Plastics Interlaboratory Testing Program
Web Summary Report #121, 1st Qtr 2022

About CTS and the Plastics Interlaboratory Program

Key for Web Summary Report

Results Summary for this Report

Analysis	Analysis Name	Analysis	Analysis Name
704	Tensile Stress at Yield, Plastic Samples	761	DSC Melt Temperature
705	Tensile Stress at Break, Plastic Samples	762	DSC Enthalpy of Crystallization
706	Percent Elongation at Yield, Plastic Samples	763	DSC Enthalpy of Fusion
708	Modulus of Elasticity, Plastic Samples	764	DSC Glass Transition Temperature
710	Deflection Temp. Under Flexural Load (1.82 MPa)	765	DSC Crystallization Peak Temperature - Research
711	Deflection Temp. Under Flexural Load (0.455 MPa)	766	DSC Melting Peak Temperature - Research
712	Temp. of Deflection Under Flexural Load 1.80 MPa	767	DSC Heat of Crystallization - Research
715	Vicat Softening Temperature (Rate A)	768	DSC Heat of Fusion - Research
716	Vicat Softening Temperature (Rate B)	769	DSC Glass Transition Temperature - Research
718	Specific Gravity	770	Tensile Stress at Yield, Film Samples
720	Flexural Modulus	771	Tensile Stress at Break, Film Samples
721	Flexural Stress at 5% Strain	772	Percent Elongation at Yield, Film Samples
722	Flexural Stress at Yield	773	Percent Elongation at Break, Film Samples
730	Tensile Stress at Yield, ISO Plastic Samples	774	Thickness of Film Tensile Samples
731	Tensile Stress at Break, ISO Plastic Samples	775	Secant Modulus at 1% Strain
732	Percent Strain at Yield, ISO Plastic Samples	776	Secant Modulus at 2% Strain
734	Modulus of Elasticity, ISO Plastic Samples	780	Coefficient of Friction: Static
736	Flexural Modulus, ISO Plastic Samples	781	Coefficient of Friction: Kinetic
737	Flexural Stress at 3.5% Strain	782	Tear Resistance of Films
738	Flexural Stress at Yield	785	Optical Properties of Films - Percent Haze
750	Flow Rates of Thermoplastics (2.16 kg load)	786	Optical Properties of Films: % Transmittance
755	Moisture Content of Plastics	790	Notched Izod Impact
757	Ash Content in Thermoplastics	791	Notched Izod Impact (ISO)
758	Thermogravimetric Analysis	792	Notched Charpy Impact, ISO Plastic Samples
760	DSC Crystallization Temperature		

About CTS and the Plastics Interlaboratory Program

Founded in 1971, Collaborative Testing Services, Inc. (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 80 countries currently participate in CTS programs.

Collaborative Testing Services initiated the Collaborative Reference Program for PLASTICS in 1992 at the request of industry, ASTM committee D-20 members, and accrediting bodies. Additional test methods are always under review and are incorporated into the program when possible.

The program allows laboratories to compare periodically the level and uniformity of their testing with that of other participating laboratories. It also provides a realistic assessment of the state of plastics testing proficiency.

For each test there is a summary of the statistics for the analysis and a graphical representation of the data. 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 FOR SUMMARY REPORT for an explanation of terms and guidelines for interpreting the results.

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WebCode   Assigned laboratory identification number (temporary) used to ensure lab confidentiality while permitting a lab to locate its data in the Plastics Web Summary Report published on the CTS web site. The WebCode for each analysis can be found in the Performance Analysis Report mailed to each participant.

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.

Difference from Grand Mean   The difference of the LAB MEAN 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   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. 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). The critical value for each CPV will vary depending on the number of labs participating in a test.

Inst Code   A code indicating the manufacturer of the instrument used to perform the test (see separate INSTRUMENT CODE LIST for each test section) if instruments are tracked.

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 FLAG	STATISTICALLY INCLUDED/EXCLUDED	ACTION REQUIRED
*	INCLUDED	**CAUTION** - review testing procedure and monitor future results. Results fall outside 95% ellipse but within a 99% ellipse that is calculated but not drawn.
X	EXCLUDED	**STOP** - immediate review of data and/or testing procedure is required. Results fall outside the 99% ellipse. See specific notes following each table for more information on why the data is excluded.
M	EXCLUDED	**PROCEED** - lab was unable to report data for at least one sample.

Graph - For each laboratory, the LAB MEAN for the first sample (x-axis) is plotted against the LAB MEAN for the second sample (y-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 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.

Common Problems Highlighted in Footnotes

1. *Extreme data* - The laboratory's results for one or both samples are so inconsistent with those of the other participants that the lab mean(s) fall outside the plot. The participant is advised to immediately review his data and/or testing procedure.

2. *Systematic bias* - The laboratory's results are either consistently high or low for both samples when compared to the other participants (the plotted point falls near the top or bottom of the ellipse). This indicates that the participant is performing the test with a constant bias. Causes of systematic errors include improper calibration, the particular make/model of equipment or a modification to the testing procedure.

3. *Inconsistency in testing between samples/sample sets* - The laboratory's results indicate that there are differences in the way the two samples tested (the plotted point falls to the side of the ellipse). This type of error may be attributed to the analyst deviating from the procedure when testing one of the samples or a material interaction occurrence with the instrument or room conditions. The inconsistency is reflected in the CPVs for the two samples, such as a +1.5 CPV for sample A and a -2.2 CPV for sample B. CTS also will specify if the laboratory's data for one sample are high/low compared to the other participants. If this inconsistency is slight, the lab's plotted point will be an * that falls on the edge of the ellipse.

4. *Inconsistency in testing within a sample* - The laboratory's within-lab standard deviation for a specified sample is high when compared to the other participants, often causing the lab's plotted point to fall outside of the ellipse.

Labs flagged with an * are not typically included in the footnotes of a data table. These labs may locate their position in the control ellipse and use the definitions above to help identify the type of testing error. An * should serve as a caution flag, a "yellow light", to a lab. If this error is repeated in future rounds, a lab may need to stop and review its testing procedures. The initial data flag is not cause for alarm. Interlaboratory tests conducted at regular intervals permit a lab to recognize trends in testing.

Analysis 704 - Tensile Stress at Yield

Material: ABS/PC	Sample F81	7,559.56	psi	1.50% COV
	Sample F82	7,548.62	psi	1.48% COV

Analysis 705 - Tensile Stress at Break

Material: ABS/PC	Sample F81	7,058.65	psi	5.42% COV
	Sample F82	6,988.17	psi	4.23% COV

Analysis 706 - Percent Elongation at Yield

Material: ABS/PC	Sample F81	4.5211	Percent	2.94% COV
	Sample F82	4.5333	Percent	3.30% COV

Analysis 708 - Modulus of Elasticity

Material: ABS/PC	Sample F81	330.21	ksi	4.91% COV
	Sample F82	329.52	ksi	5.59% COV

Analysis 710 - Deflection Temp. Under Flexural Load (1.82 MPa)

Material: HIPS	Sample E81	74.510	Degrees C	1.22% COV
	Sample E82	74.242	Degrees C	1.26% COV

Analysis 711 - Deflection Temp. Under Flexural Load (0.455 MPa)

Material: PP	Sample G81	110.89	Degrees C	3.62% COV
	Sample G82	110.83	Degrees C	3.38% COV

Analysis 712 - Temperature of Deflection (1.80 MPa)

Material: ABS	Sample N81	82.780	Degrees C	1.16% COV
	Sample N82	82.786	Degrees C	1.12% COV

Analysis 715 - Vicat Temperature (Rate A)

Material: HIPS	Sample H81	92.847	Degrees C	1.66% COV
	Sample H82	92.835	Degrees C	1.68% COV

Analysis 716 - Vicat Temperature (Rate B)

Material: HIPS	Sample R81	94.502	Degrees C	3.81% COV
	Sample R82	94.632	Degrees C	3.75% COV

Analysis 718 - Specific Gravity

Material: ABS	Sample T81	1.0480	sp gr 23/23 C	0.199% COV
	Sample T82	1.0479	sp gr 23/23 C	0.213% COV

Analysis 720 - Flexural Modulus

Material: ABS	Sample J81	361.17	ksi	5.71% COV
	Sample J82	361.84	ksi	5.37% COV

Analysis 721 - Flexural Stress at 5% Strain

Material: ABS	Sample J81	10,381.31	psi	4.01% COV
	Sample J82	10,414.95	psi	3.89% COV

Analysis 722 - Flexural Stress at Yield

Material: ABS	Sample J81	10,394.83	psi	3.61% COV
	Sample J82	10,410.02	psi	3.25% COV

Analysis 730 - Tensile Stress at Yield, ISO Method

Material: ABS	Sample C81	44.641	MPa	2.12% COV
	Sample C82	44.681	MPa	2.15% COV

Analysis 731 - Tensile Stress at Break, ISO Method

Material: ABS	Sample C81	35.368	MPa	2.63% COV
	Sample C82	35.391	MPa	3.37% COV

Analysis 732 - Strain at Yield, ISO Method

Material: ABS	Sample C81	2.3731	Percent	3.83% COV
	Sample C82	2.3722	Percent	3.49% COV

Analysis 734 - Modulus of Elasticity, ISO Method

Material: ABS	Sample C81	2,387.05	MPa	3.67% COV
	Sample C82	2,385.23	MPa	3.74% COV

Analysis 736 - Flexural Modulus

Material: ABS	Sample K81	2,454.23	MPa	3.73% COV
	Sample K82	2,458.34	MPa	3.34% COV

Analysis 737 - Flexural Stress at 3.5% Strain

Material: ABS	Sample K81	69.288	MPa	2.57% COV
	Sample K82	69.431	MPa	2.72% COV

Analysis 738 - Flexural Stress at Yield

Material: ABS	Sample K81	70.420	MPa	2.18% COV
	Sample K82	70.735	MPa	2.29% COV

Analysis 750 - Flow Rate (190C or 230C/2.16 kg)

Material: HDPE	Sample X81	6.5834	grams/10 mins	2.95% COV
	Sample X82	6.7448	grams/10 mins	3.28% COV

Analysis 755 - Moisture Content

Material: ABS	Sample Y81	0.23535	Percent	11.6% COV
	Sample Y82	0.15740	Percent	13.4% COV

Analysis 757 - Ash Content

Material: PP	Sample L81	20.621	Percent	0.349% COV
	Sample L82	20.627	Percent	0.305% COV

Analysis 758 - TGA

Material: PBT	Sample A81	62.443	Percent	16.7% COV
	Sample A82	62.426	Percent	16.5% COV

Analysis 760 - DSC Crystallization Temperature

Material: PP	Sample W81	119.79	Degrees Celsius	2.61% COV
	Sample W82	119.71	Degrees Celsius	2.65% COV

Analysis 761 - DSC Melt Temperature

Material: PP	Sample W81	165.17	Degrees Celsius	0.975% COV
	Sample W82	165.38	Degrees Celsius	1.07% COV

Analysis 762 - DSC Enthalpy of Crystallization

Material: PP	Sample W81	101.33	Joules Per Gram	6.29% COV
	Sample W82	101.07	Joules Per Gram	6.16% COV

Analysis 763 - DSC Enthalpy of Fusion

Material: PP	Sample W81	96.211	Joules Per Gram	9.96% COV
	Sample W82	96.715	Joules Per Gram	11.2% COV

Analysis 764 - DSC Glass Transition Temperature

Material: ABS	Sample V81	105.29	Degrees Celsius	2.28% COV
	Sample V82	109.10	Degrees Celsius	2.53% COV

Analysis 765 - Research Crystallization Peak Temperature

Material: PP	Sample W81	119.30	Degrees Celsius	1.75% COV
	Sample W82	119.38	Degrees Celsius	2.21% COV

Analysis 766 - Research Melting Peak Temperature

| Material: PP | Sample W81 | 164.94 | Degrees Celsius | 1.16% COV |
| | Sample W82 | 164.81 | Degrees Celsius | 1.02% COV |

Analysis 767 - Research Heat of Crystallization

| Material: PP | Sample W81 | 103.26 | Joules Per Gram | 11.4% COV |
| | Sample W82 | 103.69 | Joules Per Gram | 11.3% COV |

Analysis 768 - Research Heat of Fusion

| Material: PP | Sample W81 | 99.772 | Joules Per Gram | 20.4% COV |
| | Sample W82 | 100.89 | Joules Per Gram | 20.6% COV |

Analysis 769 - Research Glass Transition Temperature

| Material: ABS | Sample V81 | 104.23 | Degrees Celsius | 2.37% COV |
| | Sample V82 | 108.58 | Degrees Celsius | 2.49% COV |

Analysis 770 - Tensile Stress at Yield, Films

| Material: LDPE | Sample B81 | 1,911.92 | psi | 6.83% COV |
| | Sample B82 | 2,107.94 | psi | 9.89% COV |

Analysis 771 - Tensile Stress at Break, Films

| Material: LDPE | Sample B81 | 3,772.83 | psi | 11.9% COV |
| | Sample B82 | 4,225.48 | psi | 12.3% COV |

Analysis 772 - Elongation at Yield, Films

| Material: LDPE | Sample B81 | 73.066 | Percent | 38.9% COV |
| | Sample B82 | 89.086 | Percent | 42.2% COV |

Analysis 773 - Elongation at Break, Films

| Material: LDPE | Sample B81 | 846.33 | Percent | 20.5% COV |
| | Sample B82 | 876.37 | Percent | 19.2% COV |

Analysis 774 - Thickness of Film Specimens

| Material: LDPE | Sample B81 | 3.7201 | mils | 3.66% COV |
| | Sample B82 | 3.9472 | mils | 4.24% COV |

Analysis 775 - Secant Modulus at 1% Strain

| Material: LDPE | Sample B81 | 32,460.29 | psi | 16.7% COV |
| | Sample B82 | 32,332.80 | psi | 18.6% COV |

Analysis 776 - Secant Modulus at 2% Strain

| Material: LDPE | Sample B81 | 28,944.50 | psi | 16.8% COV |
| | Sample B82 | 28,580.19 | psi | 15.2% COV |

Analysis 780 - Static Friction

| Material: LDPE | Sample P81 | 0.16121 | COF | 22.2% COV |
| | Sample P82 | 0.17596 | COF | 21.4% COV |

Analysis 781 - Kinetic Friction

| Material: LDPE | Sample P81 | 0.10306 | COF | 25.2% COV |
| | Sample P82 | 0.12580 | COF | 20.6% COV |

Analysis 782 - Tear Resistance of Film

| Material: LDPE | Sample Q81 | 279.78 | grams-force | 9.49% COV |
| | Sample Q82 | 432.41 | grams-force | 17.2% COV |

Analysis 785 - Percent Haze

| Material: LDPE | Sample D81 | 19.489 | Percent | 4.66% COV |
| | Sample D82 | 19.792 | Percent | 3.82% COV |

Analysis 786 - Total Transmittance

| Material: LDPE | Sample D81 | 92.525 | Percent | 1.18% COV |
| | Sample D82 | 92.539 | Percent | 1.19% COV |

Analysis 790 - Notched Izod Impact

| Material: ABS | Sample S81 | 3.7023 | ft.lbf/in | 10.9% COV |
| | Sample S82 | 3.6391 | ft.lbf/in | 10.5% COV |

Analysis 791 - Notched Izod Impact

| Material: ABS | Sample Z81 | 16.129 | kJ/m^2 | 4.95% COV |
| | Sample Z82 | 16.232 | kJ/m^2 | 4.92% COV |

Analysis 792 - Notched Charpy Impact

| Material: ABS | Sample M81 | 15.657 | kJ/m^2 | 8.13% COV |
| | Sample M82 | 15.698 | kJ/m^2 | 7.46% COV |

WebCode	Data Flag	Sample F81 Lab Mean	Sample F81 Diff from Grand Mean	Sample F81 CPV	Sample F82 Lab Mean	Sample F82 Diff from Grand Mean	Sample F82 CPV
2HEAKR		7,513.0	-46.5	-0.41	7,484.0	-64.6	-0.58
2XLKVR	X	52.2	-7,507.3	-66.33	52.4	-7,496.2	-67.14
3DUN36		7,632.4	72.8	0.64	7,656.5	107.8	0.97
3JZKM6		7,573.8	14.2	0.13	7,496.6	-52.0	-0.47
3TQ2FF		7,692.0	132.4	1.17	7,664.0	115.4	1.03
484TJC		7,607.0	47.4	0.42	7,586.0	37.4	0.33
4UXJEB		7,462.0	-97.6	-0.86	7,573.0	24.4	0.22
69UEP9		7,617.4	57.9	0.51	7,561.2	12.5	0.11
6LKXJD		7,530.2	-29.3	-0.26	7,553.0	4.4	0.04
6QC9LP		7,711.1	151.5	1.34	7,765.6	217.0	1.94
6V8633		7,657.6	98.0	0.87	7,562.8	14.2	0.13
79TW9P		7,342.0	-217.6	-1.92	7,340.0	-208.6	-1.87
7EYDXC		7,702.0	142.4	1.26	7,688.0	139.4	1.25
7VMNMZ		7,644.0	84.4	0.75	7,538.4	-10.2	-0.09
8284WP		7,698.8	139.2	1.23	7,665.6	117.0	1.05
8Z892Z		7,651.8	92.2	0.81	7,643.6	95.0	0.85
9AVLHB		7,446.6	-113.0	-1.00	7,428.6	-120.0	-1.07
9JHD9A		7,404.0	-155.6	-1.37	7,390.0	-158.6	-1.42
AB8BM9		7,427.8	-131.8	-1.16	7,472.4	-76.2	-0.68
AGC8BF	X	7,121.2	-438.4	-3.87	7,111.2	-437.4	-3.92
ATGJD9		7,487.8	-71.8	-0.63	7,576.9	28.3	0.25
B4GKCX		7,446.4	-113.2	-1.00	7,420.4	-128.2	-1.15
BE2RD9		7,451.8	-107.8	-0.95	7,494.2	-54.4	-0.49
BG8GDV		7,478.5	-81.1	-0.72	7,461.4	-87.2	-0.78
BURY7Z		7,640.0	80.4	0.71	7,592.0	43.4	0.39
BWEDUA		7,612.5	52.9	0.47	7,601.7	53.1	0.48
E26R8A		7,442.2	-117.4	-1.04	7,470.2	-78.4	-0.70
ETP4D8		7,474.0	-85.6	-0.76	7,455.2	-93.4	-0.84
GCE2T6		7,499.3	-60.3	-0.53	7,543.5	-5.2	-0.05
GLHGD4		7,457.2	-102.4	-0.90	7,463.4	-85.2	-0.76
J7WK9Q	M	7,207.4	-352.2	-3.11	No data reported for this sample		
JAKYX2		7,520.0	-39.6	-0.35	7,494.0	-54.6	-0.49
JPB42N		7,335.8	-223.8	-1.98	7,359.2	-189.4	-1.70
JUJM32		7,614.8	55.2	0.49	7,588.8	40.2	0.36
JW79NX	*	7,728.2	168.6	1.49	7,823.2	274.6	2.46

WebCode	Data Flag	Sample F81			Sample F82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
K7BF4X		7,620.0	60.4	0.53	7,590.0	41.4	0.37
MLZAQ8		7,593.0	33.4	0.30	7,594.7	46.1	0.41
PBV6J4		7,445.0	-114.6	-1.01	7,418.4	-130.2	-1.17
PHCMVQ		7,605.6	46.1	0.41	7,603.0	54.3	0.49
QCXJC2	*	7,492.6	-67.0	-0.59	7,337.8	-210.8	-1.89
QGWJ66		7,650.8	91.2	0.81	7,540.0	-8.6	-0.08
R2DHGD		7,493.6	-66.0	-0.58	7,543.8	-4.8	-0.04
R4QUKN		7,562.3	2.8	0.02	7,539.1	-9.5	-0.09
R9XKMU		7,598.0	38.4	0.34	7,614.0	65.4	0.59
RMBXUU	**X**	8,207.4	647.8	5.72	7,903.8	355.2	3.18
RUWVK3		7,546.0	-13.6	-0.12	7,498.6	-50.0	-0.45
TK8H7N		7,659.2	99.6	0.88	7,616.2	67.6	0.61
TLEVNQ		7,577.5	17.9	0.16	7,556.7	8.1	0.07
TXBQZZ		7,471.2	-88.3	-0.78	7,454.1	-94.5	-0.85
UGHHHR		7,684.4	124.8	1.10	7,725.6	177.0	1.59
UJRGZF		7,736.4	176.8	1.56	7,704.5	155.8	1.40
UQRQCZ		7,589.8	30.2	0.27	7,589.2	40.6	0.36
UWXMWZ	*	7,874.6	315.0	2.78	7,824.2	275.6	2.47
V9PFZG		7,370.4	-189.2	-1.67	7,462.6	-86.0	-0.77
XH3LKA		7,702.1	142.5	1.26	7,670.5	121.9	1.09
XMTZ4P		7,448.0	-111.6	-0.99	7,440.0	-108.6	-0.97
YANUYH		7,542.4	-17.2	-0.15	7,434.6	-114.0	-1.02
Z6894G		7,451.6	-107.9	-0.95	7,454.8	-93.9	-0.84

Summary Statistics

	Sample F81	Sample F82
Grand Means	7,559.56 psi	7,548.62 psi
Stnd Dev Btwn Labs	113.18 psi	111.66 psi

Statistics based on 54 of 58 reporting participants

Sample F81: ABS/PC & Sample F82: ABS/PC

Comments on Assigned Data Flags for Test #704

AGC8BF (X) - Data for both samples are low. Possible Systematic Error.

J7WK9Q (M) - Participant did not submit data for sample F82.

RMBXUU (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample F81.

2XLKVR (X) - Data for both samples are low. Lab reported units in psi, but data appear to be in MPa.

Grand Mean Sample F81: 7,559.56 psi   Grand Mean Sample F82: 7,548.62 psi
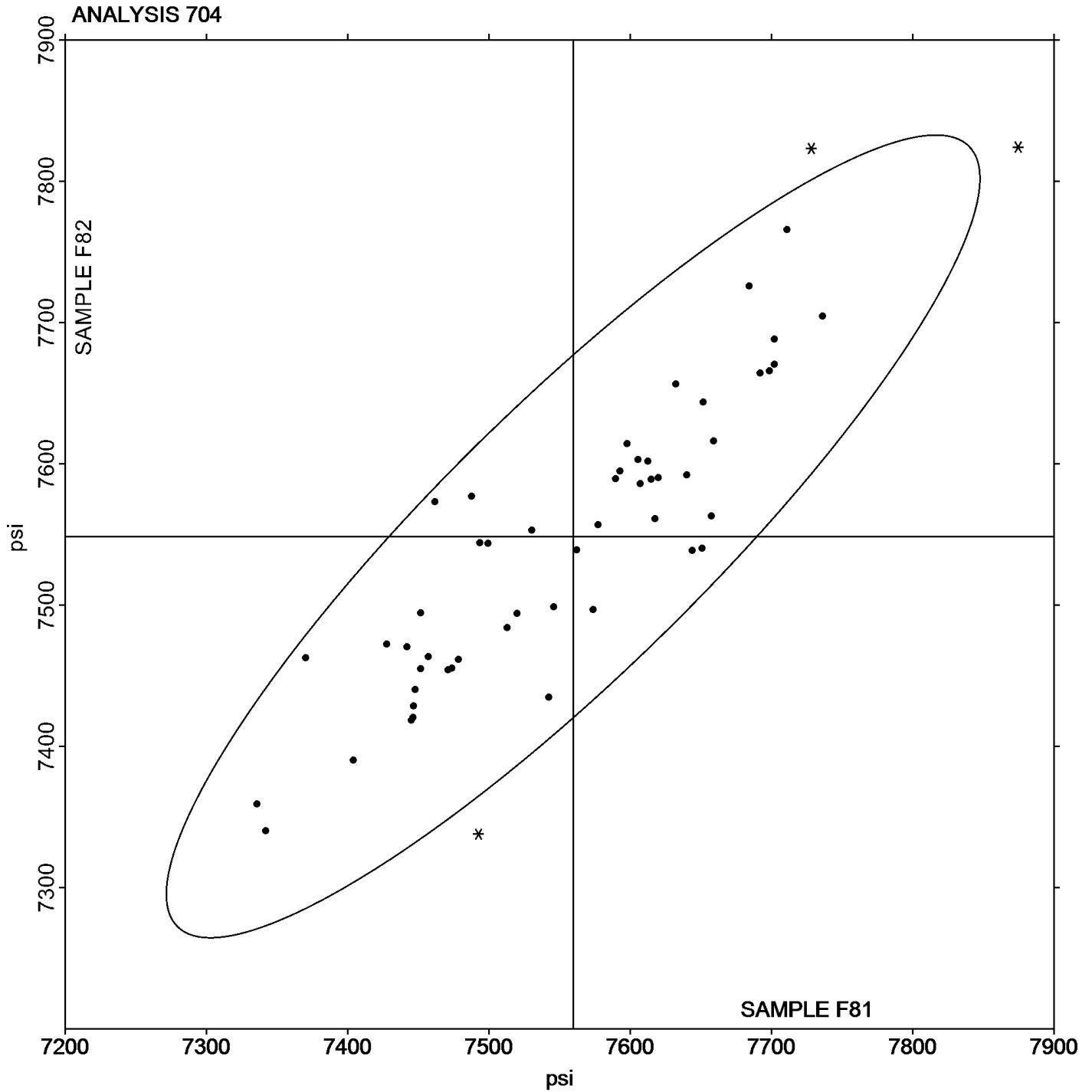
WebCode	Data Flag	Sample F81			Sample F82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2AZH3G		6,980.2	-78.5	-0.20	7,260.0	271.8	0.92
2HEAKR		6,758.8	-299.8	-0.78	6,961.9	-26.3	-0.09
2XLKVR		7,092.3	33.6	0.09	7,632.7	644.5	2.18
3DUN36		7,043.7	-14.9	-0.04	7,070.8	82.6	0.28
3JZKM6		6,594.2	-464.5	-1.21	7,008.6	20.4	0.07
3TQ2FF		7,212.0	153.3	0.40	7,146.0	157.8	0.53
484TJC		7,740.6	681.9	1.78	7,012.6	24.4	0.08
4UXJEB		6,750.2	-308.5	-0.81	6,513.0	-475.2	-1.61
69UEP9		7,153.3	94.7	0.25	7,154.8	166.6	0.56
6LKXJD		6,835.0	-223.7	-0.58	6,939.1	-49.1	-0.17
6QC9LP		7,054.3	-4.4	-0.01	7,071.2	83.0	0.28
7EYDXC		7,184.0	125.3	0.33	7,358.0	369.8	1.25
7VMNMZ		7,271.6	212.9	0.56	7,015.9	27.7	0.09
8284WP		7,331.4	272.7	0.71	7,001.2	13.0	0.04
8Z892Z		7,047.8	-10.9	-0.03	6,689.4	-298.8	-1.01
9AVLHB		6,612.9	-445.7	-1.16	6,750.4	-237.8	-0.80
9JHD9A		6,642.0	-416.7	-1.09	6,676.0	-312.2	-1.06
AB8BM9		6,407.0	-651.7	-1.70	6,678.8	-309.4	-1.05
ATGJD9		6,760.0	-298.6	-0.78	6,993.4	5.3	0.02
BE2RD9		6,888.4	-170.3	-0.44	7,111.2	123.0	0.42
BG8GDV		7,742.2	683.5	1.79	7,266.5	278.3	0.94
BWEDUA		7,508.6	450.0	1.18	7,283.4	295.2	1.00
E26R8A		7,722.0	663.3	1.73	7,235.6	247.4	0.84
ETP4D8		7,107.0	48.3	0.13	7,226.0	237.8	0.80
GCE2T6	*	7,506.3	447.7	1.17	7,753.8	765.6	2.59
GLHGD4	X	6,755.0	-303.7	-0.79	7,816.8	828.6	2.80
J7WK9Q	M	7,828.5	769.9	2.01	No data reported for this sample		
JAKYX2		7,352.0	293.3	0.77	6,922.0	-66.2	-0.22
JPB42N		6,729.0	-329.7	-0.86	6,920.4	-67.8	-0.23
JUJM32		6,814.0	-244.7	-0.64	6,738.8	-249.4	-0.84
JW79NX		6,983.0	-75.7	-0.20	7,263.6	275.4	0.93
K7BF4X		6,912.2	-146.4	-0.38	6,702.5	-285.7	-0.97
KGUWW4		7,044.0	-14.7	-0.04	7,378.0	389.8	1.32
LH6792		6,960.0	-98.7	-0.26	6,870.0	-118.2	-0.40
MLZAQ8	*	7,960.2	901.5	2.36	7,089.8	101.6	0.34

