46	0.00333	-0.00085	-1.41	XX
QN6VHE		0.00693	0.00046	0.82	0.00400	-0.00018	-0.30	OE
QQB99T	X	0.0150	0.00852	15.35	0.0123	0.00815	13.53	GD
QXX2KT		0.00673	0.00026	0.46	0.00427	0.00009	0.14	OE
RF8HZQ		0.00500	-0.00148	-2.66	0.00300	-0.00118	-1.96	OE

Fasteners and Metals Interlaboratory Testing Program

Analysis 1614

Carbon & Low Alloy Steel, COBALT (Co)
COBALT (Co)

Cycle 129
1st Qtr 2020

		Sample L65			Sample L66			
WebCode	Data Flag	Lab Mean	Diff. from Grand Mean	CPV	Lab Mean	Diff. from Grand Mean	CPV	Method
RLCGD2	*	0.00823	0.00176	3.16	0.00580	0.00162	2.69	OE
RLWZCG		0.00633	-0.00014	-0.26	0.00433	0.00015	0.25	OE
UGHYCV		0.00677	0.00029	0.52	0.00430	0.00012	0.20	XX
UUZUJE	X	0.00960	0.00312	5.62	0.00720	0.00302	5.01	OE
UVYVRR		0.00659	0.00012	0.21	0.00396	-0.00022	-0.36	OE
V3QW6M	X	0.00867	0.00219	3.94	0.00500	0.00082	1.36	OE
VH6ZVN		0.00670	0.00022	0.40	0.00420	0.00002	0.03	OE
VUXGKP		0.00613	-0.00034	-0.62	0.00433	0.00015	0.25	OE
WNNRBF	*	0.00733	0.00086	1.54	0.00567	0.00149	2.47	OE
YX9TQG		0.00650	0.00002	0.04	0.00403	-0.00015	-0.24	OE
ZB77FC		0.00580	-0.00068	-1.22	0.00330	-0.00088	-1.46	OE
ZMJ8C6		0.00593	-0.00054	-0.98	0.00357	-0.00061	-1.02	OE

Summary Statistics

	Sample L65		Sample L66	
Grand Means	0.00648	Percent	0.00418	Percent
Stnd Dev Btwn Labs	0.00056	Percent	0.00060	Percent

Samples L65, L66 : AISI 1018, A36

Statistics based on 44 of 59 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)	XX	Please Indicate Method Used for Current Element

Comments on Assigned Data Flags for Test #1614

22F3RA (M) - Participant did not submit data for sample L66.

4UUMEP (M) - Participant did not submit data for sample L66.

7GWRR7 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample L65.

7YY6QN (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample L65.

99D2JK (M) - Participant did not submit data for sample L66.

9RM622 (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample L65.

AF7VW9 (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.

BNZ2PA (X) - Data for sample L65 are low.

EUV4YQ (X) - Data for sample L65 are high and data for sample L66 are low. Inconsistent in testing between samples.

FMAT32 (M) - Participant did not submit data for sample L66.

MBV494 (M) - Participant did not submit data for sample L66.

MKY4ZQ (M) - Participant did not submit data for sample L66.

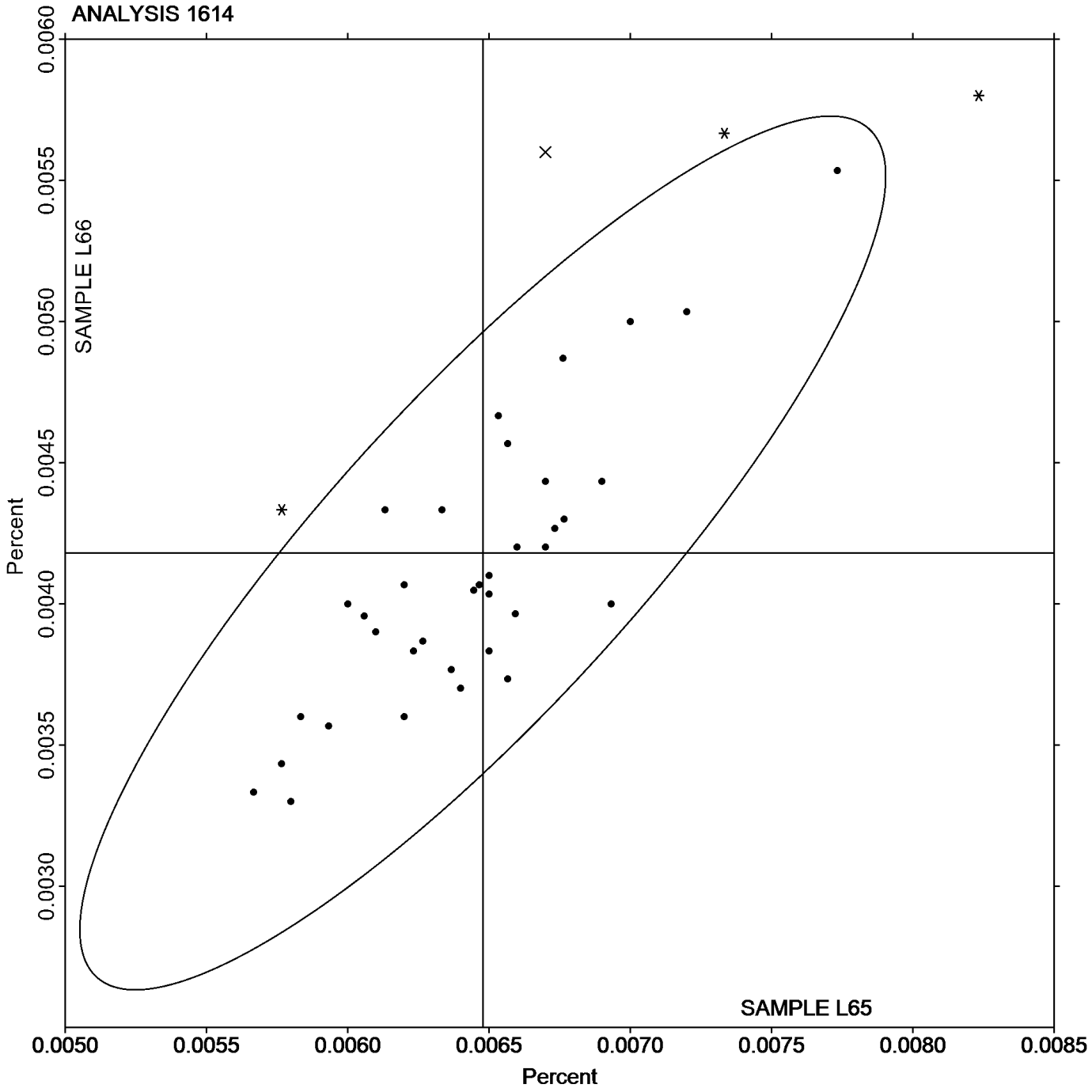
QQB99T (X) - Data for both samples are high. Possible Systematic Error.

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

V3QW6M (X) - Data for sample L65 are high. Inconsistent within the determinations of sample L65.

SAMPLE L65
0.00648 Percent

SAMPLE L66
0.00418 Percent



-End of Report-