WebCode	Data Flag	Sample F81			Sample F82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PBV6J4		6,806.2	-252.5	-0.66	6,849.6	-138.6	-0.47
PHCMVQ	*	7,602.7	544.1	1.42	6,521.9	-466.3	-1.58
QCXJC2		6,535.2	-523.5	-1.37	6,657.0	-331.2	-1.12
R2DHGD		7,324.8	266.1	0.70	7,276.4	288.2	0.97
R4QUKN		7,576.8	518.2	1.35	6,689.2	-299.0	-1.01
RMBXUU		7,272.0	213.3	0.56	6,959.8	-28.4	-0.10
RUWVK3		7,344.4	285.7	0.75	7,407.2	419.0	1.42
TK8H7N		7,450.0	391.3	1.02	7,208.2	220.0	0.74
TLEVNQ		7,143.1	84.4	0.22	7,098.3	110.1	0.37
TXBQZZ		6,545.0	-513.6	-1.34	6,649.7	-338.4	-1.14
UGHHHR		7,026.2	-32.5	-0.08	7,111.2	123.0	0.42
UJRGZF		6,953.2	-105.5	-0.28	7,080.8	92.6	0.31
UQRQCZ		7,507.6	448.9	1.17	6,930.0	-58.2	-0.20
UWXMWZ		6,593.4	-465.3	-1.22	6,572.4	-415.8	-1.41
XH3LKA		7,021.5	-37.2	-0.10	7,000.2	12.0	0.04
XMTZ4P		6,788.4	-270.3	-0.71	6,917.0	-71.2	-0.24
YANUYH		6,453.4	-605.3	-1.58	6,487.8	-500.4	-1.69
Z6894G		6,347.1	-711.5	-1.86	6,284.7	-703.5	-2.38

Summary Statistics

	Sample F81	Sample F82
Grand Means	7,058.65 psi	6,988.17 psi
Stnd Dev Btwn Labs	382.75 psi	295.69 psi

Statistics based on 51 of 53 reporting participants

Sample F81: ABS/PC & Sample F82: ABS/PC

Comments on Assigned Data Flags for Test #705

J7WK9Q (M) - Participant did not submit data for sample F82.

GLHGD4 (X) - Data for sample F82 are high. Inconsistent in testing between samples.
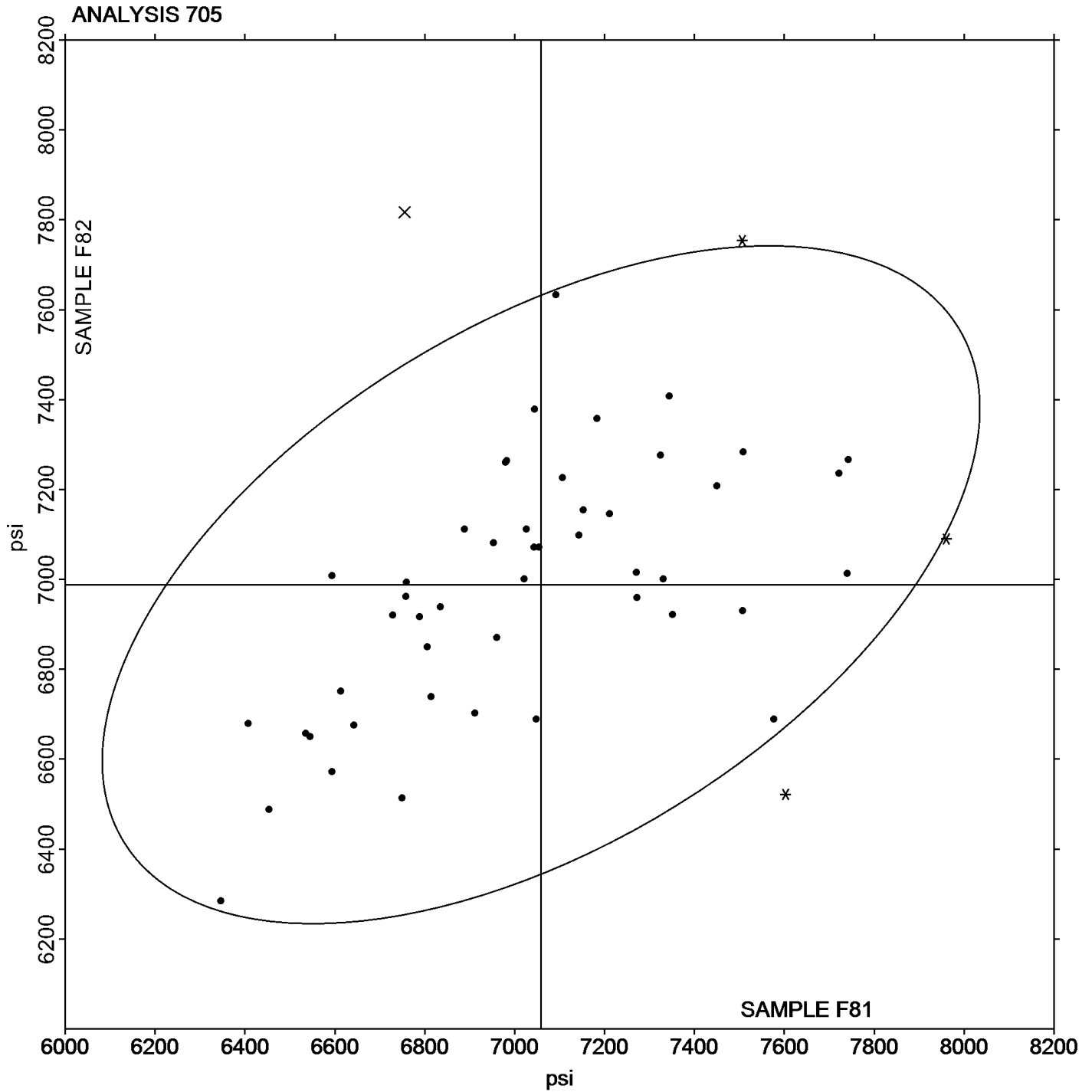
Grand Mean Sample F81: 7,058.65 psi   **Grand Mean Sample F82: 6,988.17 psi**

WebCode	Data Flag	Sample F81			Sample F82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2HEAKR		4.306	-0.215	-1.62	4.362	-0.171	-1.15
2XLKVR		4.422	-0.099	-0.75	4.534	0.001	0.00
3DUN36		4.400	-0.122	-0.91	4.436	-0.098	-0.65
3JZKM6	X	4.946	0.425	3.20	5.430	0.897	6.00
3TQ2FF		4.646	0.125	0.94	4.562	0.029	0.19
484TJC		4.524	0.003	0.02	4.480	-0.053	-0.36
4UXJEB	X	5.972	1.451	10.93	6.240	1.707	11.41
69UEP9	X	6.523	2.002	15.07	6.463	1.930	12.91
6QC9LP		4.516	-0.005	-0.04	4.470	-0.063	-0.42
6V8633		4.520	-0.001	-0.01	4.340	-0.193	-1.29
7EYDXC		4.660	0.139	1.05	4.666	0.133	0.89
7VMNMZ	*	4.174	-0.347	-2.61	4.204	-0.329	-2.20
8284WP		4.782	0.261	1.96	4.834	0.301	2.01
8Z892Z		4.538	0.017	0.13	4.530	-0.003	-0.02
9AVLHB		4.398	-0.123	-0.93	4.448	-0.085	-0.57
9JHD9A	X	5.160	0.639	4.81	5.000	0.467	3.12
AB8BM9	X	18.456	13.935	104.93	4.622	0.089	0.59
ATGJD9		4.632	0.110	0.83	4.770	0.237	1.59
BE2RD9		4.612	0.091	0.68	4.670	0.137	0.91
BG8GDV		4.660	0.139	1.05	4.700	0.167	1.11
BURY7Z		4.828	0.307	2.31	4.730	0.197	1.32
BWEDUA		4.628	0.107	0.80	4.654	0.121	0.81
E26R8A		4.533	0.012	0.09	4.475	-0.058	-0.39
ETP4D8		4.610	0.089	0.67	4.638	0.105	0.70
GCE2T6		4.545	0.024	0.18	4.690	0.157	1.05
GLHGD4		4.406	-0.115	-0.87	4.536	0.003	0.02
J7WK9Q	M	4.427	-0.095	-0.71	No data reported for this sample		
JAKYX2		4.340	-0.181	-1.36	4.360	-0.173	-1.16
JPB42N		4.460	-0.061	-0.46	4.396	-0.137	-0.92
JUJM32		4.456	-0.065	-0.49	4.506	-0.027	-0.18
JW79NX		4.556	0.035	0.26	4.602	0.069	0.46
K7BF4X		4.450	-0.071	-0.54	4.544	0.011	0.07
MLZAQ8		4.452	-0.069	-0.52	4.494	-0.039	-0.26
PBV6J4		4.544	0.023	0.17	4.550	0.017	0.11
PHCMVQ		4.646	0.125	0.94	4.762	0.229	1.53

WebCode	Data Flag	Sample F81			Sample F82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
QCXJC2	*	4.462	-0.059	-0.45	4.220	-0.313	-2.10
QGWJ66		4.524	0.003	0.02	4.560	0.027	0.18
R2DHGD		4.352	-0.169	-1.27	4.384	-0.149	-1.00
R4QUKN		4.756	0.235	1.77	4.776	0.243	1.62
RMBXUU	X	26.733	22.212	167.26	31.260	26.727	178.76
RUWVK3		4.720	0.199	1.50	4.700	0.167	1.11
TLEVNQ		4.512	-0.009	-0.07	4.376	-0.157	-1.05
TXBQZZ		4.498	-0.023	-0.17	4.460	-0.073	-0.49
UGHHHR		4.480	-0.041	-0.31	4.460	-0.073	-0.49
UJRGZF		4.680	0.159	1.20	4.640	0.107	0.71
UQRQCZ		4.420	-0.101	-0.76	4.476	-0.057	-0.38
UWXMWZ		4.414	-0.107	-0.81	4.654	0.121	0.81
V9PFZG		4.398	-0.123	-0.93	4.474	-0.059	-0.40
XH3LKA	X	3.464	-1.057	-7.96	3.499	-1.035	-6.92
XMTZ4P		4.482	-0.039	-0.29	4.502	-0.031	-0.21
YANUYH		4.466	-0.055	-0.41	4.308	-0.225	-1.51

Summary Statistics

	Sample F81	Sample F82
Grand Means	4.5211 Percent	4.5333 Percent
Stnd Dev Btwn Labs	0.1328 Percent	0.1495 Percent

Statistics based on 43 of 51 reporting participants

Sample F81: ABS/PC & Sample F82: ABS/PC

Comments on Assigned Data Flags for Test #706

69UEP9 (X) - Data for both samples are high.

J7WK9Q (M) - Participant did not submit data for sample F82.

4UXJEB (X) - Data for both samples are high.

9JHD9A (X) - Data for both samples are high. Possible Systematic Error.

AB8BM9 (X) - Data for sample F81 are high. Inconsistent in testing between samples.

XH3LKA (X) - Data for both samples are low. Possible Systematic Error.

3JZKM6 (X) - Data for both samples are high.

RMBXUU (X) - Extreme data.

Grand Mean Sample F81: 4.5211 Percent   Grand Mean Sample F82: 4.5333 Percent
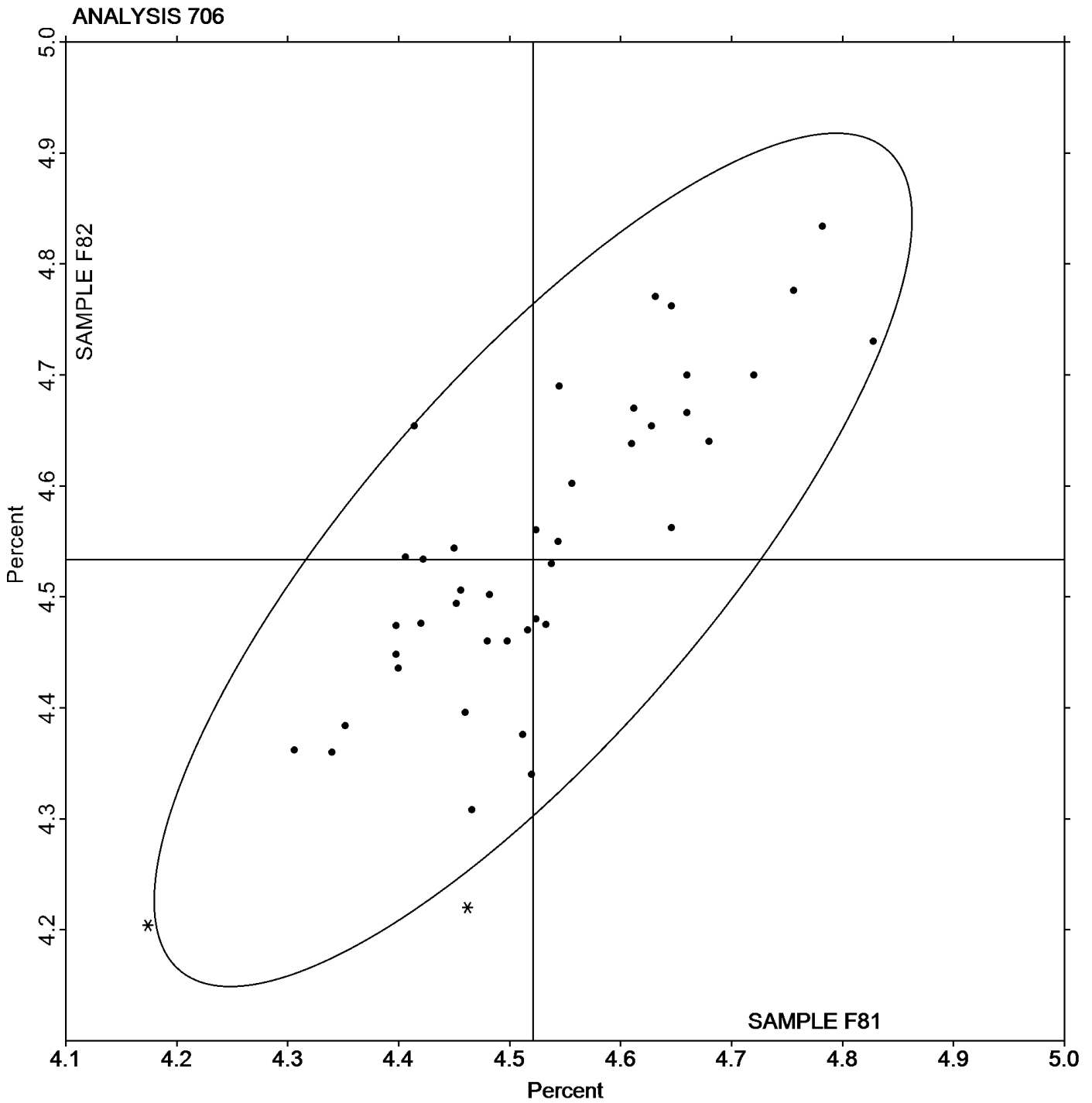
WebCode	Data Flag	Sample F81 Lab Mean	Sample F81 Diff from Grand Mean	Sample F81 CPV	Sample F82 Lab Mean	Sample F82 Diff from Grand Mean	Sample F82 CPV
2HEAKR		335.88	5.67	0.35	337.36	7.84	0.43
2XLKVR	X	0.28	-329.93	-20.35	0.28	-329.24	-17.89
3DUN36		338.10	7.89	0.49	338.21	8.69	0.47
3JZKM6		310.80	-19.41	-1.20	308.20	-21.32	-1.16
3TQ2FF		343.40	13.19	0.81	347.40	17.88	0.97
484TJC		333.02	2.81	0.17	337.46	7.94	0.43
69UEP9	X	165.10	-165.11	-10.18	171.49	-158.03	-8.59
6QC9LP		337.97	7.76	0.48	339.16	9.64	0.52
6V8633	*	322.10	-8.11	-0.50	306.26	-23.26	-1.26
7EYDXC		343.80	13.59	0.84	339.40	9.88	0.54
7VMNMZ		359.46	29.25	1.80	360.64	31.13	1.69
8284WP		320.80	-9.41	-0.58	316.84	-12.68	-0.69
8Z892Z		322.40	-7.81	-0.48	320.48	-9.04	-0.49
9AVLHB		327.95	-2.25	-0.14	328.29	-1.23	-0.07
9JHD9A	X	277.20	-53.01	-3.27	283.20	-46.32	-2.52
AB8BM9	X	79.71	-250.50	-15.45	320.71	-8.80	-0.48
ATGJD9		332.66	2.45	0.15	333.83	4.31	0.23
BE2RD9		312.48	-17.73	-1.09	312.40	-17.12	-0.93
BG8GDV	*	282.54	-47.67	-2.94	275.57	-53.94	-2.93
BURY7Z		324.20	-6.01	-0.37	323.20	-6.32	-0.34
BWEDUA		330.70	0.49	0.03	330.22	0.70	0.04
ETP4D8		327.12	-3.09	-0.19	326.64	-2.88	-0.16
GCE2T6		317.93	-12.28	-0.76	315.15	-14.37	-0.78
GLHGD4		329.14	-1.07	-0.07	331.58	2.06	0.11
J7WK9Q	M	290.63	-39.57	-2.44	No data reported for this sample		
JAKYX2		351.80	21.59	1.33	350.60	21.08	1.15
JPB42N		333.32	3.11	0.19	334.80	5.28	0.29
JUJM32		359.08	28.87	1.78	354.84	25.32	1.38
JW79NX		343.02	12.81	0.79	346.70	17.18	0.93
K7BF4X		310.22	-19.99	-1.23	302.12	-27.40	-1.49
MLZAQ8	X	0.28	-329.93	-20.35	0.28	-329.24	-17.89
PBV6J4		329.40	-0.81	-0.05	321.02	-8.50	-0.46
PHCMVQ		325.08	-5.13	-0.32	328.69	-0.82	-0.04
QCXJC2		352.08	21.87	1.35	358.22	28.70	1.56
R2DHGD		347.98	17.77	1.10	357.92	28.40	1.54

WebCode	Data Flag	Sample F81			Sample F82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
R4QUKN		311.92	-18.29	-1.13	311.22	-18.29	-0.99
RUWVK3		310.33	-19.88	-1.23	315.37	-14.15	-0.77
TLEVNQ	X	316.14	-14.06	-0.87	344.81	15.30	0.83
TXBQZZ		325.18	-5.03	-0.31	333.30	3.78	0.21
UGHHHR		340.60	10.39	0.64	337.00	7.48	0.41
UJRGZF		323.15	-7.06	-0.44	323.15	-6.37	-0.35
UQRQCZ		347.88	17.68	1.09	344.22	14.71	0.80
UWXMWZ		344.98	14.77	0.91	342.58	13.06	0.71
V9PFZG		336.30	6.09	0.38	337.74	8.22	0.45
XH3LKA	X	436.10	105.89	6.53	438.85	109.33	5.94
XMTZ4P		298.20	-32.01	-1.97	290.80	-38.72	-2.10
YANUYH		335.12	4.91	0.30	332.56	3.04	0.17

Summary Statistics	Sample F81	Sample F82
Grand Means	330.207 ksi	329.517 ksi
Stnd Dev Btwn Labs	16.212 ksi	18.404 ksi

Statistics based on 39 of 47 reporting participants

Sample F81: ABS/PC & Sample F82: ABS/PC

Comments on Assigned Data Flags for Test #708

69UEP9 (X) - Data for both samples are low. Possible Systematic Error.

J7WK9Q (M) - Participant did not submit data for sample F82.

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

9JHD9A (X) - Data for sample F81 are low. Inconsistent in testing between samples.

AB8BM9 (X) - Data for sample F81 are low. Inconsistent in testing between samples.

XH3LKA (X) - Data for both samples are high. Possible Systematic Error.

MLZAQ8 (X) - Extreme data.

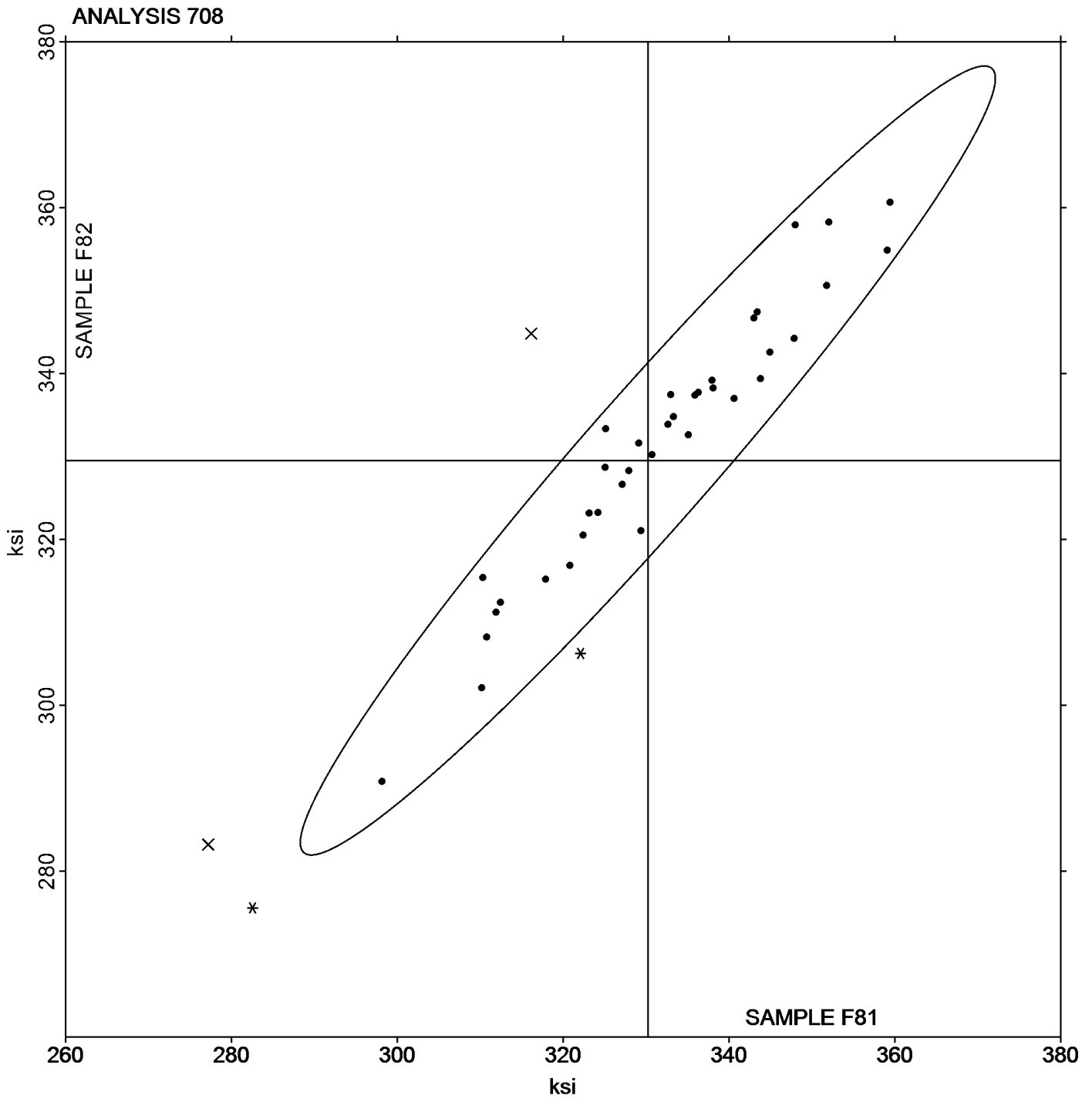2XLKVR (X) - Extreme data.

Plastics Interlaboratory Testing Program

Analysis 708
Modulus of Elasticity - ksi

Grand Mean Sample F81: 330.21 ksi   Grand Mean Sample F82: 329.52 ksi

Plastics Interlaboratory Testing Program

Report #121

Analysis 710

1st Qtr 2022

Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

WebCode	Data Flag	Sample E81			Sample E82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2HEAKR		74.08	-0.44	-0.48	73.73	-0.52	-0.55	RO
3JZKM6		74.98	0.46	0.51	75.60	1.36	1.45	XX
3MJFRH	X	80.50	5.99	6.60	80.33	6.08	6.49	XX
69UEP9		74.70	0.19	0.21	74.43	0.18	0.20	ZW
6LKXJD	*	73.90	-0.61	-0.67	75.00	0.76	0.81	CE
6QC9LP		73.73	-0.78	-0.86	73.48	-0.76	-0.81	TO
6V8633		76.48	1.96	2.16	76.53	2.28	2.44	CE
7VMNMZ		73.55	-0.96	-1.06	73.18	-1.07	-1.14	CE
8284WP		74.68	0.16	0.18	74.18	-0.07	-0.07	ZW
9AVLHB		74.35	-0.16	-0.18	74.05	-0.19	-0.20	TY
9JHD9A		75.18	0.66	0.73	74.48	0.23	0.25	TO
B4GKCX		73.60	-0.91	-1.00	73.12	-1.12	-1.20	TO
BWEDUA	M	No data reported for this sample			74.05	-0.19	-0.20	IN
ETP4D8		75.35	0.84	0.93	74.60	0.36	0.38	CE
F2YW29		75.53	1.01	1.12	75.55	1.31	1.40	TO
FN96EJ		73.05	-1.46	-1.61	73.15	-1.09	-1.16	TO
GCE2T6		74.70	0.19	0.21	74.53	0.28	0.30	CF
GLHGD4		75.03	0.51	0.57	74.55	0.31	0.33	IN
JAKYX2		75.65	1.14	1.26	75.40	1.16	1.24	CF
JPB42N		73.28	-1.24	-1.36	73.28	-0.97	-1.03	TO
JW79NX		73.48	-1.04	-1.14	73.38	-0.87	-0.92	TO
KAE4RZ		75.65	1.14	1.26	74.95	0.71	0.76	XA
KGUWW4		73.35	-1.16	-1.28	73.30	-0.94	-1.00	TO
QGWJ66		73.83	-0.69	-0.76	73.38	-0.87	-0.92	TO
R2DHGD		74.90	0.39	0.43	74.08	-0.17	-0.18	IN
TK8H7N		74.93	0.41	0.46	74.35	0.11	0.12	TO
UJRGZF		75.63	1.11	1.23	75.15	0.91	0.97	AT
UWXMWZ	X	79.50	4.99	5.50	79.00	4.76	5.08	TO
V9PFZG		73.48	-1.04	-1.14	72.65	-1.59	-1.70	TO
VZBTPR		74.78	0.26	0.29	74.50	0.26	0.28	IN

Plastics Interlaboratory Testing Program

Analysis 710

Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

Report #121

1st Qtr 2022

Summary Statistics	Sample E81	Sample E82
Grand Means	74.510 Degrees C	74.242 Degrees C
Stnd Dev Btwn Labs	0.907 Degrees C	0.937 Degrees C

Statistics based on 27 of 30 reporting participants

Sample E81: HIPS & Sample E82: HIPS

Comments on Assigned Data Flags for Test #710

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

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

BWEDUA (M) - Participant did not submit data for sample E81.

Key to Instrument Codes Reported by Participants

| AT	Atlas	CE	Ceast
CF	Coesfeld	IN	Instron
RO	Rosand	TO	Tinius Olsen
TY	Toyoseiki	XA	Special In-House Instrument
XX	Instrument manufacturer not specified by lab	ZW	Zwick

Plastics Interlaboratory Testing Program

Analysis 710

Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

Report #121

1st Qtr 2022

Grand Mean Sample E81: 74.510 Degrees C   **Grand Mean Sample E82: 74.242 Degrees C**
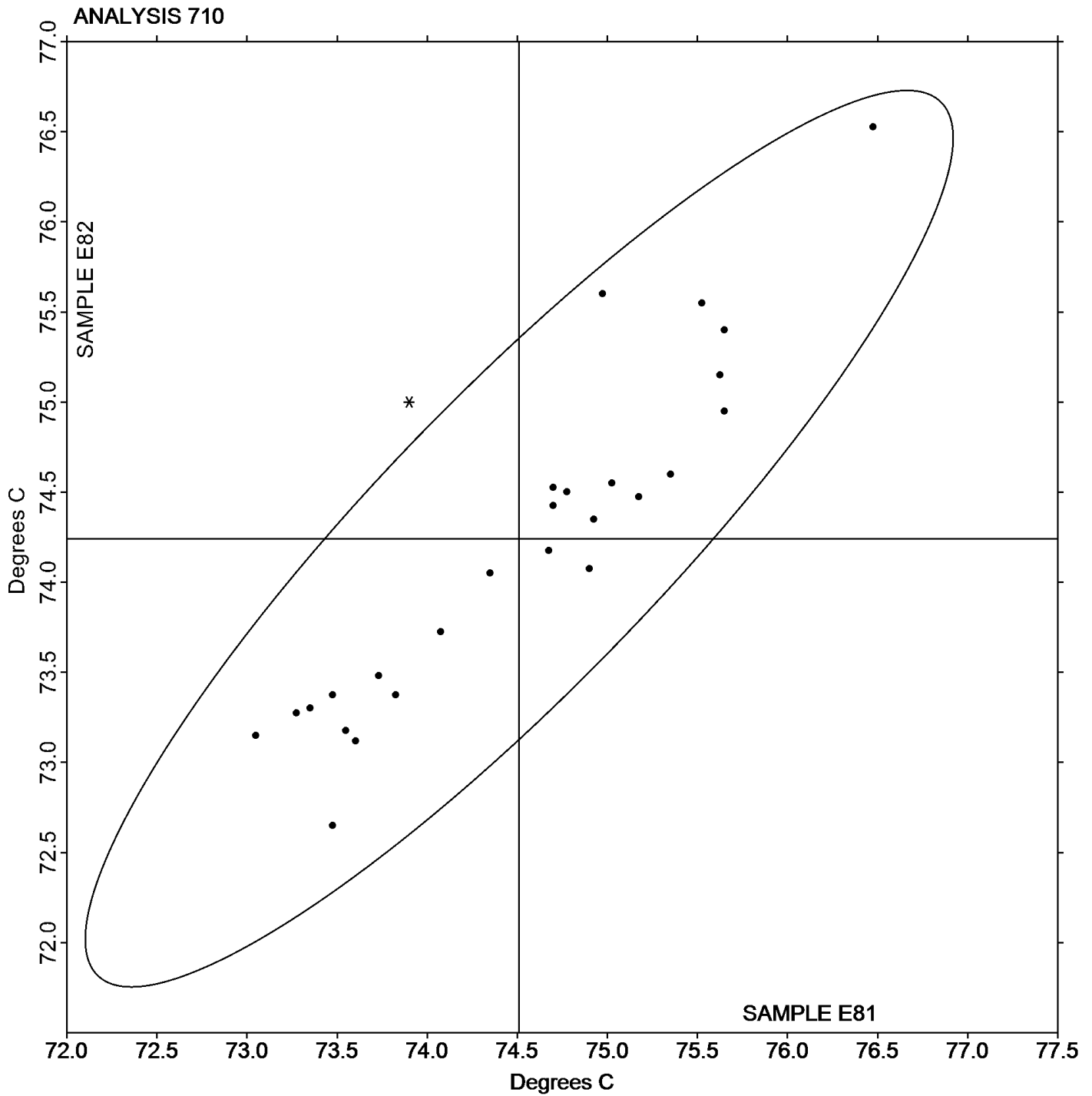
Plastics Interlaboratory Testing Program

Report #121

Analysis 711

1st Qtr 2022

Deflection Temp. Under Flexural Load (0.455 MPa) - Degrees C

		Sample G81			Sample G82			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
2T9K2L		110.5	-0.4	-0.10	109.8	-1.1	-0.28	CE
69UEP9		115.4	4.5	1.12	114.8	3.9	1.06	ZW
79TW9P		107.0	-3.9	-0.97	106.5	-4.3	-1.16	XX
7VMNMZ		108.2	-2.7	-0.67	110.1	-0.7	-0.19	CE
9JHD9A		112.5	1.6	0.41	108.9	-1.9	-0.51	TO
9KD39W		110.1	-0.8	-0.19	111.9	1.0	0.28	CS
B4GKCX		111.0	0.1	0.03	111.1	0.2	0.07	TO
BWEDUA		108.9	-2.0	-0.49	107.9	-2.9	-0.77	IN
FN96EJ		115.5	4.6	1.15	117.5	6.7	1.78	TO
QGWJ66		107.4	-3.5	-0.88	107.4	-3.4	-0.91	TO
R9XKMU		106.8	-4.1	-1.03	106.5	-4.3	-1.16	XX
TK8H7N		115.9	5.0	1.25	115.2	4.4	1.17	TO
UJRGZF		118.1	7.2	1.79	116.3	5.4	1.45	AT
V9PFZG		105.2	-5.7	-1.41	107.8	-3.1	-0.82	TO

Summary Statistics	Sample G81	Sample G82
Grand Means	110.89 Degrees C	110.83 Degrees C
Stnd Dev Btwn Labs	4.01 Degrees C	3.74 Degrees C

Statistics based on 14 of 14 reporting participants

Sample G81: PP & Sample G82: PP

Key to Instrument Codes Reported by Participants

AT	Atlas	CE	Ceast
CS	CSI	IN	Instron
TO	Tinius Olsen	XX	Instrument manufacturer not specified by lab
ZW	Zwick		

Plastics Interlaboratory Testing Program

Analysis 711

Deflection Temp. Under Flexural Load (0.455 MPa) - Degrees C

Report #121

1st Qtr 2022

Grand Mean Sample G81: 110.89 Degrees C   Grand Mean Sample G82: 110.83 Degrees C

If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

		Sample N81			Sample N82			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
3F3R2M		82.05	-0.73	-0.76	82.05	-0.74	-0.79	CE
3JZKM6	X	81.58	-1.21	-1.25	85.18	2.39	2.58	XX
3NEXTJ		84.35	1.57	1.63	84.28	1.49	1.60	CE
64XQ92		82.85	0.07	0.07	82.95	0.16	0.18	TO
69UEP9		81.85	-0.93	-0.97	82.33	-0.45	-0.49	ZW
6Y6QU7		84.45	1.67	1.73	84.45	1.66	1.79	CE
79TW9P		81.98	-0.81	-0.84	81.90	-0.89	-0.96	XX
7VMNMZ		81.33	-1.46	-1.51	81.58	-1.21	-1.31	CE
9AVLHB		83.58	0.79	0.83	83.63	0.84	0.90	TY
9JHD9A		82.50	-0.28	-0.29	82.43	-0.36	-0.39	TO
AGC8BF	*	82.20	-0.58	-0.60	82.83	0.04	0.04	IN
B4GKCX		81.75	-1.04	-1.07	81.84	-0.94	-1.02	TO
BWEDUA		83.28	0.49	0.51	83.28	0.49	0.53	TO
CVZFRC		82.55	-0.23	-0.24	82.58	-0.21	-0.23	TO
D2ND67		83.58	0.79	0.83	83.43	0.64	0.69	CF
DAXVKJ		83.78	0.99	1.03	83.63	0.84	0.90	CE
ETP4D8		84.48	1.69	1.76	84.70	1.91	2.06	CE
EVVF83		82.05	-0.73	-0.76	81.85	-0.94	-1.01	TO
FN96EJ		82.63	-0.16	-0.16	82.55	-0.24	-0.25	XX
GQTAP3		83.40	0.62	0.64	83.33	0.54	0.58	TY
JAKYX2		83.47	0.69	0.71	83.63	0.85	0.91	CF
KNE77L	*	82.93	0.14	0.15	82.28	-0.51	-0.55	IN
KQ46QC		84.35	1.57	1.63	83.95	1.16	1.25	CE
MG6FU7		83.03	0.24	0.25	83.05	0.26	0.28	CE
R2DHGD		83.28	0.49	0.51	83.15	0.36	0.39	IN
R4QUKN		83.75	0.97	1.01	83.58	0.79	0.85	CE
R9XKMU		80.85	-1.93	-2.00	80.90	-1.89	-2.03	XX
RTMY2J		81.95	-0.83	-0.86	82.05	-0.74	-0.79	TO
T2WJ3U		83.45	0.67	0.70	83.50	0.71	0.77	XX
U7MHRA		82.33	-0.46	-0.47	82.33	-0.46	-0.50	TO
UJRGZF		83.18	0.39	0.41	83.45	0.66	0.72	AT
UMRP7C		81.43	-1.36	-1.41	81.45	-1.34	-1.44	XX
UQRQCZ		82.17	-0.62	-0.64	81.89	-0.90	-0.97	TO
XBJD2J		82.18	-0.61	-0.63	82.15	-0.64	-0.69	CE
YLXPU9		81.63	-1.16	-1.20	81.80	-0.99	-1.06	CE

Summary Statistics	Sample N81	Sample N82
Grand Means	82.780 Degrees C	82.786 Degrees C
Stnd Dev Btwn Labs	0.963 Degrees C	0.928 Degrees C
		Statistics based on 34 of 35 reporting participants

Sample N81: ABS & Sample N82: ABS

Comments on Assigned Data Flags for Test #712

3JZKM6 (X) - Inconsistent in testing between samples.

Key to Instrument Codes Reported by Participants

AT	Atlas	CE	Ceast
CF	Coesfeld	IN	Instron
TO	Tinius Olsen	TY	Toyoseiki
XX	Instrument manufacturer not specified by lab	ZW	Zwick

Plastics Interlaboratory Testing Program
Analysis 712
Temp. of Deflection Under Flexural Load (1.80 MPa) - Degrees C

Report #121
1st Qtr 2022

Grand Mean Sample N81: 82.780 Degrees C   Grand Mean Sample N82: 82.786 Degrees C
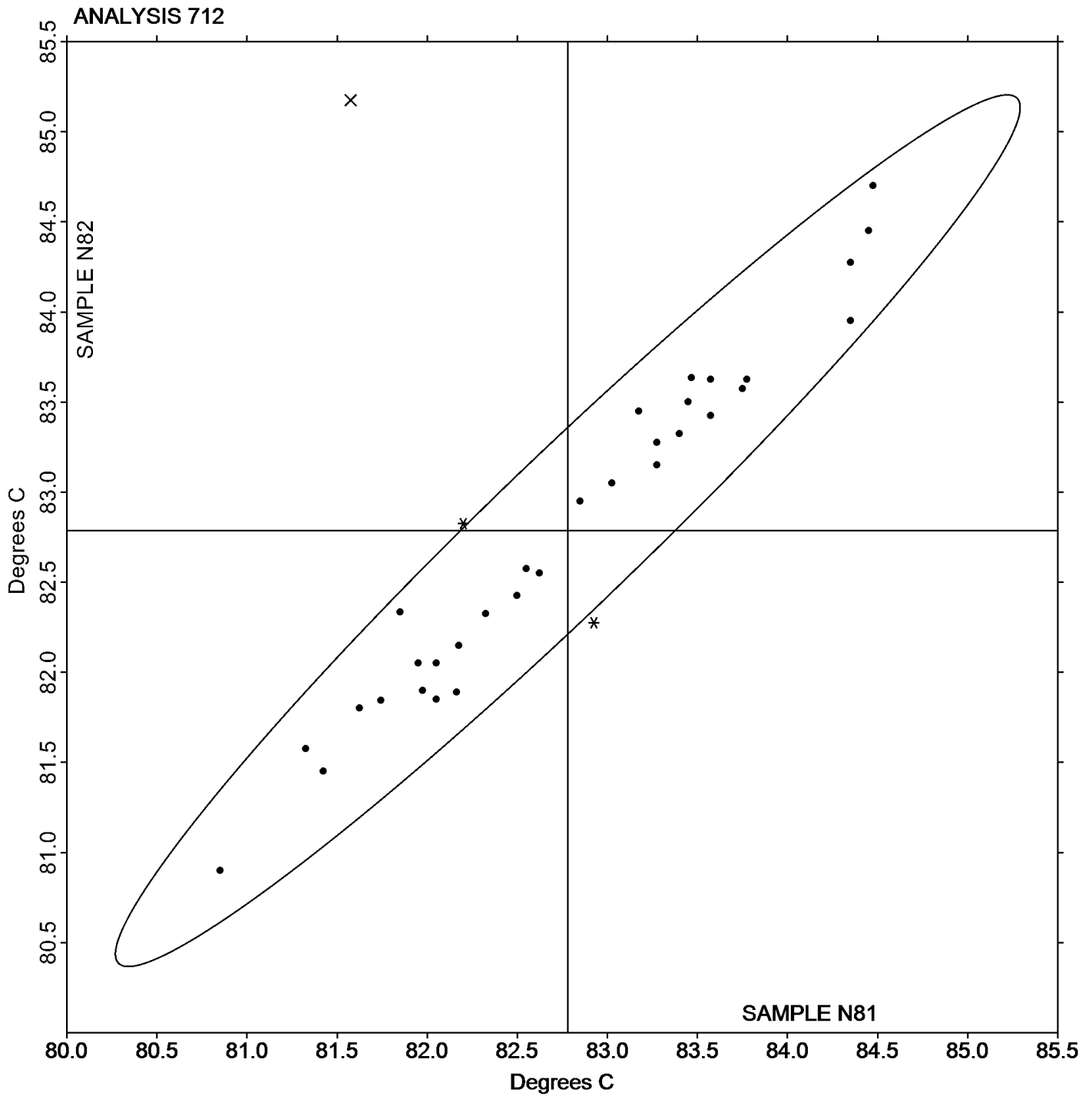
WebCode	Data Flag	Sample H81 Lab Mean	Sample H81 Diff from Grand Mean	Sample H81 CPV	Sample H82 Lab Mean	Sample H82 Diff from Grand Mean	Sample H82 CPV	Instr Code
2HEAKR		93.08	0.24	0.15	93.18	0.35	0.22	RO
3JZKM6		90.93	-1.92	-1.25	90.93	-1.91	-1.23	XX
3MJFRH	*	87.80	-5.05	-3.27	87.70	-5.13	-3.30	XX
69UEP9		94.35	1.50	0.97	94.23	1.40	0.90	CF
7VMNMZ		92.67	-0.18	-0.12	92.45	-0.38	-0.25	CE
8284WP		93.28	0.44	0.28	93.62	0.78	0.50	WZ
9AVLHB		94.08	1.24	0.80	93.90	1.07	0.68	CF
B4GKCX		93.14	0.29	0.19	93.12	0.28	0.18	TO
BWEDUA		93.03	0.19	0.12	93.15	0.32	0.20	TO
DAXVKJ		93.48	0.64	0.41	93.45	0.62	0.40	CE
ETP4D8		93.65	0.80	0.52	93.73	0.90	0.58	CE
JAKYX2		93.43	0.59	0.38	93.43	0.60	0.38	CF
JKLFRC		94.48	1.64	1.06	94.47	1.63	1.05	CE
JPB42N		91.33	-1.51	-0.98	91.35	-1.48	-0.95	TO
R4QUKN		93.60	0.75	0.49	93.43	0.60	0.38	CE
TAM9KF		93.15	0.30	0.20	93.17	0.33	0.21	CE
UJRGZF		93.10	0.25	0.16	93.05	0.22	0.14	AT
UMRP7C		92.65	-0.20	-0.13	92.67	-0.17	-0.11	AT

Summary Statistics

	Sample H81	Sample H82
Grand Means	92.847 Degrees C	92.835 Degrees C
Stnd Dev Btwn Labs	1.543 Degrees C	1.555 Degrees C

Statistics based on 18 of 18 reporting participants

Sample H81: HIPS & Sample H82: HIPS

Key to Instrument Codes Reported by Participants

AT	Atlas	CE	Ceast
CF	Coesfeld	RO	Rosand
TO	Tinius Olsen	WZ	Zwick
XX	Instrument manufacturer not specified by lab		

Grand Mean Sample H81: 92.847 Degrees C   Grand Mean Sample H82: 92.835 Degrees C
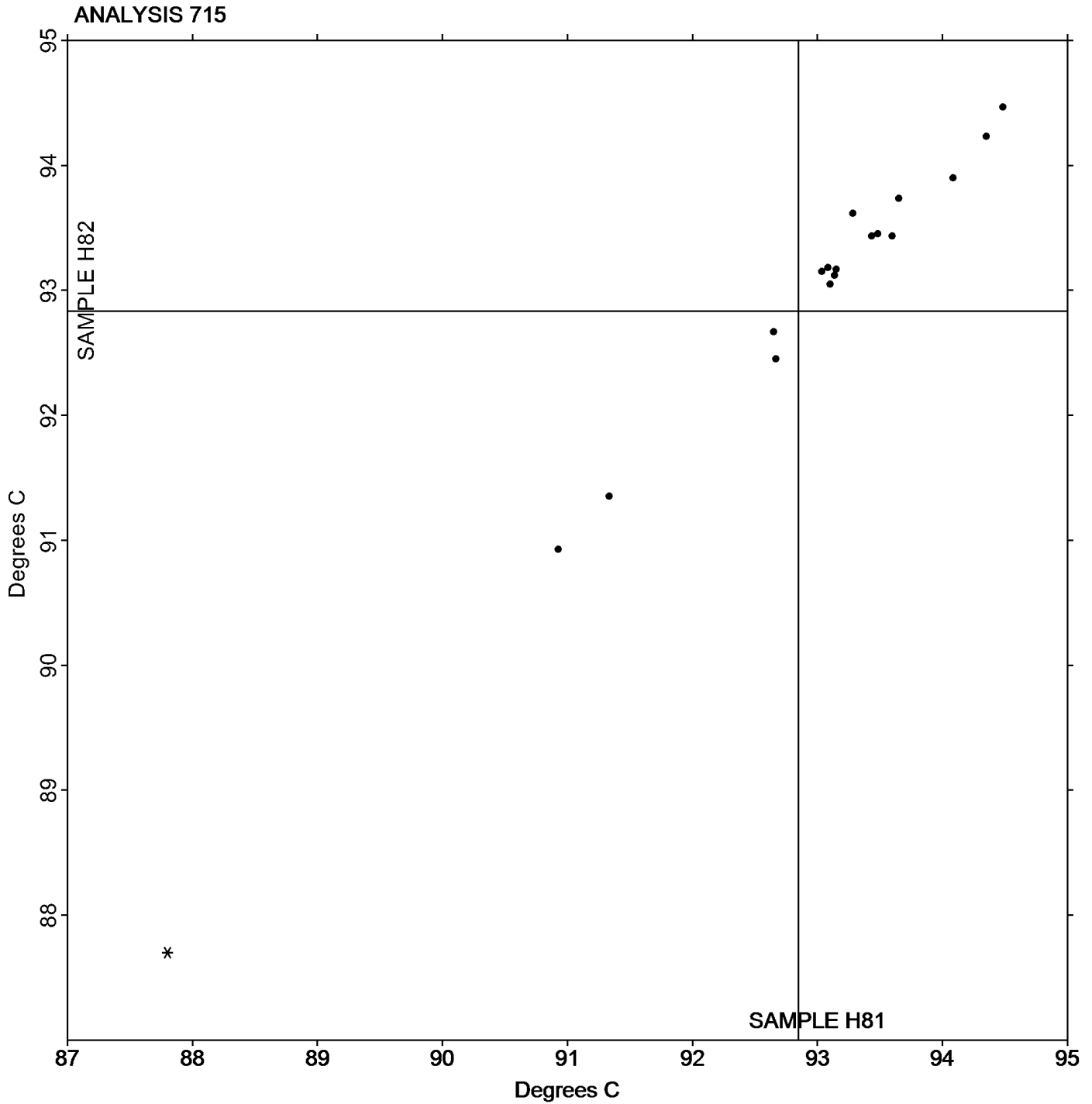
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample R81			Sample R82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2HEAKR		95.37	0.86	0.24	95.33	0.70	0.20	RO
3JZKM6	*	92.87	-1.63	-0.45	94.45	-0.19	-0.05	XX
3MJFRH	*	81.57	-12.94	-3.59	81.72	-12.92	-3.64	XX
69UEP9		95.85	1.35	0.37	95.83	1.20	0.34	CF
8284WP		96.02	1.51	0.42	95.93	1.30	0.37	CE
9AVLHB		95.62	1.11	0.31	95.83	1.20	0.34	CF
B4GKCX		95.18	0.68	0.19	95.14	0.51	0.14	TO
BWEDUA		95.10	0.60	0.17	95.08	0.45	0.13	TO
DAXVKJ		95.48	0.98	0.27	95.55	0.92	0.26	CE
ETP4D8		96.10	1.60	0.44	96.10	1.47	0.41	CE
JAKYX2		96.00	1.50	0.42	96.23	1.60	0.45	CF
JKLFRC		96.88	2.38	0.66	96.78	2.15	0.61	CE
JPB42N		93.02	-1.49	-0.41	93.03	-1.60	-0.45	TO
R4QUKN		95.80	1.30	0.36	95.98	1.35	0.38	CE
UJRGZF		95.75	1.25	0.35	95.68	1.05	0.30	AT
UMRP7C		95.43	0.93	0.26	95.43	0.80	0.23	AT

Summary Statistics	Sample R81	Sample R82
Grand Means	94.502 Degrees C	94.632 Degrees C
Stnd Dev Btwn Labs	3.602 Degrees C	3.547 Degrees C
		Statistics based on 16 of 16 reporting participants

Sample R81: HIPS & Sample R82: HIPS

Key to Instrument Codes Reported by Participants

AT	Atlas	CE	Ceast
CF	Coesfeld	RO	Rosand
TO	Tinius Olsen	XX	Instrument manufacturer not specified by lab

Grand Mean Sample R81: 94.502 Degrees C   Grand Mean Sample R82: 94.632 Degrees C
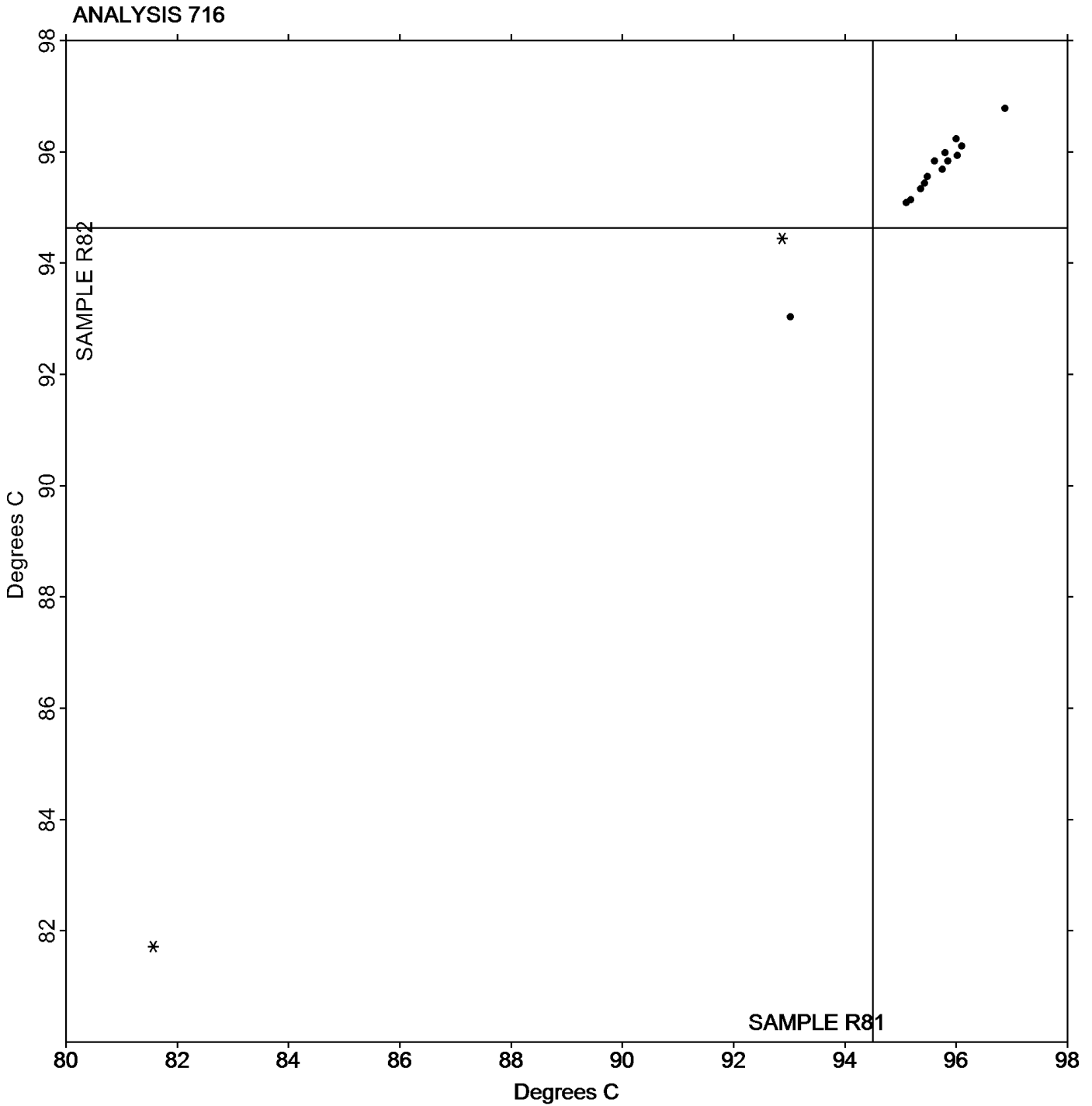
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample T81			Sample T82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2AZH3G		1.04900	0.00098	0.47	1.04800	0.00012	0.06
324VW3		1.04863	0.00061	0.29	1.04843	0.00056	0.25
3BAWV9	X	1.05033	0.00231	1.11	1.04700	-0.00088	-0.39
3F3R2M		1.05003	0.00201	0.97	1.05013	0.00226	1.01
3JZKM6	X	1.05467	0.00665	3.19	1.05800	0.01012	4.54
3NEXTJ		1.04967	0.00165	0.79	1.04953	0.00166	0.74
3Q2JFE		1.04957	0.00155	0.74	1.04820	0.00032	0.14
484TJC		1.04930	0.00128	0.61	1.04927	0.00139	0.62
486QU8		1.04667	-0.00135	-0.65	1.04667	-0.00121	-0.54
69UEP9		1.05016	0.00214	1.03	1.04993	0.00205	0.92
6QC9LP		1.04900	0.00098	0.47	1.04900	0.00112	0.50
6V8633		1.05270	0.00468	2.25	1.05253	0.00466	2.09
6WZ2PC		1.04800	-0.00002	-0.01	1.04800	0.00012	0.06
79TW9P		1.04533	-0.00269	-1.29	1.04633	-0.00154	-0.69
7A828M	*	1.04677	-0.00125	-0.60	1.04487	-0.00301	-1.35
7EYDXC		1.05010	0.00208	1.00	1.04993	0.00206	0.92
7F8NUF	X	1.04903	0.00101	0.49	1.04213	-0.00574	-2.58
7M6HN9		1.04913	0.00111	0.53	1.04903	0.00116	0.52
7VMNMZ		1.05027	0.00225	1.08	1.05030	0.00242	1.09
8284WP		1.04577	-0.00225	-1.08	1.04580	-0.00208	-0.93
9AVLHB		1.04567	-0.00235	-1.13	1.04533	-0.00254	-1.14
9JHD9A		1.04433	-0.00369	-1.77	1.04300	-0.00488	-2.19
9QZX4A		1.04567	-0.00235	-1.13	1.04500	-0.00288	-1.29
A4MH83		1.04930	0.00128	0.61	1.04983	0.00196	0.88
AB8BM9		1.04567	-0.00235	-1.13	1.04533	-0.00254	-1.14
AGC8BF		1.04700	-0.00102	-0.49	1.04767	-0.00021	-0.09
B4GKCX		1.04907	0.00105	0.50	1.05003	0.00216	0.97
BURY7Z		1.04837	0.00035	0.17	1.04800	0.00012	0.06
BWEDUA		1.05010	0.00208	1.00	1.04933	0.00146	0.65
CPZPW2		1.04893	0.00091	0.44	1.04837	0.00049	0.22
D2ND67		1.04953	0.00151	0.73	1.04920	0.00132	0.59
D8DQ7U		1.04633	-0.00169	-0.81	1.04600	-0.00188	-0.84
DAXVKJ		1.04827	0.00025	0.12	1.04827	0.00039	0.17
DDE8CT		1.04667	-0.00135	-0.65	1.04700	-0.00088	-0.39
DFLAGD		1.04633	-0.00169	-0.81	1.04667	-0.00121	-0.54

WebCode	Data Flag	Sample T81			Sample T82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
DYZYFW		1.04817	0.00015	0.07	1.04777	-0.00011	-0.05
E26R8A		1.04800	-0.00002	-0.01	1.04633	-0.00154	-0.69
ETP4D8		1.04767	-0.00035	-0.17	1.04730	-0.00058	-0.26
GLHGD4	*	1.04443	-0.00359	-1.72	1.04257	-0.00531	-2.38
GZWLKW		1.04863	0.00061	0.29	1.04717	-0.00071	-0.32
JA4XY6		1.04993	0.00191	0.92	1.04970	0.00182	0.82
JAKYX2		1.04550	-0.00252	-1.21	1.04600	-0.00188	-0.84
JF7Y62		1.04367	-0.00435	-2.09	1.04320	-0.00468	-2.10
KH7T29		1.04600	-0.00202	-0.97	1.04667	-0.00121	-0.54
KNE77L		1.04927	0.00125	0.60	1.04940	0.00152	0.68
KNTGYZ		1.04810	0.00008	0.04	1.04960	0.00172	0.77
KQ46QC	X	1.04627	-0.00175	-0.84	1.04927	0.00139	0.62
LEHEDY		1.04807	0.00005	0.02	1.04927	0.00139	0.62
LH6792		1.04750	-0.00052	-0.25	1.04707	-0.00081	-0.36
PBV6J4		1.04667	-0.00135	-0.65	1.04633	-0.00154	-0.69
PVZNU6		1.05050	0.00248	1.19	1.05050	0.00262	1.18
QGWJ66		1.05013	0.00211	1.01	1.05047	0.00259	1.16
R2DHGD		1.04970	0.00168	0.81	1.05017	0.00229	1.03
R3QRUK		1.04967	0.00165	0.79	1.04900	0.00112	0.50
R4QUKN	*	1.05420	0.00618	2.97	1.05373	0.00586	2.63
R9XKMU		1.04533	-0.00269	-1.29	1.04567	-0.00221	-0.99
TK8H7N		1.04923	0.00121	0.58	1.04917	0.00129	0.58
U7MHRA		1.04567	-0.00235	-1.13	1.04667	-0.00121	-0.54
UJRGZF		1.04613	-0.00189	-0.91	1.04563	-0.00224	-1.01
UMRP7C		1.05037	0.00235	1.13	1.05097	0.00309	1.39
UQRQCZ		1.04840	0.00038	0.18	1.04880	0.00092	0.41
UWXMWZ		1.05147	0.00345	1.65	1.05140	0.00352	1.58
V23WAL		1.04880	0.00078	0.38	1.04888	0.00100	0.45
V9PFZG		1.04617	-0.00185	-0.89	1.04473	-0.00314	-1.41
VAFQPN		1.04540	-0.00262	-1.26	1.04577	-0.00211	-0.95
WH7NXA		1.04600	-0.00202	-0.97	1.04600	-0.00188	-0.84
YANUYH		1.04770	-0.00032	-0.15	1.04800	0.00012	0.06
YLXPU9		1.04923	0.00121	0.58	1.04917	0.00129	0.58
YVLGHL		1.04750	-0.00052	-0.25	1.04713	-0.00074	-0.33
ZM9U6B		1.04480	-0.00322	-1.55	1.04467	-0.00321	-1.44

Summary Statistics

	Sample T81	Sample T82
Grand Means	1.048020 sp gr 23/23 C	1.047877 sp gr 23/23 C
Stnd Dev Btwn Labs	0.002083 sp gr 23/23 C	0.002230 sp gr 23/23 C

Statistics based on 66 of 70 reporting participants

Sample T81: ABS & Sample T82: ABS

Comments on Assigned Data Flags for Test #718

KQ46QC (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample T82.

3BAWV9 (X) - Inconsistent in testing between samples.

7F8NUF (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

3JZKM6 (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample T81.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample T81 ABS			Sample T82 ABS			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
ASTM D792 Method A (water)	1.048088	0.002153	0.000	1.047941	0.002347	0.000	46/50
ASTM D792 Method B (not water)	1.047644	0.001752	0.000	1.047200	0.001622	-0.001	3/3
ASTM D1505	1.050267	0.000000	0.002	1.050300	0.000000	0.002	1/1
ISO 1183	1.047698	0.002068	0.000	1.047669	0.002118	0.000	14/14

Plastics Interlaboratory Testing Program
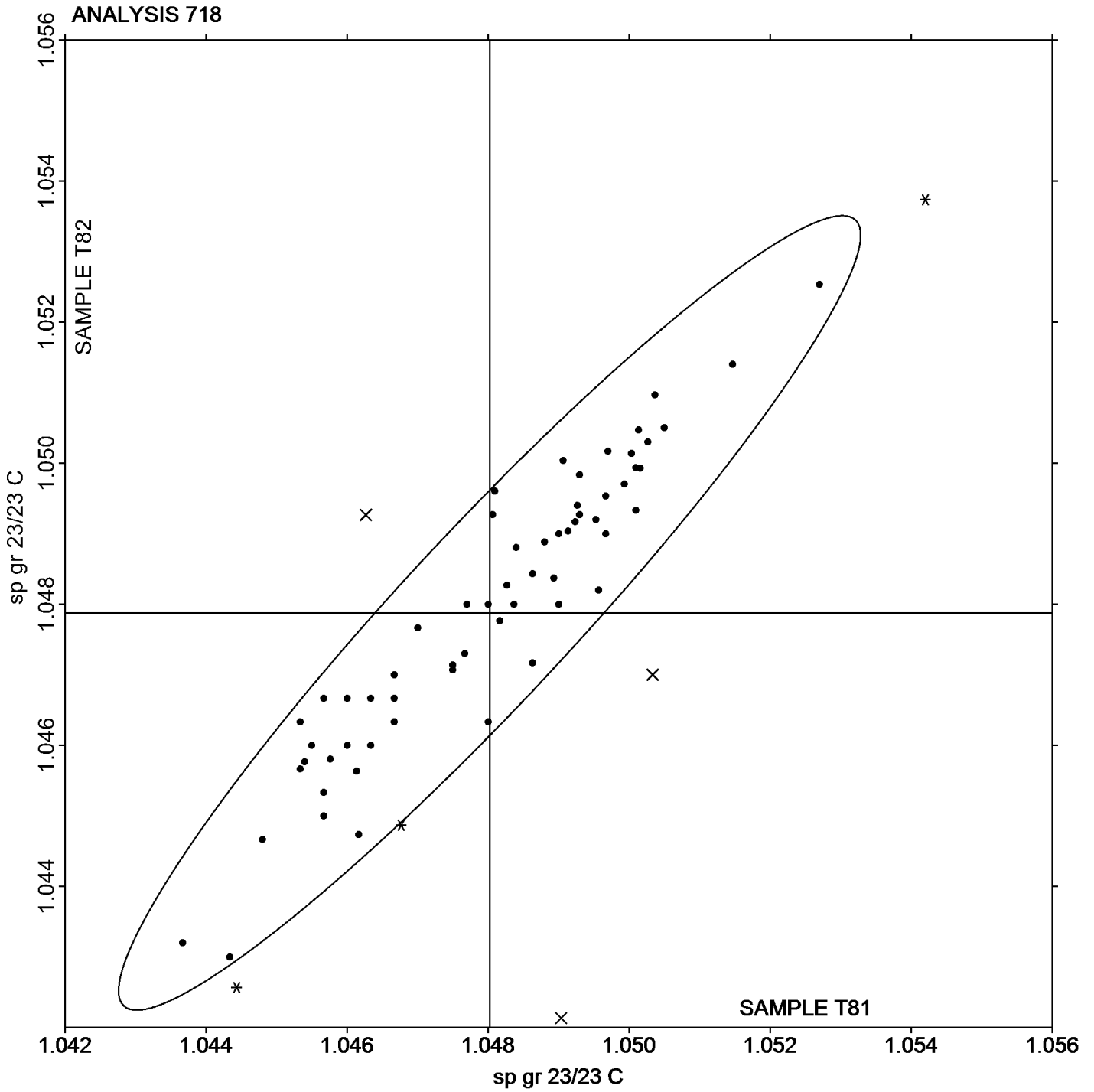
Analysis 718
Specific Gravity - sp gr 23/23 C

Grand Mean Sample T81: 1.0480 sp gr 23/23 C   Grand Mean Sample T82: 1.0479 sp gr 23/23 C

WebCode	Data Flag	Sample J81			Sample J82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2HEAKR		359.4	-1.8	-0.09	362.6	0.7	0.04
2XLKVR		336.8	-24.4	-1.18	345.2	-16.6	-0.86
33C8BX	X	360.2	-0.9	-0.04	342.8	-19.0	-0.98
3JZKM6		323.2	-38.0	-1.84	323.4	-38.4	-1.98
3Q2JFE		394.1	32.9	1.60	386.4	24.6	1.27
3TQ2FF		361.2	0.0	0.00	366.2	4.4	0.22
484TJC		369.6	8.4	0.41	370.5	8.7	0.45
69UEP9		369.9	8.7	0.42	370.3	8.4	0.43
6LKXJD		373.7	12.6	0.61	372.8	10.9	0.56
6QC9LP		389.1	28.0	1.36	384.2	22.4	1.15
6V8633		372.7	11.6	0.56	370.2	8.4	0.43
6Y6QU7		362.1	1.0	0.05	362.0	0.2	0.01
79TW9P		329.2	-31.9	-1.55	328.4	-33.5	-1.72
7EYDXC		364.0	2.8	0.14	363.6	1.8	0.09
7F8NUF		369.3	8.1	0.39	371.2	9.3	0.48
7VMNMZ		368.8	7.6	0.37	372.8	11.0	0.57
8284WP	*	315.9	-45.2	-2.19	314.4	-47.5	-2.44
8Z892Z		368.3	7.2	0.35	369.2	7.3	0.38
9AVLHB		353.4	-7.8	-0.38	354.6	-7.2	-0.37
9JHD9A		387.6	26.4	1.28	386.0	24.2	1.24
AB8BM9	*	361.2	0.1	0.00	352.2	-9.7	-0.50
B4GKCX		371.4	10.2	0.50	373.9	12.1	0.62
BBW7GV	*	345.3	-15.9	-0.77	356.4	-5.5	-0.28
BEWGCV		388.1	26.9	1.30	389.8	28.0	1.44
BWEDUA	*	412.1	50.9	2.47	413.6	51.7	2.66
ETP4D8		351.3	-9.8	-0.48	352.8	-9.0	-0.46
FGN2A3		351.7	-9.5	-0.46	353.8	-8.0	-0.41
FN96EJ		369.8	8.7	0.42	369.8	8.0	0.41
GCE2T6		376.3	15.1	0.73	372.3	10.5	0.54
GLHGD4		332.0	-29.2	-1.42	332.0	-29.9	-1.54
HNJTK3		374.2	13.0	0.63	366.4	4.6	0.24
J7WK9Q	X	361.5	0.4	0.02	332.1	-29.8	-1.53
JAKYX2		331.0	-30.2	-1.46	340.0	-21.8	-1.12
JW79NX		392.6	31.5	1.52	386.4	24.5	1.26
K7BF4X		381.2	20.0	0.97	381.8	20.0	1.03

WebCode	Data Flag	Sample J81			Sample J82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
KGUWW4		355.2	-6.0	-0.29	354.0	-7.8	-0.40
MLZAQ8		336.5	-24.7	-1.20	341.1	-20.7	-1.07
PBV6J4		385.0	23.8	1.15	383.9	22.1	1.14
PLB2GU		343.0	-18.2	-0.88	344.2	-17.6	-0.91
QCXJC2		343.2	-18.0	-0.87	343.8	-18.0	-0.93
QGWJ66	**M**	363.5	2.4	0.12	No data reported for this sample		
R2DHGD		377.7	16.6	0.80	374.9	13.1	0.67
R4QUKN		341.0	-20.2	-0.98	338.7	-23.1	-1.19
R9XKMU		362.0	0.9	0.04	365.5	3.7	0.19
TK8H7N		353.0	-8.1	-0.39	357.0	-4.8	-0.25
UJRGZF		344.8	-16.4	-0.79	347.1	-14.7	-0.76
UMRP7C		344.1	-17.0	-0.83	350.8	-11.0	-0.57
UQRQCZ		372.5	11.4	0.55	376.3	14.5	0.74
UWXMWZ		370.1	8.9	0.43	370.1	8.3	0.43
V9PFZG		367.6	6.4	0.31	371.5	9.6	0.50
YANUYH		333.7	-27.4	-1.33	334.2	-27.7	-1.42

Summary Statistics

	Sample J81	Sample J82
Grand Means	361.17 ksi	361.84 ksi
Stnd Dev Btwn Labs	20.63 ksi	19.44 ksi

Statistics based on 48 of 51 reporting participants

Sample J81: ABS & Sample J82: ABS

Comments on Assigned Data Flags for Test #720

QGWJ66 (M) - Participant did not submit data for sample J82.

J7WK9Q (X) - Inconsistent in testing between samples.

33C8BX (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample J81.
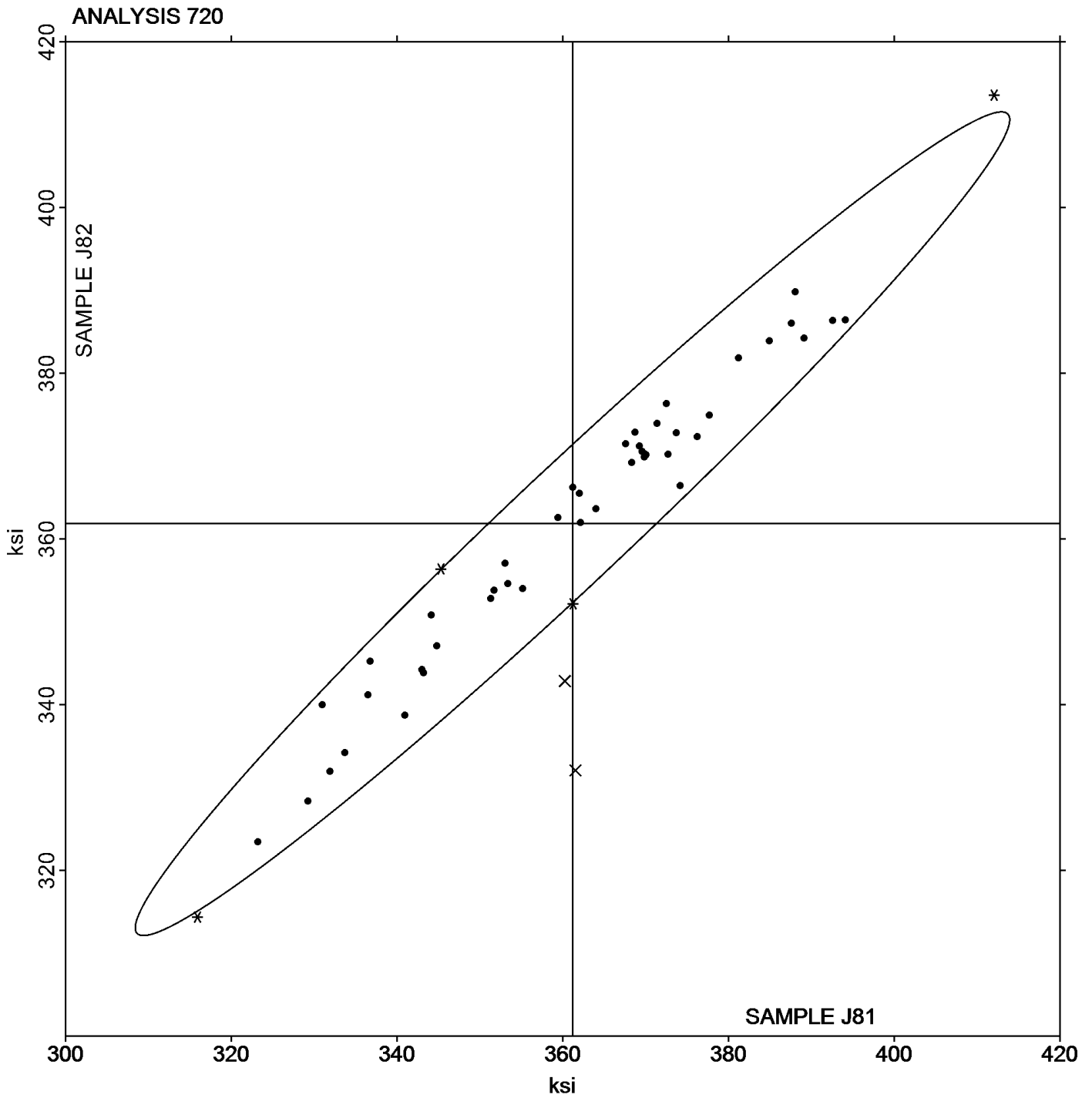
Grand Mean Sample J81: 361.17 ksi   **Grand Mean Sample J82: 361.84 ksi**

WebCode	Data Flag	Sample J81			Sample J82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2HEAKR		10,124	-258	-0.62	10,327	-88	-0.22
2XLKVR	X	76	-10,305	-24.78	76	-10,339	-25.53
33C8BX		10,550	169	0.41	10,382	-33	-0.08
3JZKM6		9,963	-418	-1.00	9,918	-497	-1.23
3TQ2FF		9,978	-403	-0.97	10,092	-323	-0.80
69UEP9		10,434	52	0.13	10,528	113	0.28
6Y6QU7		10,203	-178	-0.43	10,328	-87	-0.22
7EYDXC		10,140	-241	-0.58	10,120	-295	-0.73
7F8NUF		10,909	528	1.27	10,938	523	1.29
7VMNMZ		10,247	-135	-0.32	10,343	-72	-0.18
8284WP		11,005	623	1.50	10,921	506	1.25
8Z892Z		10,582	201	0.48	10,668	253	0.62
9AVLHB		10,196	-185	-0.45	10,426	11	0.03
9JHD9A		10,520	139	0.33	10,640	225	0.56
AB8BM9		10,122	-259	-0.62	9,882	-533	-1.32
BBW7GV		10,608	226	0.54	10,785	370	0.91
BEWGCV		11,216	835	2.01	11,052	637	1.57
BWEDUA		10,837	455	1.09	10,723	308	0.76
ETP4D8		10,340	-42	-0.10	10,388	-27	-0.07
FGN2A3		10,014	-367	-0.88	10,151	-264	-0.65
FN96EJ		11,040	659	1.58	11,040	625	1.54
GCE2T6		10,441	60	0.14	10,318	-97	-0.24
GLHGD4		10,207	-174	-0.42	10,165	-250	-0.62
HNJTK3		10,504	123	0.30	10,312	-103	-0.25
J7WK9Q		9,737	-645	-1.55	9,842	-573	-1.41
JAKYX2		10,926	545	1.31	11,040	625	1.54
JW79NX		10,859	478	1.15	10,777	362	0.89
K7BF4X		10,825	443	1.07	10,723	308	0.76
MLZAQ8		11,047	665	1.60	11,082	667	1.65
PBV6J4		10,341	-40	-0.10	10,413	-2	0.00
PLB2GU		9,341	-1,041	-2.50	9,419	-996	-2.46
QCXJC2		9,770	-611	-1.47	9,817	-598	-1.48
QGWJ66	M	9,030	-1,352	-3.25	No data reported for this sample		
R2DHGD		10,383	1	0.00	10,425	10	0.03
R4QUKN		10,447	66	0.16	10,431	16	0.04

WebCode	Data Flag	Sample J81			Sample J82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TK8H7N		10,110	-271	-0.65	10,171	-244	-0.60
UJRGZF		10,668	287	0.69	10,767	352	0.87
UMRP7C		10,034	-348	-0.84	10,223	-192	-0.48
UQRQCZ		10,546	165	0.40	10,870	455	1.12
UWXMWZ		9,897	-484	-1.16	9,776	-639	-1.58
V9PFZG		10,184	-197	-0.47	10,447	32	0.08
YANUYH		9,958	-424	-1.02	9,929	-486	-1.20

Summary Statistics

	Sample J81	Sample J82
Grand Means	10,381.3 psi	10,415.0 psi
Stnd Dev Btwn Labs	415.8 psi	404.9 psi

Statistics based on 40 of 42 reporting participants

Sample J81: ABS & Sample J82: ABS

Comments on Assigned Data Flags for Test #721

QGWJ66 (M) - Participant did not submit data for sample J82.

2XLKVR (X) - Extreme data.

Grand Mean Sample J81: 10,381.31 psi   Grand Mean Sample J82: 10,414.95 psi
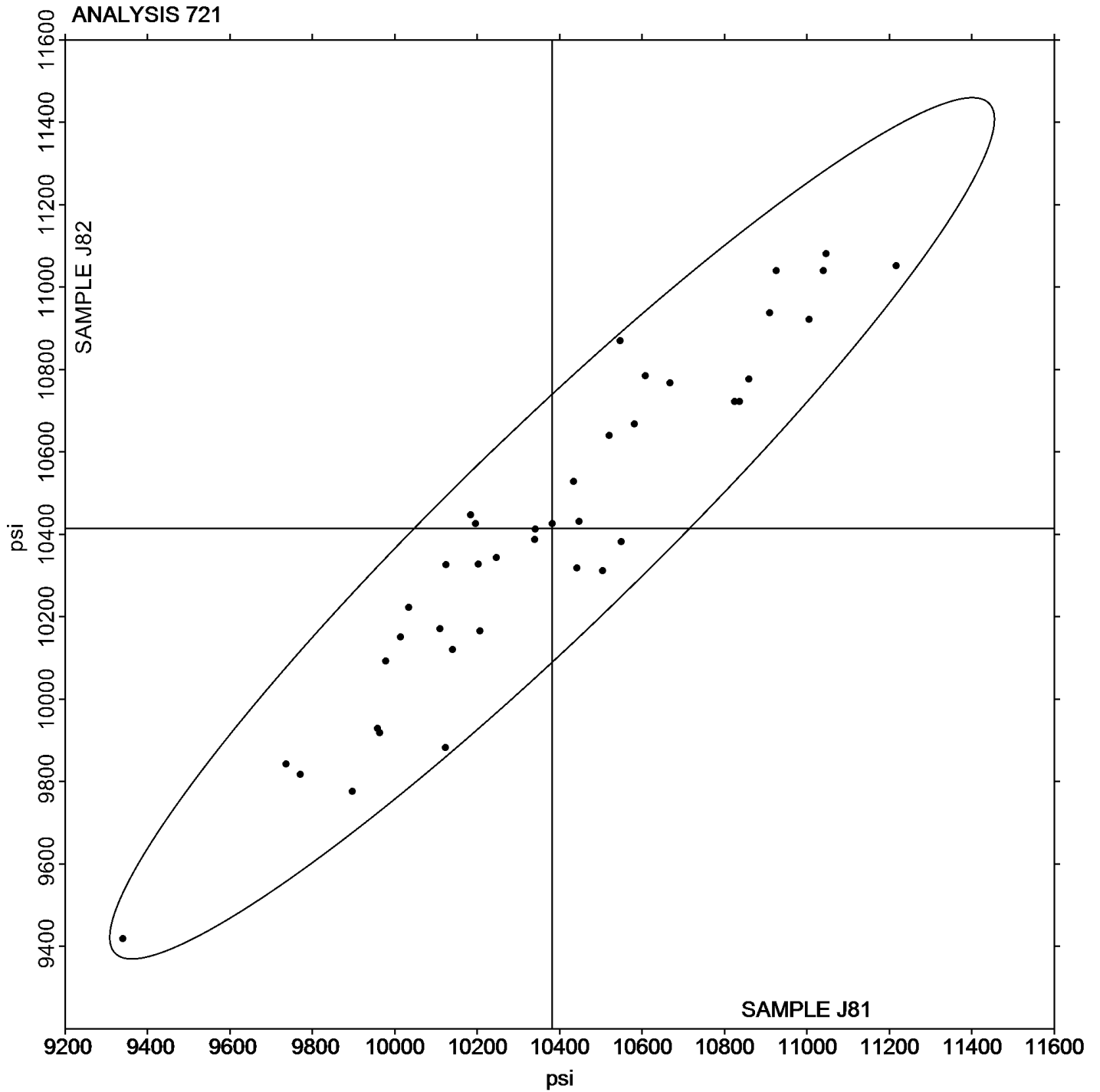
WebCode	Data Flag	Sample J81			Sample J82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2HEAKR		10,153	-242	-0.65	10,327	-83	-0.25
2XLKVR	X	77	-10,318	-27.52	77	-10,333	-30.55
33C8BX		10,562	167	0.45	10,391	-19	-0.06
3Q2JFE		10,883	488	1.30	10,671	261	0.77
3TQ2FF		9,994	-401	-1.07	10,096	-314	-0.93
484TJC		10,162	-233	-0.62	10,299	-111	-0.33
69UEP9		10,410	15	0.04	10,494	84	0.25
6LKXJD		10,878	483	1.29	10,849	439	1.30
6QC9LP		10,336	-59	-0.16	10,286	-124	-0.37
6Y6QU7		10,245	-150	-0.40	10,361	-49	-0.14
7EYDXC		10,160	-235	-0.63	10,120	-290	-0.86
7F8NUF		10,387	-8	-0.02	10,362	-48	-0.14
7VMNMZ		10,266	-129	-0.34	10,358	-52	-0.15
8284WP		11,030	635	1.69	10,946	536	1.58
8Z892Z		10,524	130	0.35	10,549	139	0.41
9AVLHB		10,196	-199	-0.53	10,428	18	0.05
AB8BM9		10,159	-236	-0.63	9,937	-473	-1.40
BBW7GV		10,643	248	0.66	10,830	420	1.24
BEWGCV		11,191	796	2.12	11,015	605	1.79
BWEDUA		10,859	464	1.24	10,744	334	0.99
ETP4D8		10,336	-58	-0.16	10,381	-29	-0.08
FGN2A3		9,855	-540	-1.44	9,960	-450	-1.33
FN96EJ	X	369,849	359,455	958.79	369,849	359,439	1,062.85
GCE2T6		10,475	80	0.21	10,329	-81	-0.24
HNJTK3		10,572	177	0.47	10,395	-15	-0.04
J7WK9Q		9,729	-666	-1.78	9,903	-507	-1.50
JAKYX2		10,980	585	1.56	11,140	730	2.16
JW79NX		10,868	473	1.26	10,789	379	1.12
K7BF4X		10,853	458	1.22	10,773	363	1.07
MLZAQ8	X	76	-10,319	-27.52	77	-10,333	-30.55
PBV6J4		10,349	-46	-0.12	10,421	11	0.03
PLB2GU		9,833	-562	-1.50	9,915	-495	-1.46
QCXJC2		9,822	-573	-1.53	9,872	-538	-1.59
QGWJ66	M	9,072	-1,323	-3.53	No data reported for this sample		
R2DHGD		10,438	43	0.12	10,442	32	0.09

WebCode	Data Flag	Sample J81 Lab Mean	Sample J81 Diff from Grand Mean	Sample J81 CPV	Sample J82 Lab Mean	Sample J82 Diff from Grand Mean	Sample J82 CPV
R4QUKN		10,471	76	0.20	10,464	54	0.16
TK8H7N		10,153	-241	-0.64	10,203	-207	-0.61
UJRGZF		10,727	333	0.89	10,873	463	1.37
UMRP7C		10,044	-351	-0.94	10,255	-155	-0.46
UWXMWZ		10,079	-315	-0.84	10,041	-369	-1.09
YANUYH		9,987	-408	-1.09	9,954	-456	-1.35

Summary Statistics

	Sample J81	Sample J82
Grand Means	10,394.8 psi	10,410.0 psi
Stnd Dev Btwn Labs	374.9 psi	338.2 psi

Statistics based on 37 of 41 reporting participants

Sample J81: ABS & Sample J82: ABS

Comments on Assigned Data Flags for Test #722

QGWJ66 (M) - Participant did not submit data for sample J82.

FN96EJ (X) - Extreme data.

MLZAQ8 (X) - Extreme data.

2XLKVR (X) - Extreme data.

Grand Mean Sample J81: 10,394.83 psi   Grand Mean Sample J82: 10,410.02 psi
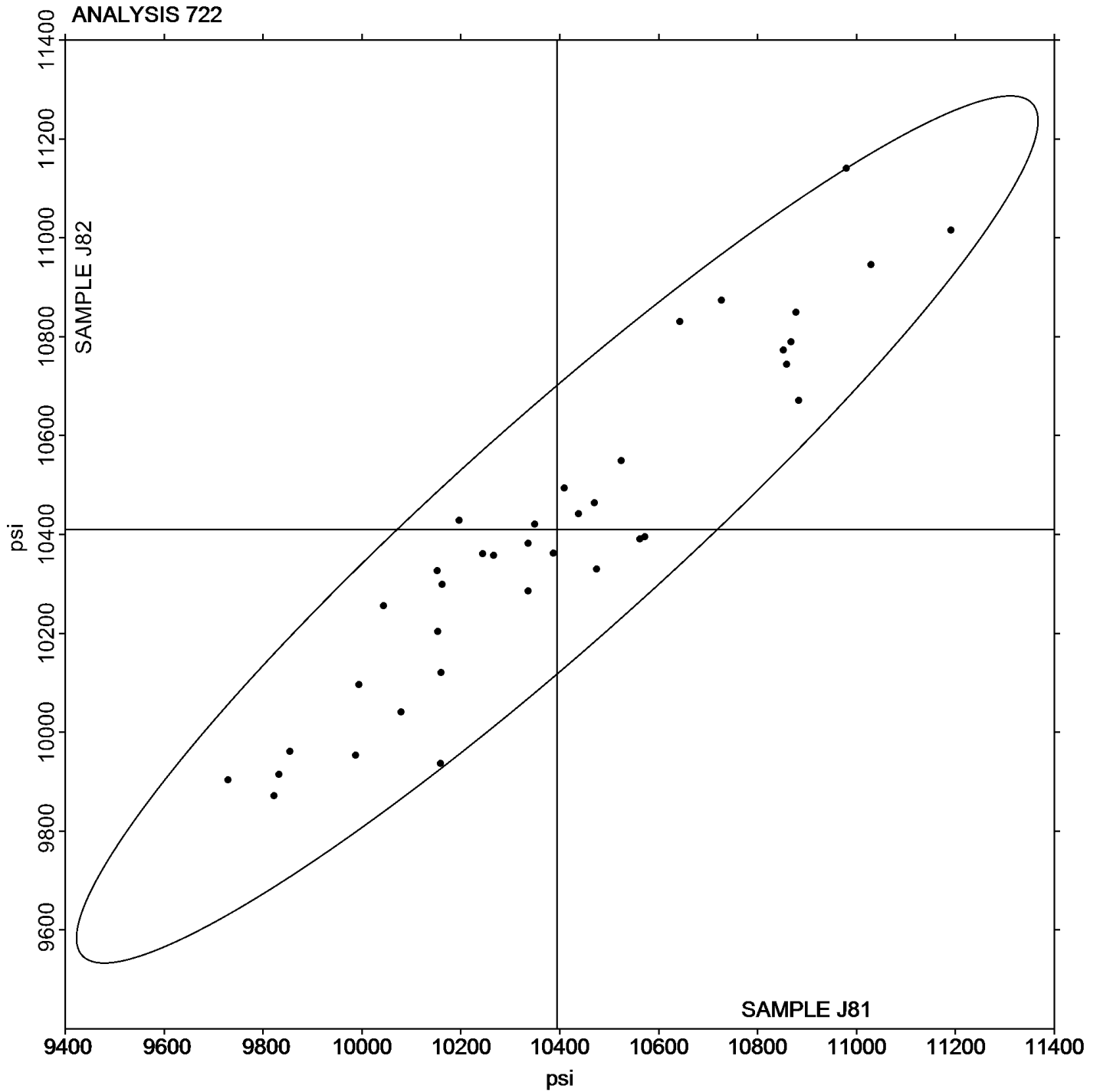
WebCode	Data Flag	Sample C81			Sample C82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3NEXTJ		45.57	0.92	0.98	45.45	0.77	0.80
4UWQF3		46.28	1.64	1.73	46.52	1.84	1.92
64XQ92		44.50	-0.14	-0.15	44.28	-0.40	-0.42
69UEP9		43.43	-1.21	-1.28	43.83	-0.85	-0.89
6Y6QU7		45.70	1.06	1.12	45.53	0.85	0.89
79TW9P		43.96	-0.68	-0.72	43.92	-0.76	-0.79
7M6HN9		43.64	-1.00	-1.06	44.15	-0.53	-0.55
8284WP	X	43.37	-1.27	-1.35	41.27	-3.41	-3.55
8YG6CY	*	44.72	0.08	0.08	45.82	1.14	1.18
9AVLHB		44.93	0.28	0.30	44.29	-0.39	-0.41
9JHD9A		43.29	-1.35	-1.43	43.46	-1.22	-1.27
AGC8BF		43.72	-0.92	-0.97	43.52	-1.16	-1.21
B4GKCX		42.31	-2.33	-2.47	42.37	-2.31	-2.40
BWEDUA		44.77	0.13	0.14	44.86	0.18	0.19
C4VHV9	X	26.40	-18.24	-19.31	26.78	-17.90	-18.62
D2ND67		45.31	0.67	0.71	45.48	0.80	0.83
DAXVKJ		43.67	-0.97	-1.03	43.86	-0.82	-0.85
ETP4D8		44.06	-0.58	-0.61	43.95	-0.73	-0.76
EVVF83		43.84	-0.80	-0.85	43.94	-0.74	-0.77
F2YW29		44.26	-0.39	-0.41	45.04	0.36	0.37
FVNQFB		46.02	1.37	1.46	45.91	1.23	1.27
GLHGD4		43.30	-1.34	-1.42	43.18	-1.50	-1.56
GQTAP3		45.95	1.31	1.39	45.82	1.14	1.18
HM9QY6		44.69	0.05	0.05	44.39	-0.29	-0.30
JAKYX2		44.36	-0.28	-0.30	44.50	-0.18	-0.19
JF7Y62		44.12	-0.52	-0.55	43.86	-0.82	-0.85
KH7T29		45.50	0.86	0.91	45.94	1.26	1.31
KNE77L		44.30	-0.34	-0.36	44.52	-0.16	-0.17
KQ46QC		45.03	0.39	0.41	45.21	0.53	0.55
KQGVMA		45.03	0.39	0.41	45.73	1.05	1.09
KW6Q9E		46.82	2.18	2.31	46.91	2.23	2.32
KZAC7C		45.25	0.61	0.65	45.50	0.82	0.85
MG6FU7		44.86	0.22	0.23	44.70	0.02	0.02
PHCMVQ		43.92	-0.72	-0.76	43.99	-0.69	-0.72
QZPRUM		45.48	0.84	0.89	45.14	0.46	0.47

WebCode	Data Flag	Sample C81 Lab Mean	Sample C81 Diff from Grand Mean	Sample C81 CPV	Sample C82 Lab Mean	Sample C82 Diff from Grand Mean	Sample C82 CPV
R2DHGD		44.62	-0.02	-0.02	44.32	-0.36	-0.38
R4QUKN		44.72	0.08	0.09	44.75	0.07	0.08
R9XKMU		44.41	-0.23	-0.24	44.81	0.13	0.14
RTMY2J		43.84	-0.80	-0.85	43.66	-1.02	-1.06
TCQ2CT		45.28	0.64	0.68	45.48	0.80	0.83
TVNCCP		44.52	-0.12	-0.13	44.50	-0.18	-0.19
U7MHRA	*	46.50	1.86	1.97	45.82	1.14	1.18
UJRGZF		45.30	0.66	0.70	45.24	0.56	0.58
UQRQCZ		44.61	-0.03	-0.03	44.46	-0.22	-0.23
XBJD2J		43.97	-0.67	-0.71	44.51	-0.17	-0.18
YLXPU9		45.05	0.41	0.44	44.49	-0.19	-0.20
Z28X8G		45.48	0.84	0.89	45.49	0.81	0.84
Z6894G		42.93	-1.71	-1.81	42.61	-2.07	-2.16
ZM9U6B		44.28	-0.36	-0.38	44.30	-0.38	-0.40

Summary Statistics

	Sample C81	Sample C82
Grand Means	44.641 MPa	44.681 MPa
Stnd Dev Btwn Labs	0.945 MPa	0.961 MPa

Statistics based on 47 of 49 reporting participants

Sample C81: ABS & Sample C82: ABS

Comments on Assigned Data Flags for Test #730

8284WP (X) - Data for sample C82 are low. Inconsistent within the determinations of sample C81.

C4VHV9 (X) - Data for both samples are low.

Grand Mean Sample C81: 44.641 MPa   Grand Mean Sample C82: 44.681 MPa
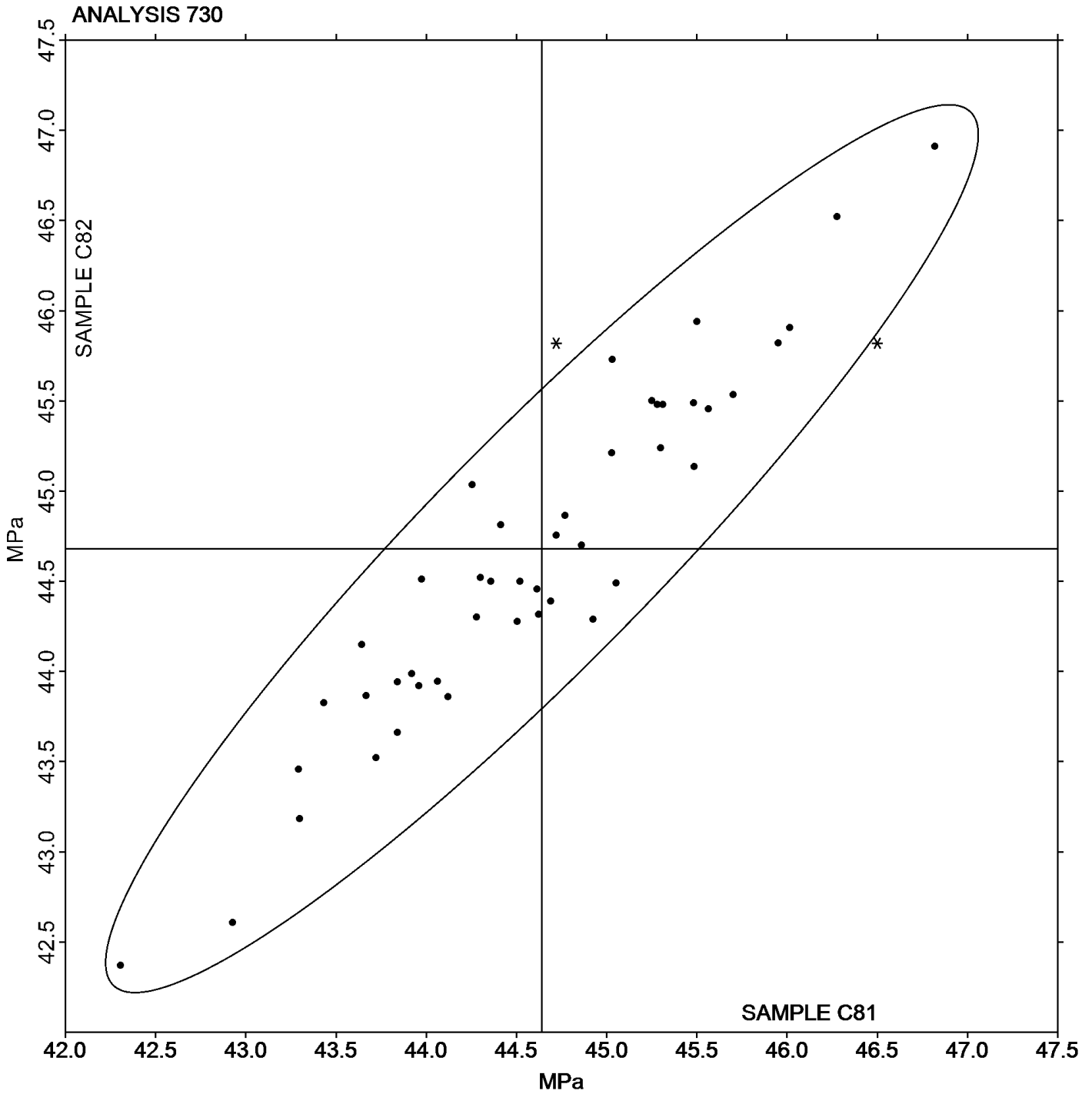
WebCode	Data Flag	Sample C81			Sample C82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3NEXTJ		34.84	-0.52	-0.56	35.31	-0.08	-0.07
4UWQF3		36.83	1.46	1.57	36.63	1.24	1.04
64XQ92		34.74	-0.62	-0.67	35.46	0.06	0.05
69UEP9		34.71	-0.66	-0.70	33.40	-2.00	-1.67
6Y6QU7		35.99	0.62	0.67	35.98	0.58	0.49
7VMNMZ		35.75	0.39	0.42	35.44	0.05	0.04
8284WP	*	33.96	-1.41	-1.51	32.40	-2.99	-2.51
8YG6CY		35.58	0.21	0.23	36.52	1.13	0.95
9AVLHB		34.75	-0.62	-0.67	34.18	-1.22	-1.02
9JHD9A		33.41	-1.96	-2.11	33.40	-1.99	-1.67
BWEDUA		35.59	0.22	0.24	35.92	0.53	0.45
C4VHV9	X	45.78	10.41	11.19	46.16	10.77	9.04
D2ND67		35.08	-0.29	-0.31	34.90	-0.50	-0.42
DAXVKJ		34.97	-0.40	-0.43	34.95	-0.44	-0.37
EPTCAG		34.87	-0.50	-0.53	34.81	-0.59	-0.49
ETP4D8		34.64	-0.72	-0.78	34.73	-0.67	-0.56
EVVF83	X	33.02	-2.35	-2.52	36.10	0.71	0.59
F2YW29	*	35.57	0.21	0.22	37.53	2.13	1.79
FVNQFB		36.32	0.95	1.02	35.76	0.37	0.31
GLHGD4		33.42	-1.95	-2.10	32.91	-2.48	-2.08
GQTAP3		36.39	1.02	1.10	36.53	1.14	0.95
HM9QY6		35.28	-0.09	-0.10	35.06	-0.33	-0.28
JAKYX2		34.32	-1.05	-1.13	34.50	-0.89	-0.75
JF7Y62		34.60	-0.77	-0.82	33.66	-1.73	-1.45
KH7T29		35.44	0.07	0.08	35.66	0.27	0.23
KNE77L		35.72	0.35	0.38	36.60	1.21	1.01
KQ46QC		35.73	0.36	0.39	35.99	0.60	0.50
KQGVMA		34.76	-0.61	-0.65	36.16	0.77	0.65
KZAC7C		35.89	0.53	0.57	36.14	0.75	0.63
MG6FU7		36.38	1.01	1.09	36.38	0.99	0.83
PHCMVQ	X	38.85	3.48	3.74	42.23	6.84	5.74
QZPRUM		36.19	0.82	0.88	36.63	1.24	1.04
R2DHGD		34.98	-0.39	-0.41	35.17	-0.22	-0.18
R4QUKN		34.10	-1.27	-1.36	34.06	-1.33	-1.12
TCQ2CT		36.22	0.85	0.92	36.08	0.69	0.58

WebCode	Data Flag	Sample C81			Sample C82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TVNCCP		35.53	0.16	0.18	34.90	-0.49	-0.41
U7MHRA		35.92	0.55	0.59	36.02	0.63	0.53
UJRGZF		36.28	0.91	0.98	36.20	0.81	0.68
UQRQCZ		36.64	1.27	1.37	36.97	1.58	1.32
VZBTPR	*	37.78	2.41	2.59	37.54	2.15	1.80
YLXPU9		35.59	0.23	0.24	34.92	-0.47	-0.40
Z28X8G		36.21	0.84	0.90	36.11	0.72	0.60
Z6894G		34.16	-1.20	-1.29	34.87	-0.52	-0.44
ZM9U6B		34.93	-0.44	-0.47	34.68	-0.71	-0.59

Summary Statistics	Sample C81	Sample C82
Grand Means	35.368 MPa	35.391 MPa
Stnd Dev Btwn Labs	0.931 MPa	1.192 MPa

Statistics based on 41 of 44 reporting participants

Sample C81: ABS & Sample C82: ABS

Comments on Assigned Data Flags for Test #731

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

EVVF83 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

C4VHV9 (X) - Data for both samples are high.

Grand Mean Sample C81: 35.368 MPa   Grand Mean Sample C82: 35.391 MPa
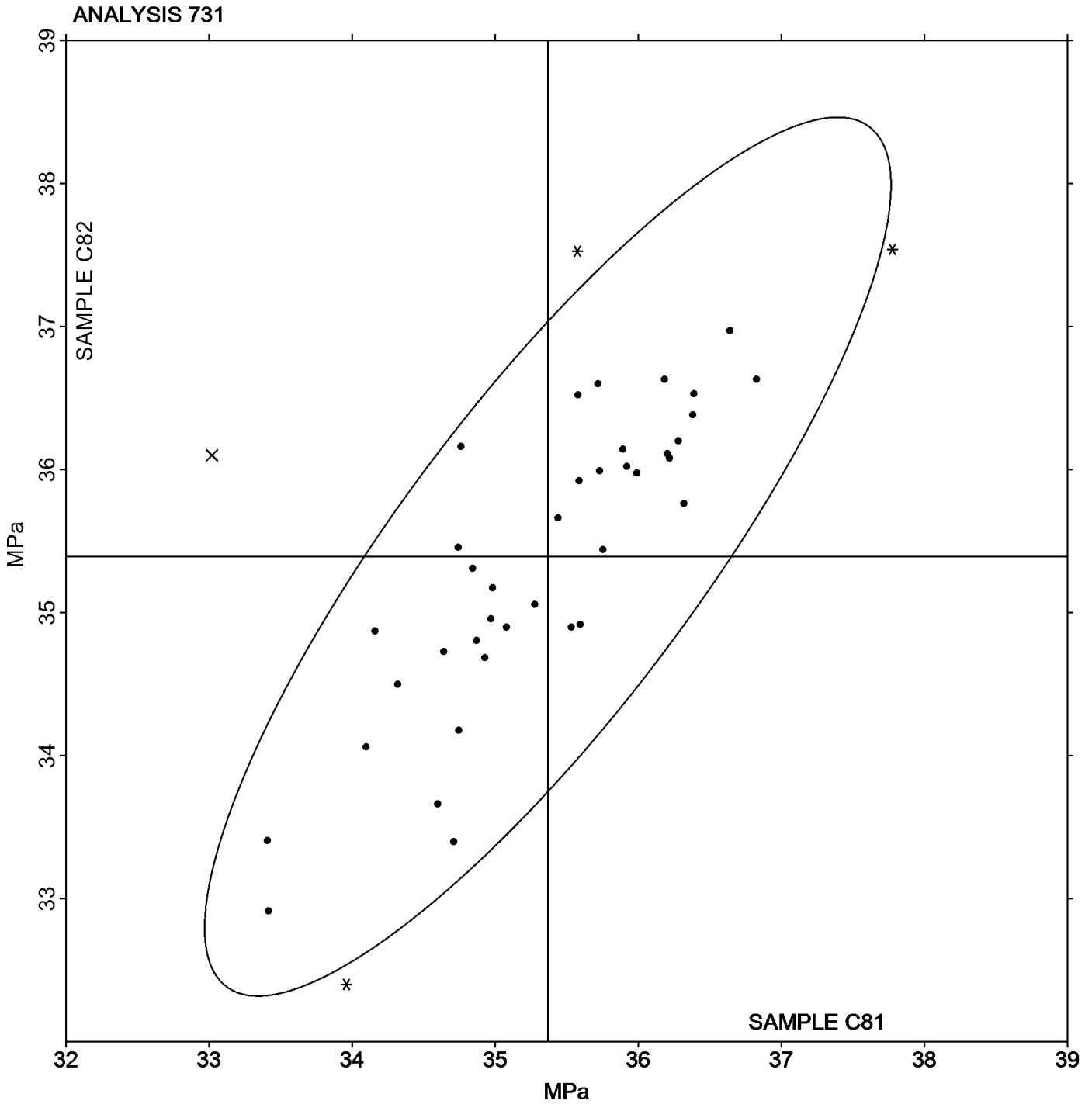
WebCode	Data Flag	Sample C81			Sample C82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3NEXTJ		2.482	0.109	1.20	2.444	0.072	0.87
4UWQF3		2.521	0.148	1.63	2.538	0.166	2.00
64XQ92		2.406	0.033	0.36	2.386	0.014	0.17
69UEP9	*	2.225	-0.148	-1.63	2.340	-0.032	-0.39
6Y6QU7		2.360	-0.013	-0.14	2.356	-0.016	-0.20
7M6HN9		2.254	-0.119	-1.31	2.276	-0.096	-1.16
8284WP		2.412	0.039	0.43	2.326	-0.046	-0.56
8YG6CY		2.220	-0.153	-1.68	2.280	-0.092	-1.11
9AVLHB		2.384	0.011	0.12	2.376	0.004	0.05
9JHD9A		2.494	0.121	1.33	2.462	0.090	1.08
BWEDUA		2.328	-0.045	-0.50	2.344	-0.028	-0.34
C4VHV9	X	13.660	11.287	124.06	12.784	10.412	125.65
D2ND67		2.360	-0.013	-0.14	2.366	-0.006	-0.08
DAXVKJ		2.372	-0.001	-0.01	2.356	-0.016	-0.20
ETP4D8		2.354	-0.019	-0.21	2.354	-0.018	-0.22
EVVF83		2.300	-0.073	-0.80	2.310	-0.062	-0.75
F2YW29		2.324	-0.049	-0.54	2.406	0.034	0.41
FVNQFB		2.460	0.087	0.95	2.420	0.048	0.58
GLHGD4		2.412	0.039	0.43	2.404	0.032	0.38
GQTAP3		2.368	-0.005	-0.06	2.374	0.002	0.02
HM9QY6		2.290	-0.083	-0.91	2.272	-0.100	-1.21
JAKYX2		2.300	-0.073	-0.80	2.300	-0.072	-0.87
JF7Y62		2.370	-0.003	-0.03	2.392	0.020	0.24
KH7T29		2.220	-0.153	-1.68	2.200	-0.172	-2.08
KNE77L	X	10.414	8.041	88.38	8.672	6.300	76.02
KQ46QC		2.393	0.020	0.22	2.390	0.018	0.21
KW6Q9E		2.330	-0.043	-0.47	2.360	-0.012	-0.15
KZAC7C		2.410	0.037	0.41	2.424	0.052	0.62
MG6FU7		2.220	-0.153	-1.68	2.280	-0.092	-1.11
PHCMVQ		2.356	-0.017	-0.19	2.342	-0.030	-0.36
QZPRUM		2.358	-0.015	-0.17	2.346	-0.026	-0.32
R2DHGD		2.456	0.083	0.91	2.452	0.080	0.96
R4QUKN		2.408	0.035	0.38	2.420	0.048	0.58
RTMY2J		2.280	-0.093	-1.02	2.220	-0.152	-1.84
TCQ2CT	*	2.594	0.221	2.43	2.612	0.240	2.89

WebCode	Data Flag	Sample C81			Sample C82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TVNCCP		2.520	0.147	1.62	2.520	0.148	1.78
U7MHRA		2.360	-0.013	-0.14	2.340	-0.032	-0.39
UJRGZF		2.420	0.047	0.52	2.400	0.028	0.34
UQRQCZ		2.248	-0.125	-1.38	2.250	-0.122	-1.48
YLXPU9		2.422	0.049	0.54	2.396	0.024	0.29
Z28X8G		2.422	0.048	0.53	2.466	0.093	1.13
ZM9U6B	*	2.512	0.139	1.53	2.390	0.018	0.21

Summary Statistics	Sample C81	Sample C82
Grand Means	2.3731 Percent	2.3722 Percent
Stnd Dev Btwn Labs	0.0910 Percent	0.0829 Percent
	Statistics based on 40 of 42 reporting participants	

Sample C81: ABS & Sample C82: ABS

Comments on Assigned Data Flags for Test #732

KNE77L (X) - Extreme data.

C4VHV9 (X) - Extreme data.

Grand Mean Sample C81: 2.3731 Percent   Grand Mean Sample C82: 2.3722 Percent
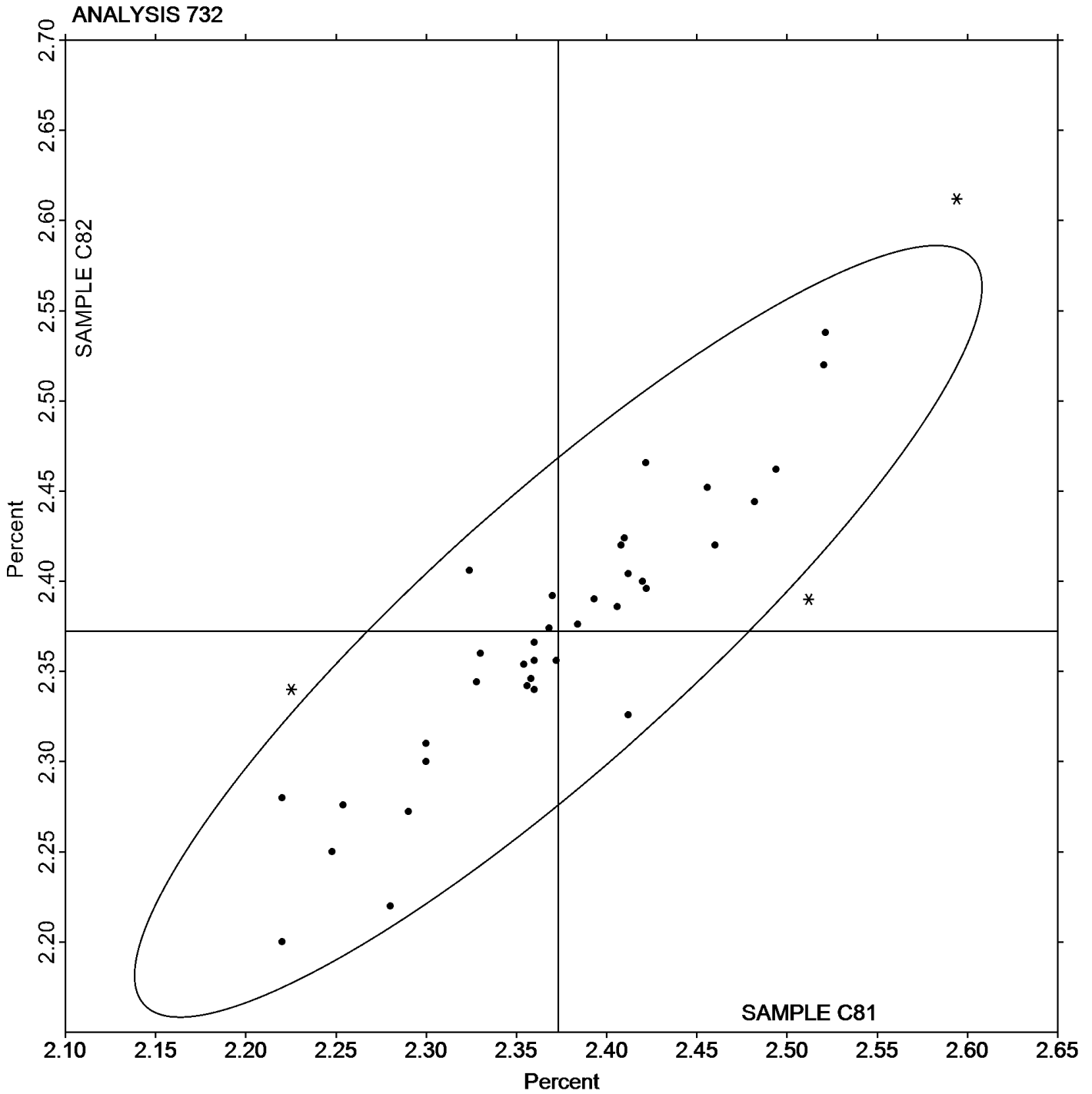
WebCode	Data Flag	Sample C81 Lab Mean	Diff from Grand Mean	CPV	Sample C82 Lab Mean	Diff from Grand Mean	CPV
3NEXTJ		2,322	-65	-0.75	2,311	-74	-0.83
4UWQF3		2,435	48	0.54	2,454	68	0.77
64XQ92		2,510	123	1.41	2,488	103	1.15
69UEP9		2,392	5	0.06	2,380	-5	-0.06
6Y6QU7		2,465	78	0.88	2,443	58	0.64
7M6HN9		2,384	-3	-0.04	2,409	24	0.26
7VMNMZ		2,347	-40	-0.45	2,397	11	0.13
8284WP		2,238	-149	-1.70	2,238	-147	-1.65
8YG6CY		2,417	30	0.34	2,431	46	0.51
9AVLHB		2,333	-54	-0.61	2,302	-84	-0.94
9JHD9A	*	2,233	-154	-1.76	2,302	-83	-0.93
AGC8BF		2,295	-92	-1.04	2,280	-106	-1.18
BWEDUA		2,326	-61	-0.70	2,323	-63	-0.70
C4VHV9		2,512	125	1.42	2,531	145	1.63
D2ND67		2,388	1	0.01	2,392	7	0.08
DAXVKJ		2,227	-160	-1.82	2,246	-139	-1.56
EPTCAG		2,428	41	0.47	2,424	39	0.43
ETP4D8		2,334	-53	-0.61	2,331	-54	-0.60
EVVF83		2,383	-4	-0.05	2,389	4	0.04
F2YW29		2,501	114	1.30	2,551	165	1.85
FVNQFB		2,386	-1	-0.01	2,393	7	0.08
GLHGD4	*	2,369	-18	-0.20	2,284	-101	-1.14
GQTAP3		2,466	79	0.90	2,432	46	0.52
HM9QY6		2,490	103	1.18	2,511	126	1.41
JAKYX2		2,530	143	1.63	2,536	151	1.69
JF7Y62		2,355	-32	-0.37	2,341	-44	-0.49
KH7T29		2,604	217	2.47	2,604	219	2.45
KNE77L		2,435	48	0.54	2,462	76	0.85
KQ46QC		2,356	-31	-0.36	2,383	-2	-0.02
KQGVMA		2,397	10	0.12	2,402	17	0.19
KW6Q9E		2,417	30	0.34	2,378	-7	-0.08
KZAC7C		2,356	-31	-0.36	2,300	-85	-0.96
MG6FU7		2,415	28	0.32	2,423	38	0.42
PHCMVQ		2,368	-19	-0.22	2,382	-3	-0.03
QZPRUM		2,498	111	1.26	2,513	128	1.43

| WebCode | Data Flag | Sample C81 | | | Sample C82 | | |
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
R2DHGD		2,318	-69	-0.79	2,302	-83	-0.93
R4QUKN		2,241	-146	-1.66	2,231	-154	-1.73
RTMY2J		2,404	17	0.20	2,430	45	0.50
TCQ2CT		2,394	7	0.07	2,354	-31	-0.35
TVNCCP		2,427	40	0.46	2,419	34	0.38
U7MHRA		2,497	110	1.25	2,465	80	0.89
UJRGZF		2,282	-105	-1.20	2,268	-117	-1.31
UQRQCZ		2,407	20	0.22	2,405	20	0.23
XBJD2J		2,328	-59	-0.67	2,314	-71	-0.79
YLXPU9	*	2,263	-124	-1.41	2,336	-49	-0.55
Z28X8G		2,242	-145	-1.65	2,237	-149	-1.66
ZM9U6B	*	2,476	89	1.02	2,381	-5	-0.05

Summary Statistics

	Sample C81	Sample C82
Grand Means	2,387.0 MPa	2,385.2 MPa
Stnd Dev Btwn Labs	87.7 MPa	89.3 MPa

Statistics based on 47 of 47 reporting participants

Sample C81: ABS & Sample C82: ABS

Grand Mean Sample C81: 2,387.05 MPa   Grand Mean Sample C82: 2,385.23 MPa
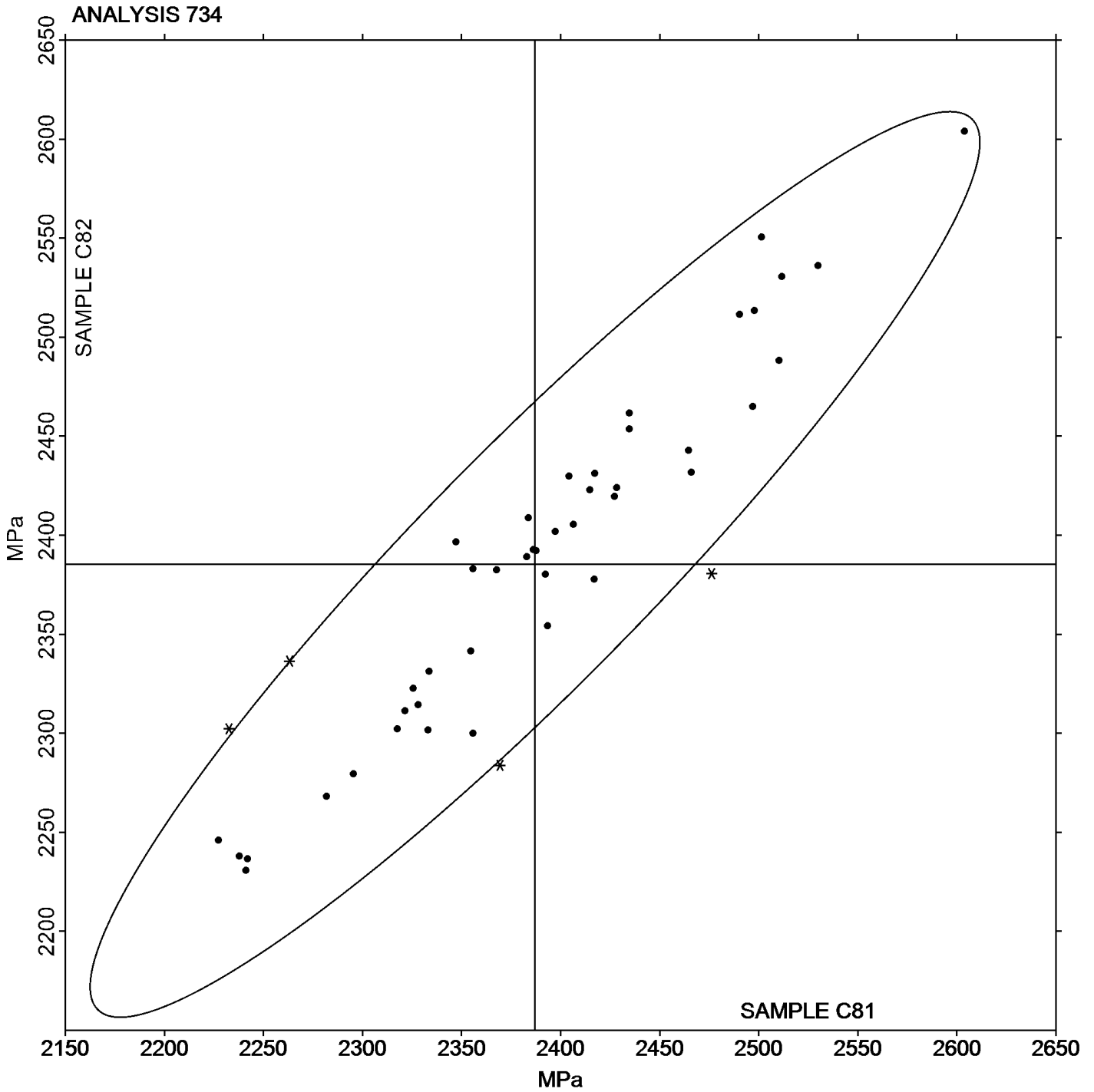
WebCode	Data Flag	Sample K81			Sample K82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3NEXTJ		2,541	86	0.94	2,536	78	0.95
4UWQF3		2,514	60	0.65	2,526	68	0.82
64XQ92		2,400	-54	-0.59	2,402	-57	-0.69
69UEP9		2,359	-95	-1.04	2,380	-79	-0.96
79TW9P		2,322	-132	-1.44	2,314	-144	-1.76
7M6HN9		2,421	-33	-0.36	2,413	-45	-0.55
7VMNMZ	*	2,218	-236	-2.58	2,250	-208	-2.53
8YG6CY		2,376	-78	-0.85	2,360	-98	-1.19
9AVLHB		2,371	-83	-0.90	2,428	-31	-0.37
AGC8BF		2,361	-93	-1.02	2,431	-27	-0.33
B4GKCX		2,557	103	1.12	2,546	88	1.07
BWEDUA		2,664	210	2.29	2,647	188	2.29
D2ND67		2,391	-63	-0.69	2,422	-36	-0.44
DAXVKJ		2,394	-61	-0.66	2,421	-37	-0.45
DFLAGD	M	2,310	-145	-1.58	No data reported for this sample		
ETP4D8		2,507	53	0.58	2,482	24	0.29
EVVF83		2,464	10	0.11	2,468	10	0.12
F2YW29		2,492	37	0.41	2,493	34	0.42
FN96EJ		2,454	0	0.00	2,460	1	0.02
GLHGD4		2,375	-79	-0.86	2,344	-114	-1.39
GQTAP3		2,471	16	0.18	2,463	4	0.05
HM9QY6		2,301	-153	-1.67	2,340	-118	-1.44
JAKYX2		2,490	36	0.39	2,510	52	0.63
JF7Y62		2,578	124	1.35	2,526	68	0.83
KH7T29		2,663	209	2.28	2,647	189	2.30
KNE77L		2,554	100	1.09	2,542	83	1.02
KQ46QC		2,462	8	0.09	2,517	59	0.72
KQGVMA		2,544	90	0.98	2,550	92	1.12
KW6Q9E		2,451	-4	-0.04	2,414	-44	-0.53
MG6FU7		2,492	37	0.41	2,507	48	0.59
R2DHGD	X	1,999	-455	-4.97	1,937	-521	-6.34
R4QUKN		2,422	-32	-0.35	2,420	-39	-0.47
R9XKMU		2,450	-4	-0.05	2,460	2	0.02
RTMY2J		2,352	-102	-1.12	2,410	-48	-0.59
TCQ2CT		2,522	68	0.74	2,519	61	0.74

WebCode	Data Flag	Sample K81			Sample K82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TVNCCP		2,428	-27	-0.29	2,431	-27	-0.33
U7MHRA		2,392	-62	-0.68	2,358	-100	-1.22
UJRGZF		2,451	-3	-0.03	2,454	-4	-0.05
UQRQCZ		2,493	39	0.42	2,503	44	0.54
XBJD2J		2,429	-25	-0.28	2,433	-25	-0.30
YLXPU9		2,519	65	0.71	2,498	40	0.49
Z28X8G		2,523	69	0.75	2,507	48	0.59

Summary Statistics

	Sample K81	Sample K82
Grand Means	2,454.2 MPa	2,458.3 MPa
Stnd Dev Btwn Labs	91.6 MPa	82.2 MPa

Statistics based on 40 of 42 reporting participants

Sample K81: ABS & Sample K82: ABS

Comments on Assigned Data Flags for Test #736

R2DHGD (X) - Data for both samples are low. Possible Systematic Error.

DFLAGD (M) - Participant did not submit data for sample K82.

Grand Mean Sample K81: 2,454.23 MPa   Grand Mean Sample K82: 2,458.34 MPa
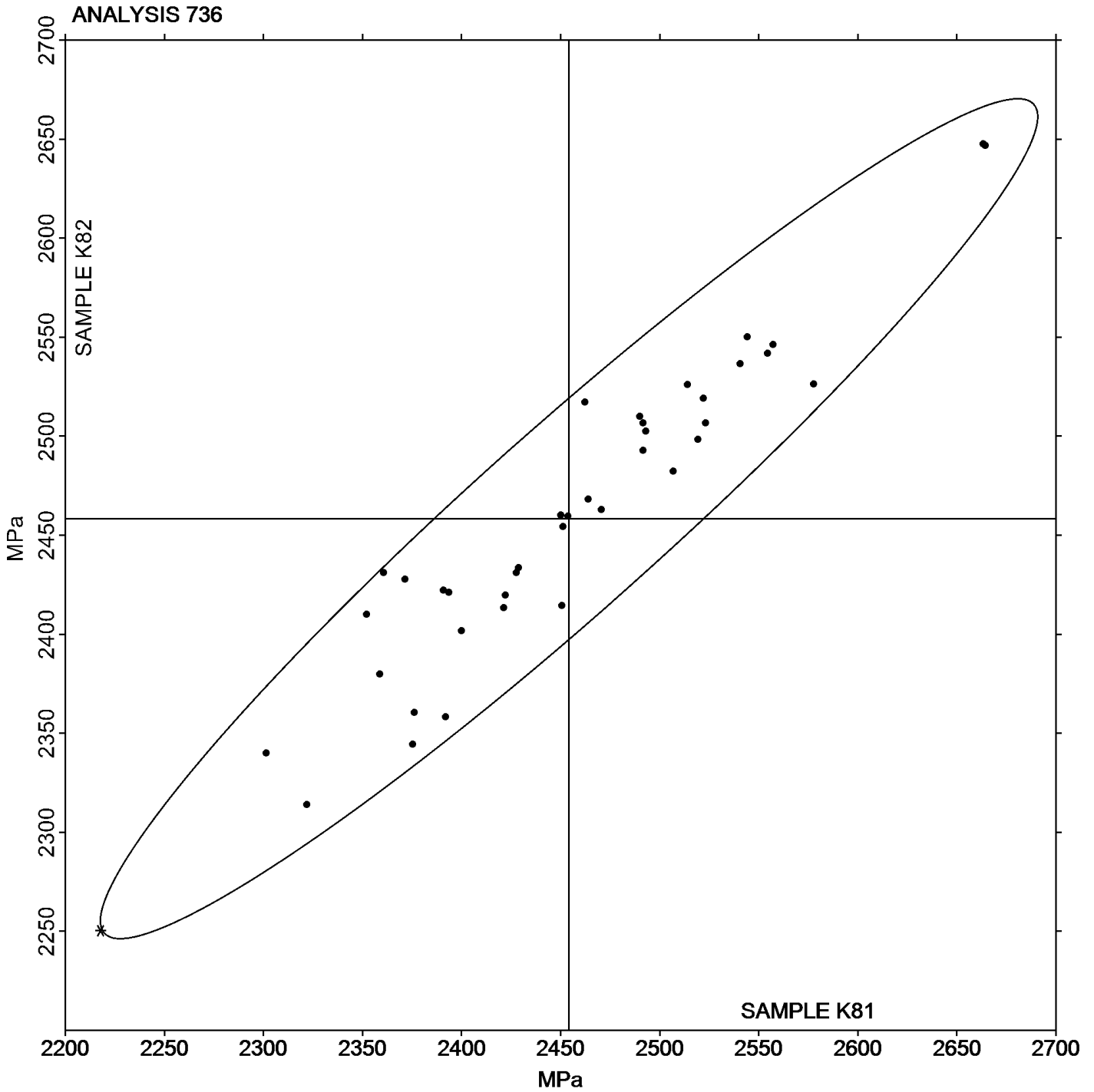
WebCode	Data Flag	Sample K81			Sample K82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3NEXTJ		72.13	2.84	1.60	72.18	2.75	1.46
4UWQF3		71.30	2.01	1.13	71.78	2.35	1.24
64XQ92		68.78	-0.51	-0.28	69.37	-0.06	-0.03
69UEP9		68.41	-0.88	-0.49	68.48	-0.95	-0.50
7M6HN9		67.39	-1.89	-1.06	67.62	-1.81	-0.96
8YG6CY		69.01	-0.28	-0.16	69.78	0.35	0.18
9AVLHB		68.16	-1.13	-0.63	68.56	-0.87	-0.46
BWEDUA		72.13	2.84	1.60	72.22	2.79	1.48
D2ND67		69.23	-0.06	-0.04	69.95	0.51	0.27
DAXVKJ		67.69	-1.59	-0.90	68.11	-1.33	-0.70
ETP4D8		69.19	-0.10	-0.06	68.72	-0.72	-0.38
F2YW29		69.24	-0.05	-0.03	69.35	-0.08	-0.04
FN96EJ		68.82	-0.47	-0.26	68.88	-0.55	-0.29
GLHGD4		67.73	-1.55	-0.87	66.99	-2.44	-1.29
GQTAP3		70.48	1.19	0.67	70.67	1.24	0.65
HM9QY6		70.43	1.15	0.64	71.30	1.86	0.99
JAKYX2		71.38	2.09	1.17	71.38	1.94	1.03
JF7Y62		68.59	-0.70	-0.39	68.32	-1.11	-0.59
KH7T29		71.53	2.24	1.26	71.54	2.11	1.12
KNE77L	*	64.56	-4.73	-2.65	65.16	-4.28	-2.26
KQ46QC		68.56	-0.73	-0.41	69.65	0.22	0.12
MG6FU7		71.13	1.85	1.04	71.31	1.88	1.00
R2DHGD		68.82	-0.47	-0.26	69.28	-0.15	-0.08
R4QUKN		67.76	-1.53	-0.86	67.28	-2.15	-1.14
TCQ2CT	*	65.28	-4.01	-2.25	64.18	-5.25	-2.78
TVNCCP		69.08	-0.21	-0.12	69.42	-0.02	-0.01
U7MHRA		70.23	0.94	0.53	69.79	0.36	0.19
UJRGZF		69.83	0.54	0.30	69.95	0.52	0.27
UQRQCZ		69.47	0.18	0.10	69.91	0.48	0.25
YLXPU9		70.35	1.06	0.60	70.33	0.90	0.48
Z28X8G		71.25	1.96	1.10	70.93	1.50	0.79

Summary Statistics

	Sample K81	Sample K82
Grand Means	69.288 MPa	69.431 MPa
Stnd Dev Btwn Labs	1.780 MPa	1.888 MPa

Statistics based on 31 of 31 reporting participants

Sample K81: ABS & Sample K82: ABS

Grand Mean Sample K81: 69.288 MPa   Grand Mean Sample K82: 69.431 MPa
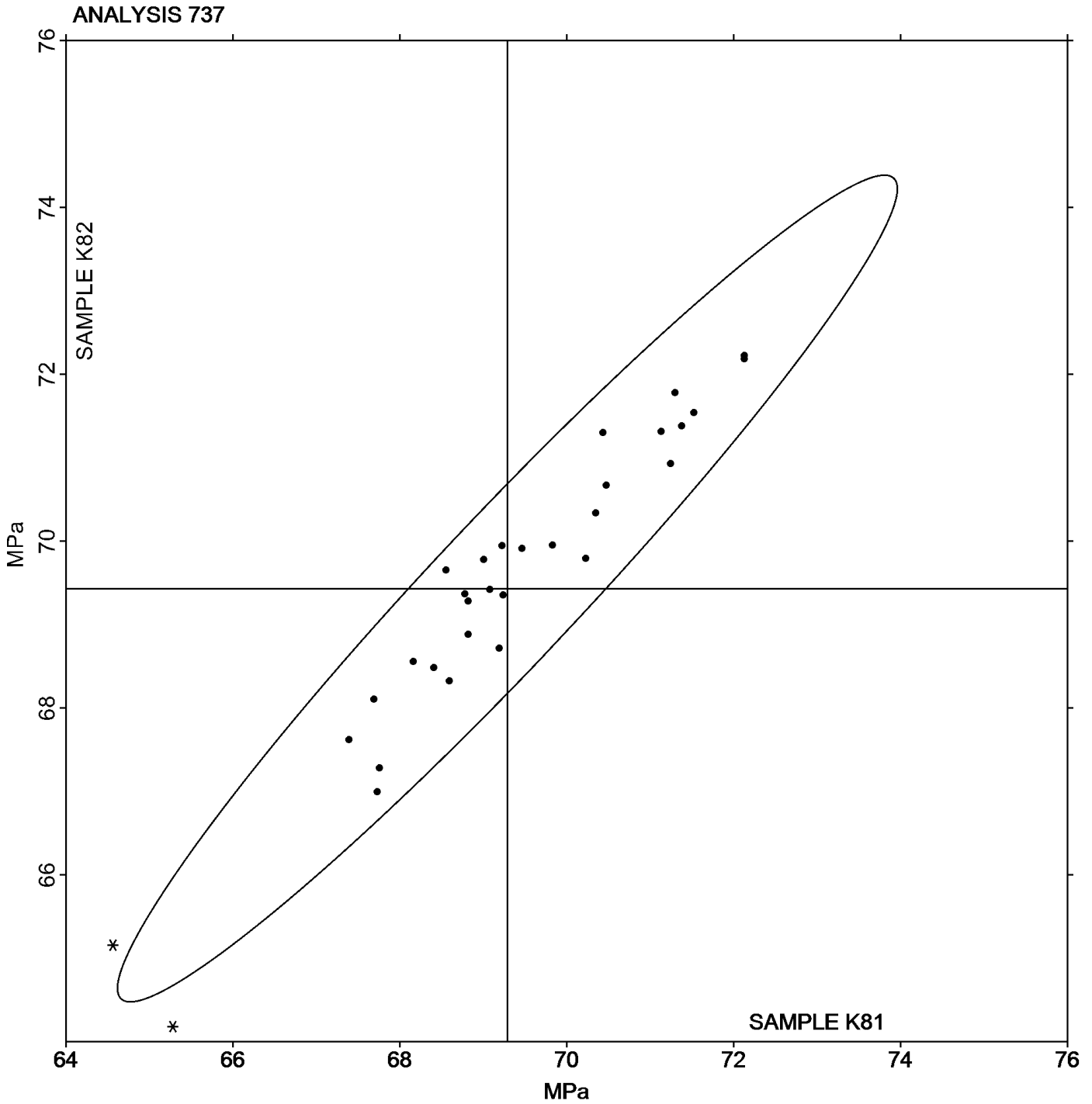
WebCode	Data Flag	Sample K81			Sample K82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
64XQ92		70.71	0.29	0.19	71.28	0.55	0.34
69UEP9		70.77	0.35	0.23	71.59	0.86	0.53
7VMNMZ		70.60	0.18	0.12	70.00	-0.73	-0.45
8YG6CY		70.99	0.57	0.37	71.79	1.06	0.65
9AVLHB		69.10	-1.32	-0.86	69.76	-0.97	-0.60
BWEDUA		73.37	2.95	1.92	73.58	2.85	1.76
D2ND67		69.86	-0.56	-0.36	70.89	0.15	0.09
DAXVKJ		68.76	-1.66	-1.08	69.22	-1.51	-0.93
DFLAGD	M	57.88	-12.54	-8.16	No data reported for this sample		
ETP4D8		70.81	0.39	0.25	70.30	-0.44	-0.27
EVVF83		70.82	0.40	0.26	70.70	-0.03	-0.02
F2YW29		70.73	0.31	0.20	71.09	0.36	0.22
FN96EJ		69.84	-0.58	-0.38	70.34	-0.39	-0.24
GQTAP3		71.55	1.13	0.73	71.80	1.07	0.66
HM9QY6		71.92	1.50	0.97	73.25	2.51	1.55
JAKYX2		72.65	2.23	1.45	72.66	1.93	1.19
JF7Y62		69.90	-0.52	-0.34	69.67	-1.07	-0.66
KQ46QC		70.49	0.07	0.04	71.40	0.66	0.41
KQGVMA		68.60	-1.82	-1.18	68.91	-1.82	-1.13
KW6Q9E		71.52	1.10	0.72	71.74	1.01	0.62
R2DHGD		70.18	-0.24	-0.16	70.96	0.23	0.14
R4QUKN		68.74	-1.68	-1.09	68.22	-2.51	-1.55
RTMY2J		69.90	-0.52	-0.34	69.80	-0.93	-0.58
TCQ2CT	*	65.64	-4.78	-3.11	66.06	-4.67	-2.89
U7MHRA		71.33	0.91	0.59	71.25	0.51	0.32
UJRGZF		71.75	1.33	0.86	72.10	1.37	0.85

Summary Statistics

	Sample K81	Sample K82
Grand Means	70.420 MPa	70.735 MPa
Stnd Dev Btwn Labs	1.536 MPa	1.619 MPa

Statistics based on 25 of 26 reporting participants

Sample K81: ABS & Sample K82: ABS

Comments on Assigned Data Flags for Test #738

DFLAGD (M) - Participant did not submit data for sample K82.

Grand Mean Sample K81: 70.420 MPa   Grand Mean Sample K82: 70.735 MPa
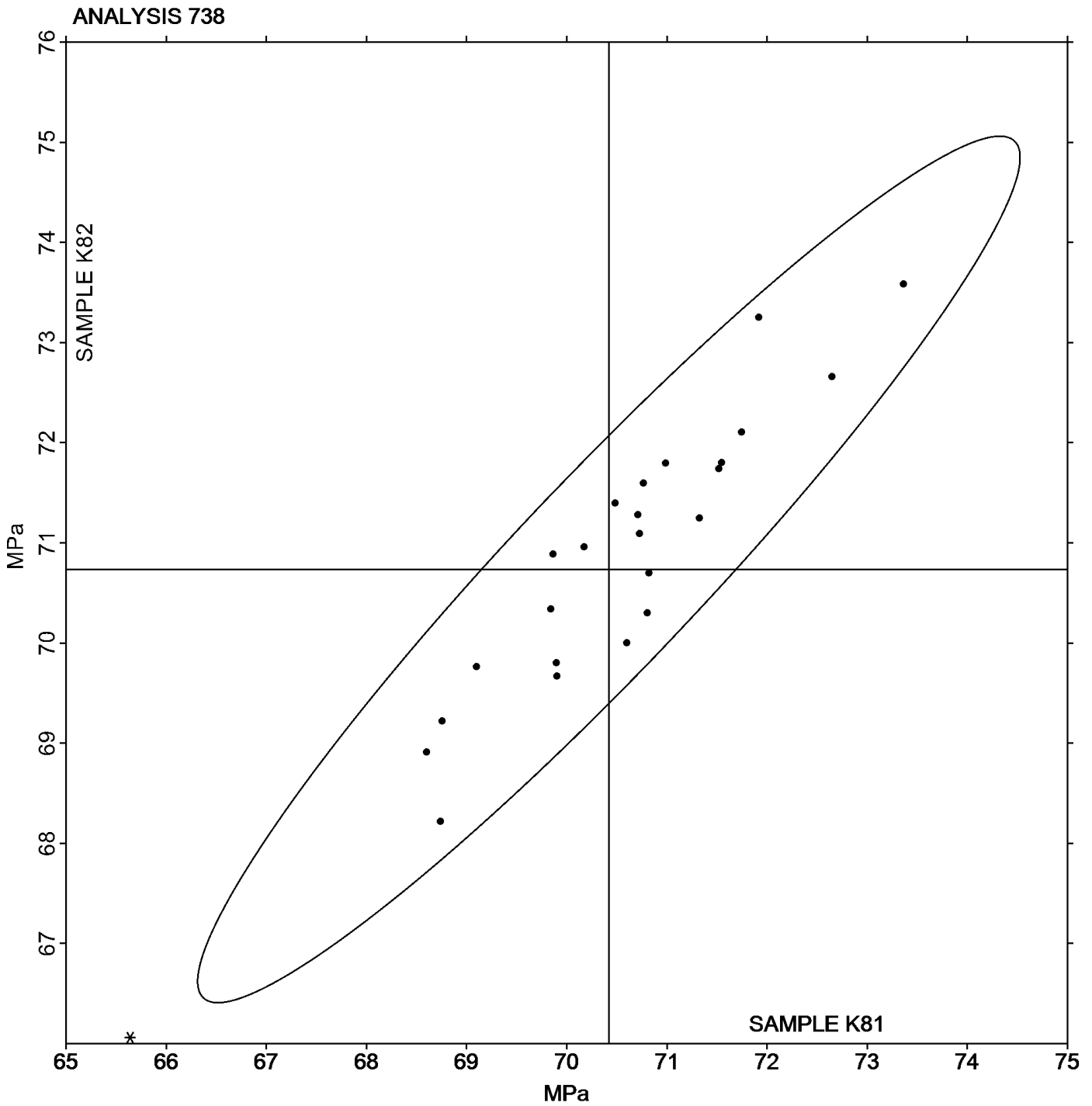
ANALYSIS 738

SAMPLE K82

MPa

SAMPLE K81

MPa

WebCode	Data Flag	Sample X81			Sample X82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2D37T6	X	11.02	4.44	22.84	11.18	4.43	20.03	CE
2HEAKR	X	11.05	4.46	22.97	11.21	4.46	20.15	TO
2UL37D		6.66	0.07	0.37	6.86	0.11	0.50	TO
324VW3		6.64	0.06	0.31	6.77	0.02	0.11	WZ
3BAWV9		6.73	0.15	0.77	6.87	0.13	0.57	TO
3JZKM6		6.65	0.07	0.34	6.83	0.08	0.36	XX
3NEXTJ		6.31	-0.27	-1.41	6.42	-0.32	-1.47	DY
3Q2JFE	*	7.17	0.59	3.02	7.41	0.66	2.98	RR
486QU8	*	6.61	0.03	0.14	7.04	0.29	1.31	DY
4JVHEC		6.90	0.32	1.63	7.00	0.26	1.15	TO
4UWQF3		6.68	0.09	0.47	6.86	0.11	0.50	XX
62PPYM		6.58	0.00	-0.02	6.70	-0.04	-0.20	TO
69UEP9		6.63	0.05	0.24	6.72	-0.03	-0.13	WZ
6LKXJD	X	11.45	4.87	25.05	11.40	4.66	21.03	TO
6MU3VG	X	5.22	-1.36	-7.01	5.39	-1.36	-6.12	CE
6QC9LP		6.35	-0.23	-1.19	6.40	-0.34	-1.56	TO
6V8633	*	6.55	-0.03	-0.17	6.40	-0.34	-1.56	TO
79TW9P	*	7.13	0.54	2.80	7.28	0.54	2.43	XX
7VMNMZ		6.62	0.03	0.16	6.69	-0.06	-0.27	TO
8284WP		6.65	0.07	0.34	6.80	0.06	0.25	WZ
8YG6CY		6.27	-0.31	-1.61	6.41	-0.33	-1.50	TO
9AVLHB		6.62	0.04	0.19	6.77	0.03	0.13	TY
9JHD9A		6.40	-0.18	-0.94	6.60	-0.14	-0.65	TO
AGC8BF	X	7.00	0.42	2.14	6.80	0.06	0.25	TO
AGM4N8	X	4.08	-2.50	-12.89	4.10	-2.64	-11.95	XX
AT4YVJ		6.30	-0.28	-1.46	6.50	-0.24	-1.11	TO
B4GKCX		6.42	-0.16	-0.84	6.66	-0.09	-0.41	TO
BG8GDV		6.40	-0.18	-0.94	6.60	-0.14	-0.65	TY
CGNQ9H		6.66	0.08	0.40	6.75	0.01	0.04	TO
CXAA2J		6.24	-0.34	-1.75	6.43	-0.32	-1.44	QT
D2ND67		6.60	0.02	0.09	6.76	0.01	0.05	GO
DAXVKJ		6.61	0.02	0.11	6.82	0.07	0.32	DY
DFLAGD		6.78	0.20	1.01	6.86	0.11	0.50	CE
EL8PKA		6.42	-0.16	-0.84	6.65	-0.09	-0.43	XX
ETP4D8		6.60	0.02	0.09	6.80	0.06	0.25	KA

WebCode	Data Flag	Sample X81			Sample X82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
ETTN6G		6.51	-0.07	-0.38	6.73	-0.01	-0.07	TO
F2YW29		6.70	0.12	0.60	6.90	0.16	0.70	AT
FGN2A3		6.57	-0.02	-0.09	6.60	-0.14	-0.64	DY
FVNQFB		6.49	-0.10	-0.51	6.65	-0.10	-0.45	DY
GCE2T6	*	6.67	0.09	0.45	6.55	-0.20	-0.90	DY
JAKYX2		6.53	-0.06	-0.30	6.70	-0.04	-0.20	GO
JF7Y62	X	12.00	5.42	27.88	12.25	5.51	24.87	WZ
JHNKEZ		6.88	0.29	1.51	7.13	0.38	1.73	TO
JPB42N		6.75	0.17	0.86	6.91	0.17	0.75	TO
JW79NX		6.66	0.07	0.37	6.84	0.09	0.41	TO
KGUWW4		6.55	-0.03	-0.17	6.90	0.16	0.70	TO
KH7T29	X	5.06	-1.52	-7.84	5.90	-0.84	-3.82	XX
KMJKDV		6.30	-0.28	-1.46	6.50	-0.24	-1.11	TO
KNE77L	X	5.65	-0.93	-4.80	5.86	-0.88	-4.00	DY
LT6WRN		6.60	0.02	0.09	6.51	-0.23	-1.04	CE
MG6FU7		6.75	0.17	0.86	6.79	0.05	0.20	DY
MN4BGW		6.26	-0.33	-1.69	6.32	-0.43	-1.94	TM
PDVA7W	X	5.54	-1.04	-5.38	5.80	-0.94	-4.25	DY
PVZNU6		6.55	-0.03	-0.17	6.75	0.01	0.02	CE
QGWJ66		6.65	0.07	0.34	6.80	0.06	0.25	TO
QQN2GR	X	11.11	4.53	23.30	10.69	3.95	17.82	TO
R2DHGD		6.40	-0.18	-0.94	6.60	-0.14	-0.65	TO
R3QRUK		6.64	0.05	0.27	6.74	-0.01	-0.04	XX
R4QUKN		6.49	-0.10	-0.51	6.63	-0.11	-0.52	DY
R9XKMU		6.69	0.11	0.54	6.75	0.00	0.01	XX
RAA6MR		6.49	-0.09	-0.47	6.66	-0.09	-0.40	TO
T2WJ3U		6.45	-0.13	-0.69	6.50	-0.24	-1.11	XX
T7KFFJ		6.32	-0.26	-1.36	6.48	-0.27	-1.22	TO
TCQ2CT	*	6.75	0.17	0.86	7.20	0.46	2.06	TO
U3M7VA		6.58	0.00	-0.02	6.93	0.18	0.81	TO
U7MHRA		6.65	0.07	0.34	6.95	0.21	0.93	WZ
UJRGZF		6.72	0.13	0.68	6.89	0.14	0.63	TO
UMRP7C		6.61	0.03	0.14	6.70	-0.04	-0.20	TO
UQRQCZ		6.50	-0.08	-0.43	6.80	0.06	0.25	DY
UWXMWZ		6.30	-0.28	-1.46	6.50	-0.24	-1.11	TO

WebCode	Data Flag	Sample X81			Sample X82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
V9PFZG		6.60	0.02	0.09	6.85	0.11	0.48	CE
VAFQPN		6.40	-0.18	-0.94	6.60	-0.14	-0.65	TO
YLXPU9		6.90	0.32	1.63	7.05	0.31	1.38	TO
YVLGHL		6.95	0.37	1.89	7.14	0.39	1.76	TO
ZM9U6B		6.35	-0.23	-1.20	6.55	-0.19	-0.88	KA

Summary Statistics

	Sample X81	Sample X82
Grand Means	6.583 grams/10 mins	6.745 grams/10 mins
Stnd Dev Btwn Labs	0.194 grams/10 mins	0.221 grams/10 mins

Statistics based on 64 of 75 reporting participants

Sample X81: HDPE & Sample X82: HDPE

Comments on Assigned Data Flags for Test #750

AGC8BF (X) - Inconsistent in testing between samples.

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

KNE77L (X) - Data for both samples are low. Possible Systematic Error.

2D37T6 (X) - Data for both samples are high.

QQN2GR (X) - Data for both samples are high. Inconsistent within the determinations of both samples.

JF7Y62 (X) - Data for both samples are high. Inconsistent within the determinations of sample X82.

AGM4N8 (X) - Data for both samples are low.

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

PDVA7W (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample X81.

6MU3VG (X) - Data for both samples are low. Possible Systematic Error.

KH7T29 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample X81 HDPE			Sample X82 HDPE			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Procedure A of ASTM D1238	6.547	0.170	-0.037	6.726	0.212	-0.018	34/40
Procedure B of ASTM D1238	6.693	0.262	0.109	6.821	0.304	0.077	12/13
Procedure A of ISO 1133	6.575	0.181	-0.009	6.719	0.189	-0.025	14/17
Procedure B of ISO 1133	6.668	0.067	0.084	6.830	0.078	0.085	2/3

Key to Instrument Codes Reported by Participants

AT	Atlas		CE	Ceast
DY	Dynisco		GO	Gottfert
KA	Kayeness		QT	Qualitest
RR	Ray Ran		TM	TMI
TO	Tinius Olsen		TY	Toyoseiki Seisakusho
WZ	Zwick		XX	Instrument manufacturer not specified by lab

Grand Mean Sample X81: 6.5834 grams/10 mins   Grand Mean Sample X82: 6.7448 grams/10 mins
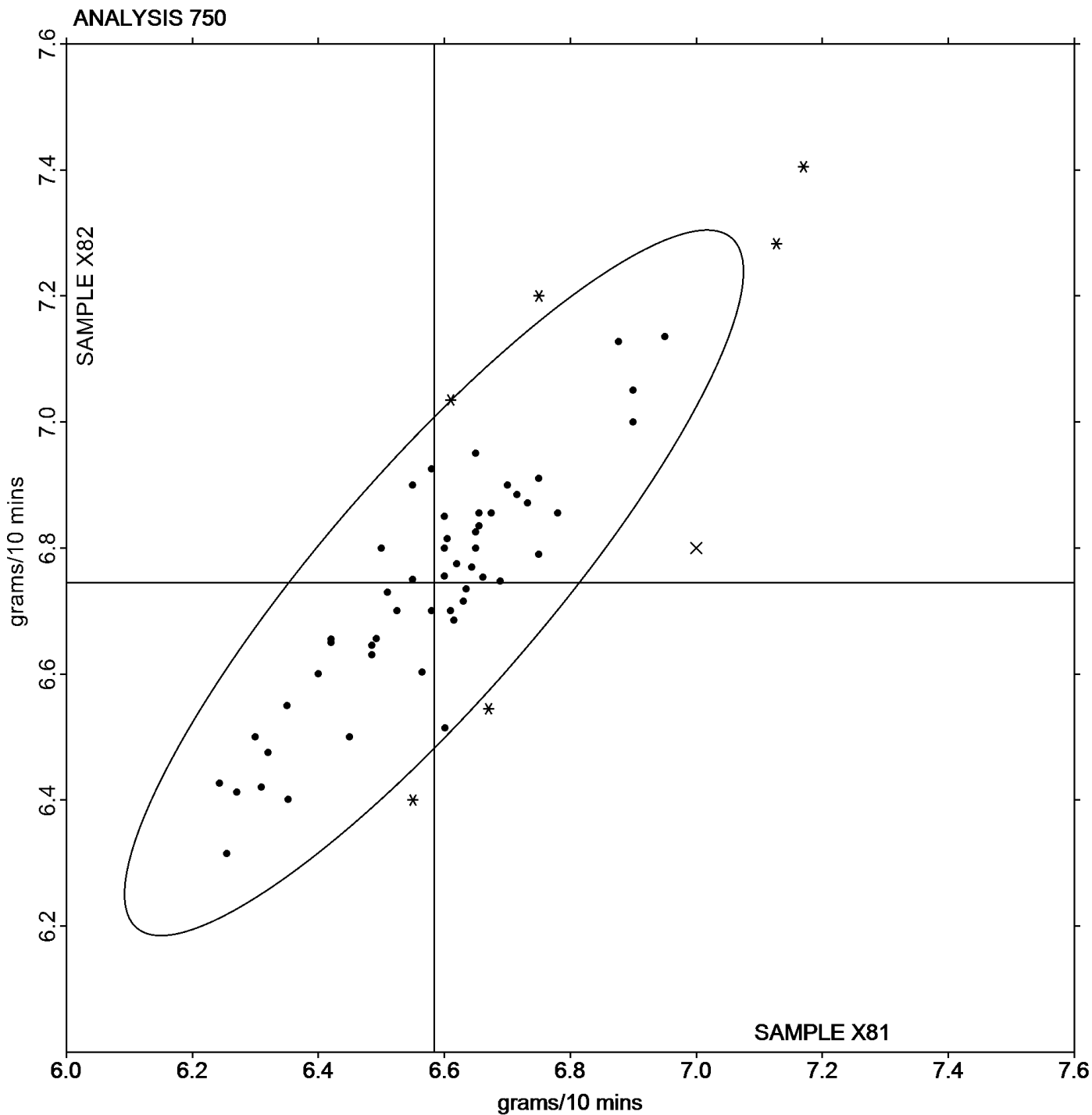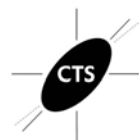
ANALYSIS 750

SAMPLE X82

grams/10 mins

SAMPLE X81

grams/10 mins

WebCode	Data Flag	Sample Y81			Sample Y82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3BAWV9		0.23667	0.00132	0.05	0.15733	-0.00006	0.00	CT
3F3R2M		0.23333	-0.00201	-0.07	0.15333	-0.00406	-0.19	MR
3NEXTJ		0.27480	0.03945	1.45	0.20026	0.04287	2.04	XX
3Q2JFE	X	0.07667	-0.15868	-5.82	0.02333	-0.13406	-6.38	MU
484TJC		0.24667	0.01132	0.41	0.16067	0.00327	0.16	MJ
486QU8		0.25480	0.01945	0.71	0.17370	0.01630	0.78	AZ
6CTQK9		0.24200	0.00665	0.24	0.13700	-0.02040	-0.97	SB
79PCGF	X	0.06667	-0.16868	-6.18	0.03000	-0.12740	-6.06	XX
7VMNMZ		0.22833	-0.00701	-0.26	0.15933	0.00194	0.09	AZ
8284WP		0.27000	0.03465	1.27	0.17400	0.01660	0.79	AZ
8PUTDF	*	0.27050	0.03515	1.29	0.11700	-0.04040	-1.92	SB
8YG6CY		0.21077	-0.02458	-0.90	0.13380	-0.02360	-1.12	AZ
96X3ER		0.23300	-0.00235	-0.09	0.16533	0.00794	0.38	CS
9ABRVF		0.22283	-0.01251	-0.46	0.13323	-0.02416	-1.15	MU
B4GKCX		0.25003	0.01469	0.54	0.16700	0.00960	0.46	AQ
D2ND67		0.25500	0.01965	0.72	0.16000	0.00260	0.12	XX
D8DQ7U		0.26123	0.02589	0.95	0.18137	0.02397	1.14	MK
DFLAGD		0.17667	-0.05868	-2.15	0.14667	-0.01073	-0.51	AZ
ETP4D8		0.22167	-0.01368	-0.50	0.14300	-0.01440	-0.69	MU
FGN2A3		0.16967	-0.06568	-2.41	0.12333	-0.03406	-1.62	AZ
FN96EJ		0.23500	-0.00035	-0.01	0.16067	0.00327	0.16	MK
FVNQFB		0.21600	-0.01935	-0.71	0.16300	0.00560	0.27	BA
GVJVAA		0.22710	-0.00825	-0.30	0.16480	0.00740	0.35	XX
K7BF4X		0.22530	-0.01005	-0.37	0.15687	-0.00053	-0.03	AZ
KC3PDV	*	0.28430	0.04895	1.79	0.21280	0.05540	2.64	CT
KQ46QC		0.24160	0.00625	0.23	0.16440	0.00700	0.33	CS
KQGVMA		0.24533	0.00999	0.37	0.13600	-0.02140	-1.02	CT
MG6FU7	*	0.16270	-0.07265	-2.66	0.16350	0.00610	0.29	XX
PNXM3Q		0.21317	-0.02218	-0.81	0.14040	-0.01700	-0.81	ML
QQN2GR		0.23833	0.00299	0.11	0.16143	0.00404	0.19	AZ
R2DHGD		0.25100	0.01565	0.57	0.16367	0.00627	0.30	MU
R3QRUK		0.25367	0.01832	0.67	0.15167	-0.00573	-0.27	CT
T2WJ3U		0.24233	0.00699	0.26	0.16600	0.00860	0.41	MK
TCQ2CT		0.22567	-0.00968	-0.35	0.10733	-0.05006	-2.38	AZ
TK8H7N		0.23433	-0.00101	-0.04	0.16700	0.00960	0.46	BA

WebCode	Data Flag	Sample Y81 Lab Mean	Diff from Grand Mean	CPV	Sample Y82 Lab Mean	Diff from Grand Mean	CPV	Instr Code
U7MHRA	**X**	0.23933	0.00399	0.15	0.23200	0.07460	3.55	MJ
UQRQCZ		0.26600	0.03065	1.12	0.18767	0.03027	1.44	AZ
VAFQPN		0.20000	-0.03535	-1.30	0.14167	-0.01573	-0.75	XX
YLXPU9		0.25600	0.02065	0.76	0.17000	0.01260	0.60	ML
Z3JMMM		0.23207	-0.00328	-0.12	0.15850	0.00110	0.05	AZ

Summary Statistics

	Sample Y81	Sample Y82
Grand Means	0.235348 Percent	0.157398 Percent
Stnd Dev Btwn Labs	0.027279 Percent	0.021017 Percent

Statistics based on 37 of 40 reporting participants

Sample Y81: ABS & Sample Y82: ABS

Comments on Assigned Data Flags for Test #755

U7MHRA (X) - Data for sample Y82 are high.

79PCGF (X) - Data for both samples are low. Possible Systematic Error.

3Q2JFE (X) - Data for both samples are low. Inconsistent within the determinations of sample Y81.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample Y81 ABS Group Mean	Btwn Lab STD	Diff from GM	Sample Y82 ABS Group Mean	Btwn Lab STD	Diff from GM	Labs Incl / Rpt
ASTM D6869	0.240067	0.018112	0.0047	0.159342	0.011695	0.0019	8/9
ISO 15512 Method B	0.233429	0.028175	-0.0019	0.159286	0.016057	0.0019	7/7
ASTM D6980	0.232110	0.028728	-0.0032	0.146680	0.022731	-0.0107	10/11
ASTM D7191	0.242559	0.024078	0.0072	0.169300	0.023896	0.0119	9/9

Key to Instrument Codes Reported by Participants

AQ	Aquastar	**AZ**	Arizona Instruments Moisture Analyzer
BA	Brabender Aquatrac	**CS**	Cosa Instruments
CT	Computrac Moisture Analyzer	**MJ**	Mitsubishi KF Analyzer Series
MK	Mitsubishi KF Analyzer CA	**ML**	Metrohm Coulometer
MR	Metrohm Coulineter 756 KF	**MU**	Mettler Toledo
SB	Sartorius Mark 3	**XX**	Instrument manufacturer not specified by lab

Grand Mean Sample Y81: 0.23535 Percent   Grand Mean Sample Y82: 0.15740 Percent
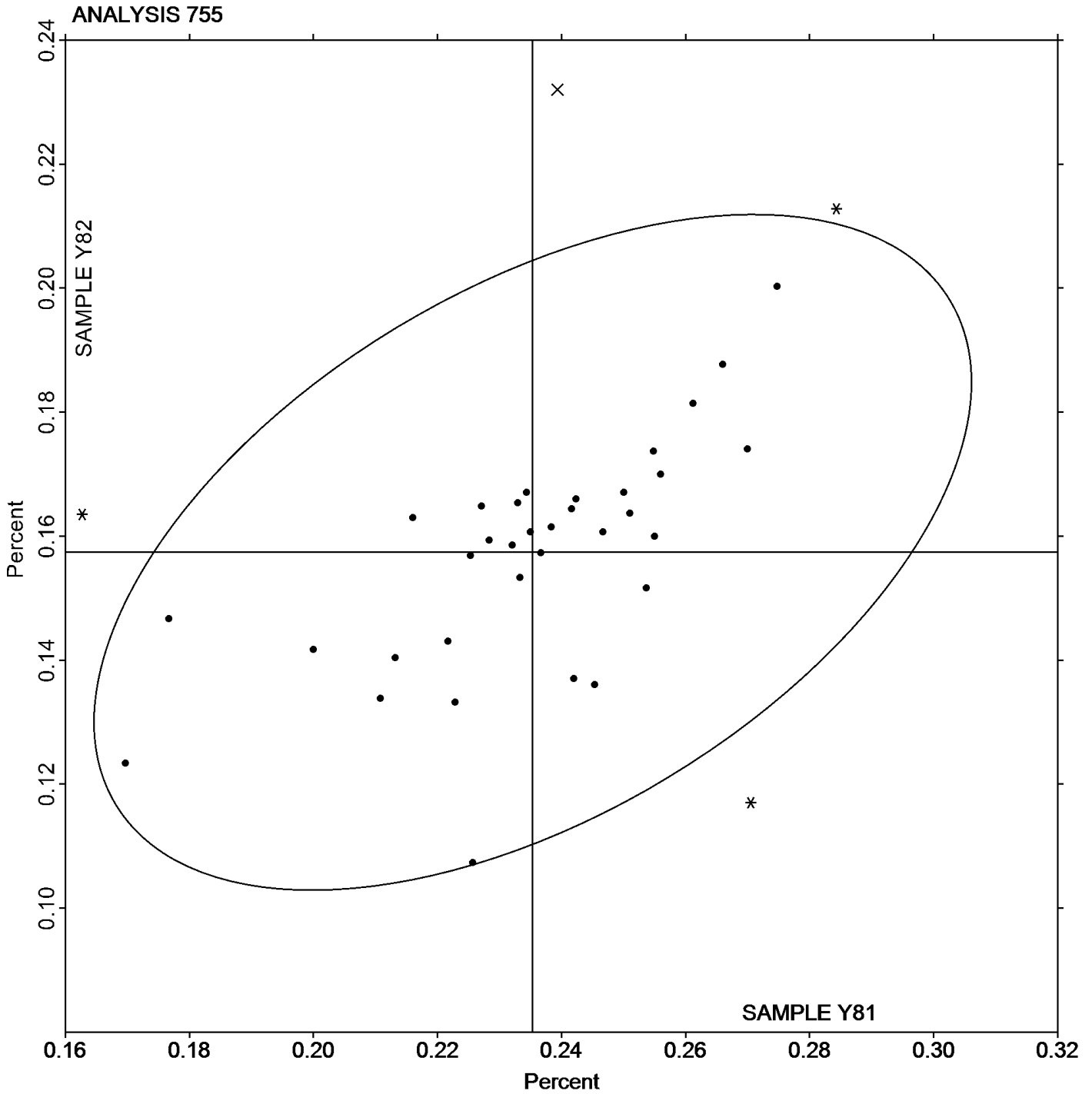
WebCode	Data Flag	Sample L81			Sample L82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3BAWV9		20.699	0.078	1.08	20.693	0.066	1.04
3JZKM6	*	20.700	0.079	1.09	20.500	-0.127	-2.02
3NEXTJ	X	20.310	-0.311	-4.32	20.280	-0.347	-5.51
4JVHEC		20.640	0.019	0.26	20.690	0.063	1.00
69UEP9		20.525	-0.096	-1.33	20.565	-0.062	-0.98
6CTQK9	X	20.550	-0.071	-0.99	20.975	0.348	5.53
6QC9LP		20.695	0.074	1.02	20.670	0.043	0.69
79TW9P		20.720	0.099	1.37	20.605	-0.022	-0.35
7VMNMZ		20.627	0.005	0.07	20.722	0.095	1.51
9ABRVF		20.579	-0.043	-0.59	20.575	-0.052	-0.82
9JHD9A	X	20.290	-0.331	-4.60	20.470	-0.157	-2.49
B4GKCX		20.594	-0.028	-0.38	20.530	-0.097	-1.55
BURY7Z		20.715	0.094	1.30	20.660	0.033	0.53
BWEDUA		20.655	0.034	0.47	20.660	0.033	0.53
CGNQ9H		20.691	0.069	0.96	20.709	0.082	1.30
D2ND67		20.675	0.054	0.75	20.700	0.073	1.16
D8DQ7U	X	19.890	-0.731	-10.15	20.455	-0.172	-2.73
DAXVKJ	X	19.615	-1.006	-13.96	19.740	-0.887	-14.09
DFLAGD		20.550	-0.071	-0.99	20.600	-0.027	-0.43
ETP4D8	*	20.455	-0.166	-2.31	20.500	-0.127	-2.02
FVNQFB		20.675	0.054	0.75	20.685	0.058	0.92
GLHGD4		20.595	-0.026	-0.36	20.570	-0.057	-0.90
JA4XY6		20.705	0.084	1.16	20.570	-0.057	-0.90
JAKYX2		20.545	-0.076	-1.06	20.650	0.023	0.37
KAE4RZ	X	20.240	-0.381	-5.29	20.150	-0.477	-7.58
KH7T29	X	20.210	-0.411	-5.71	20.710	0.083	1.32
KQGVMA		20.610	-0.011	-0.15	20.625	-0.002	-0.03
MG6FU7		20.635	0.014	0.19	20.625	-0.002	-0.03
PVZNU6		20.660	0.039	0.54	20.670	0.043	0.69
QGWJ66		20.730	0.109	1.51	20.610	-0.017	-0.27
R2DHGD		20.645	0.024	0.33	20.625	-0.002	-0.03
R3QRUK		20.661	0.040	0.55	20.688	0.061	0.97
R6XAPA		20.470	-0.151	-2.10	20.660	0.033	0.53
R9XKMU		20.530	-0.091	-1.26	20.530	-0.097	-1.54
TAM9KF		20.660	0.039	0.54	20.660	0.033	0.53

WebCode	Data Flag	Sample L81 Lab Mean	Sample L81 Diff from Grand Mean	Sample L81 CPV	Sample L82 Lab Mean	Sample L82 Diff from Grand Mean	Sample L82 CPV
TCQ2CT		20.680	0.058	0.81	20.716	0.089	1.42
U7MHRA		20.590	-0.031	-0.43	20.520	-0.107	-1.70
UJRGZF		20.580	-0.041	-0.57	20.630	0.003	0.05
UQRQCZ		20.530	-0.091	-1.26	20.645	0.018	0.29
VAFQPN		20.515	-0.106	-1.47	20.700	0.073	1.16
XBJD2J		20.610	-0.011	-0.15	20.580	-0.047	-0.74
YLXPU9		20.590	-0.031	-0.43	20.630	0.003	0.05
Z3JMMM	X	40.865	20.244	280.94	41.290	20.663	328.35
ZKYTXJ		20.628	0.006	0.09	20.601	-0.026	-0.42

Summary Statistics

	Sample L81	Sample L82
Grand Means	20.6211 Percent	20.6269 Percent
Stnd Dev Btwn Labs	0.0721 Percent	0.0629 Percent

Statistics based on 36 of 44 reporting participants

Sample L81: PP & Sample L82: PP

Comments on Assigned Data Flags for Test #757

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

D8DQ7U (X) - Data for both samples are low. Inconsistent within the determinations of both samples.

6CTQK9 (X) - Data for sample L82 are high.

KAE4RZ (X) - Data for both samples are low.

3NEXTJ (X) - Data for both samples are low. Inconsistent within the determinations of sample L82.

9JHD9A (X) - Data for sample L81 are low.

Z3JMMM (X) - Extreme data.

KH7T29 (X) - Data for sample L81 are low.

Grand Mean Sample L81: 20.621 Percent   Grand Mean Sample L82: 20.627 Percent
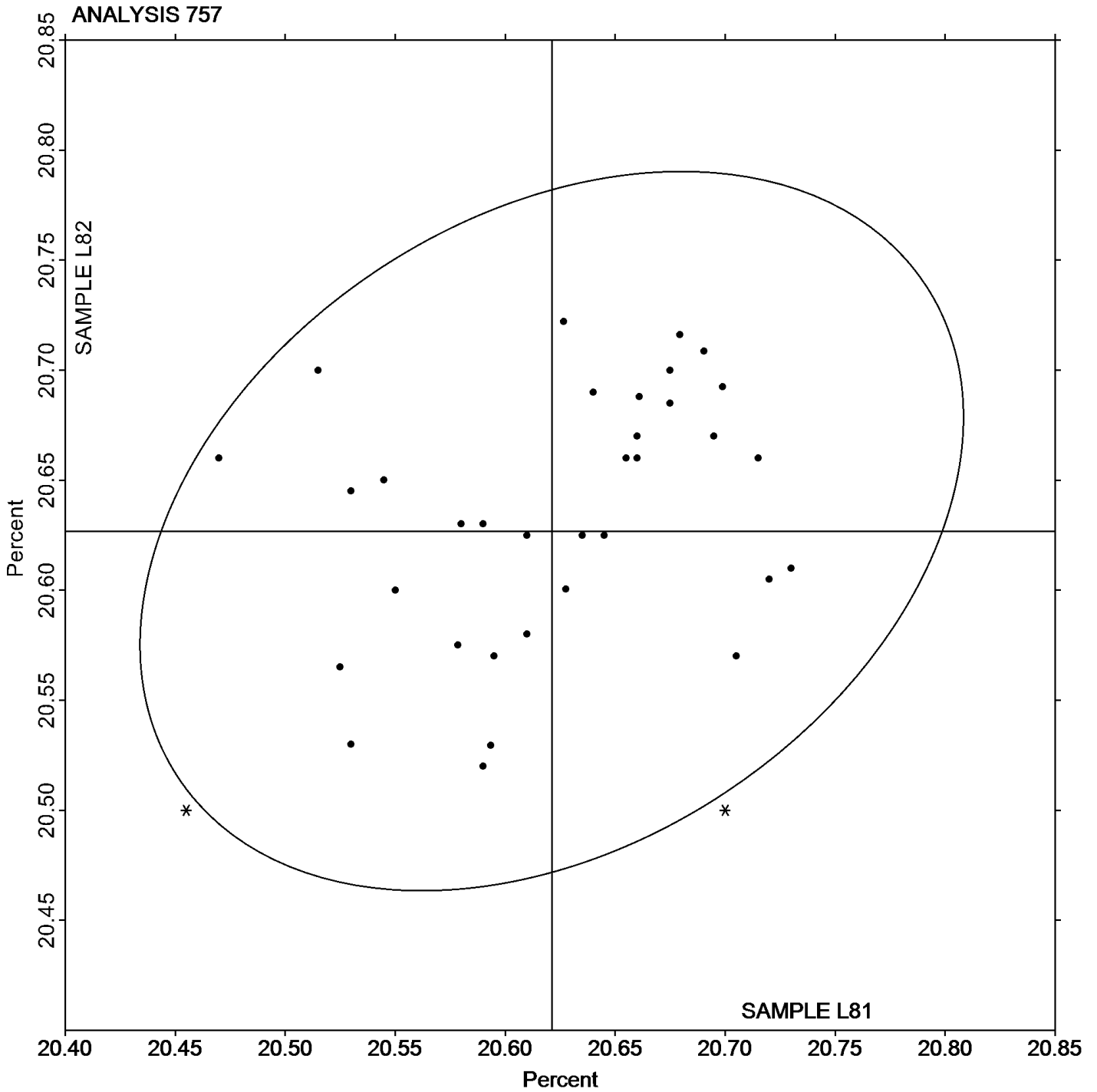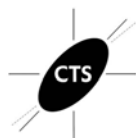
Plastics Interlaboratory Testing Program

Analysis 758
Thermogravimetric Analysis

WebCode	Data Flag	Sample A81 Lab Mean	Sample A81 Diff from Grand Mean	Sample A81 CPV	Sample A82 Lab Mean	Sample A82 Diff from Grand Mean	Sample A82 CPV	Instr Code
3NEXTJ		69.49	7.05	0.67	69.88	7.45	0.72	XX
69UEP9		63.62	1.18	0.11	65.28	2.85	0.28	TA
C4VHV9	*	30.48	-31.97	-3.06	30.53	-31.90	-3.09	TA
D2ND67		59.14	-3.31	-0.32	60.96	-1.47	-0.14	NZ
ETP4D8		60.74	-1.71	-0.16	61.04	-1.39	-0.13	TA
GCE2T6		62.38	-0.06	-0.01	60.51	-1.91	-0.19	TA
GQTAP3		69.40	6.95	0.67	68.91	6.48	0.63	XX
H4W4BB		70.77	8.32	0.80	69.09	6.66	0.65	TA
R4QUKN		61.42	-1.02	-0.10	61.39	-1.04	-0.10	TA
T42ZBX		61.63	-0.81	-0.08	62.21	-0.22	-0.02	TA
UQRQCZ		69.68	7.24	0.69	69.25	6.82	0.66	TA
UWXMWZ		63.58	1.14	0.11	62.70	0.27	0.03	TA
XMTZ4P		69.46	7.01	0.67	69.79	7.36	0.71	TA

Summary Statistics

	Sample A81	Sample A82
Grand Means	62.443 Percent	62.426 Percent
Stnd Dev Btwn Labs	10.444 Percent	10.316 Percent

Statistics based on 13 of 13 reporting participants

Sample A81: PBT & Sample A82: PBT

Results by Methodology (as reported by laboratory)

Test Methodology	Sample A81 PBT Group Mean	Sample A81 PBT Btwn Lab STD	Sample A81 PBT Diff from GM	Sample A82 PBT Group Mean	Sample A82 PBT Btwn Lab STD	Sample A82 PBT Diff from GM	Labs Incl / Rpt
ASTM D3850	65.089	4.050	2.65	64.735	4.011	2.31	6/6
ISO 11358	56.468	15.070	-5.98	56.868	15.106	-5.56	5/5

Key to Instrument Codes Reported by Participants

NZ	Netzsch Instruments	TA	TA Instruments
XX	Instrument manufacturer not specified by lab		

Grand Mean Sample A81: 62.443 Percent   Grand Mean Sample A82: 62.426 Percent
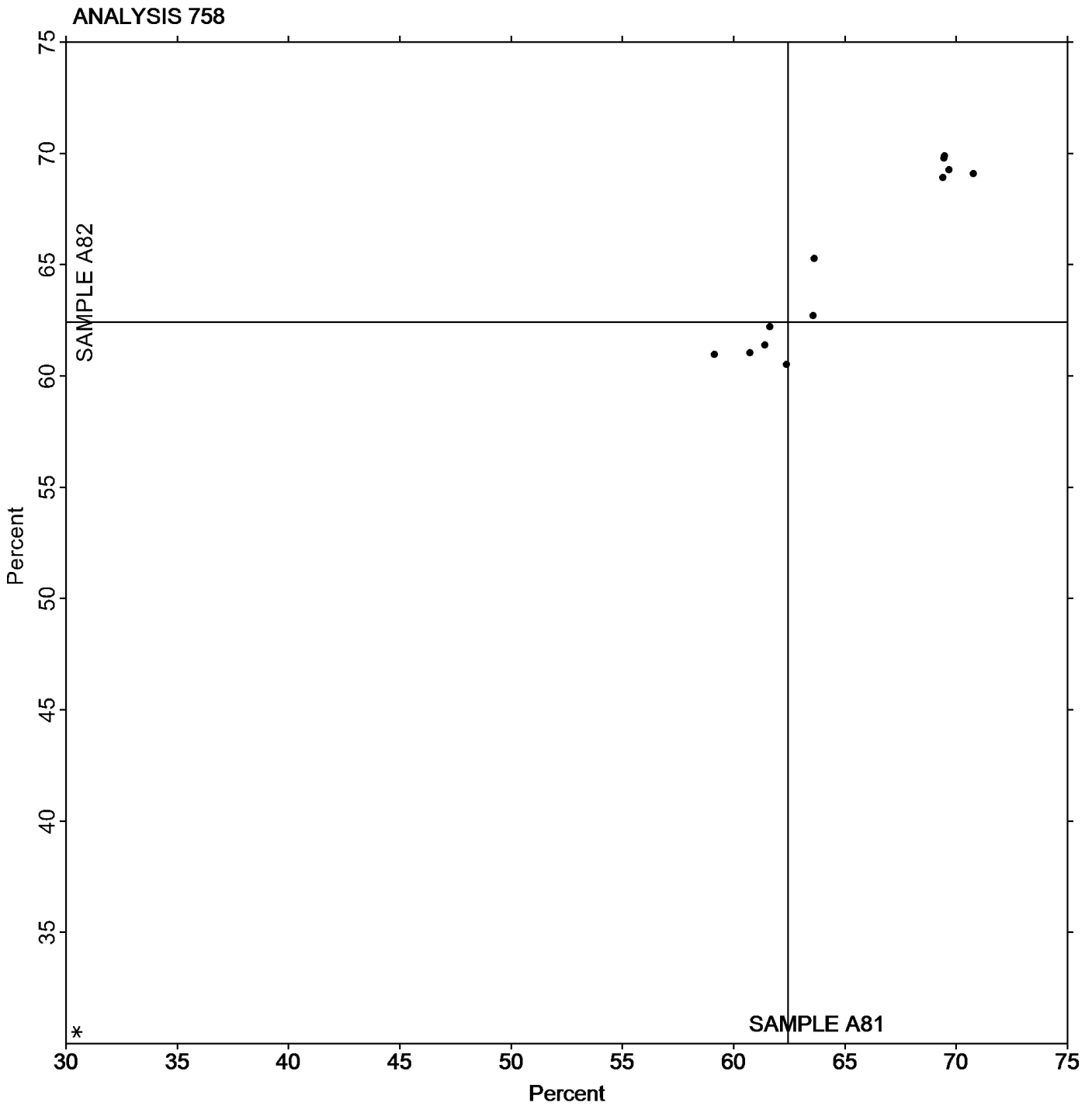
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample W81 Lab Mean	Sample W81 Diff from Grand Mean	Sample W81 CPV	Sample W82 Lab Mean	Sample W82 Diff from Grand Mean	Sample W82 CPV	Instr Code
3NEXTJ		119.80	0.02	0.01	118.71	-1.00	-0.32	XX
4UXJEB		123.73	3.95	1.26	123.97	4.25	1.34	MT
69UEP9		116.23	-3.56	-1.14	116.35	-3.36	-1.06	TA
79PCGF		118.50	-1.29	-0.41	117.91	-1.81	-0.57	XX
79TW9P		123.01	3.22	1.03	122.02	2.31	0.73	TA
9ABRVF		115.62	-4.17	-1.33	113.91	-5.80	-1.83	TA
AT4YVJ		120.70	0.91	0.29	121.43	1.72	0.54	TA
BG8GDV	*	129.58	9.79	3.13	129.16	9.45	2.98	SH
D2ND67		119.53	-0.25	-0.08	119.67	-0.05	-0.01	TA
DDGWGQ		122.77	2.98	0.95	122.32	2.61	0.82	TA
E26R8A		119.40	-0.39	-0.12	117.78	-1.94	-0.61	TA
GCE2T6		120.57	0.78	0.25	120.61	0.90	0.28	TA
GLHGD4		118.83	-0.95	-0.30	120.33	0.62	0.20	TA
GQTAP3		114.50	-5.29	-1.69	115.03	-4.68	-1.47	XX
JF7Y62		116.36	-3.43	-1.10	118.27	-1.44	-0.45	TA
KNE77L		122.35	2.57	0.82	121.78	2.07	0.65	TA
LH6792		122.39	2.60	0.83	123.07	3.36	1.06	TA
NA2ZQ6		118.24	-1.55	-0.49	117.42	-2.29	-0.72	TA
PCPT3Y		117.22	-2.57	-0.82	116.98	-2.73	-0.86	PE
QQN2GR		117.34	-2.45	-0.78	117.22	-2.49	-0.78	MT
R4QUKN		120.30	0.51	0.16	120.77	1.05	0.33	TA
R9XKMU		118.84	-0.95	-0.30	118.70	-1.01	-0.32	TA
T2WJ3U		119.67	-0.12	-0.04	121.57	1.85	0.58	TA
UQRQCZ		120.21	0.43	0.14	118.79	-0.92	-0.29	TA
UWXMWZ		122.17	2.38	0.76	122.43	2.72	0.86	TA
VAFQPN		116.07	-3.72	-1.19	116.13	-3.58	-1.13	NZ
XMTZ4P		120.30	0.51	0.16	119.89	0.18	0.06	TA

Summary Statistics

	Sample W81	Sample W82
Grand Means	119.786 Degrees Celsius	119.712 Degrees Celsius
Stnd Dev Btwn Labs	3.126 Degrees Celsius	3.173 Degrees Celsius

Statistics based on 27 of 27 reporting participants

Sample W81: PP & Sample W82: PP

Key to Instrument Codes Reported by Participants

MT	Mettler Toledo Instruments	**NZ**	Netzsch Instruments
PE	Perkins Elmer Instruments	**SH**	Shimadzu
TA	TA Instruments	**XX**	Instrument manufacturer not specified by lab

Grand Mean Sample W81: 119.79 Degrees Celsius   Grand Mean Sample W82: 119.71 Degrees Celsius
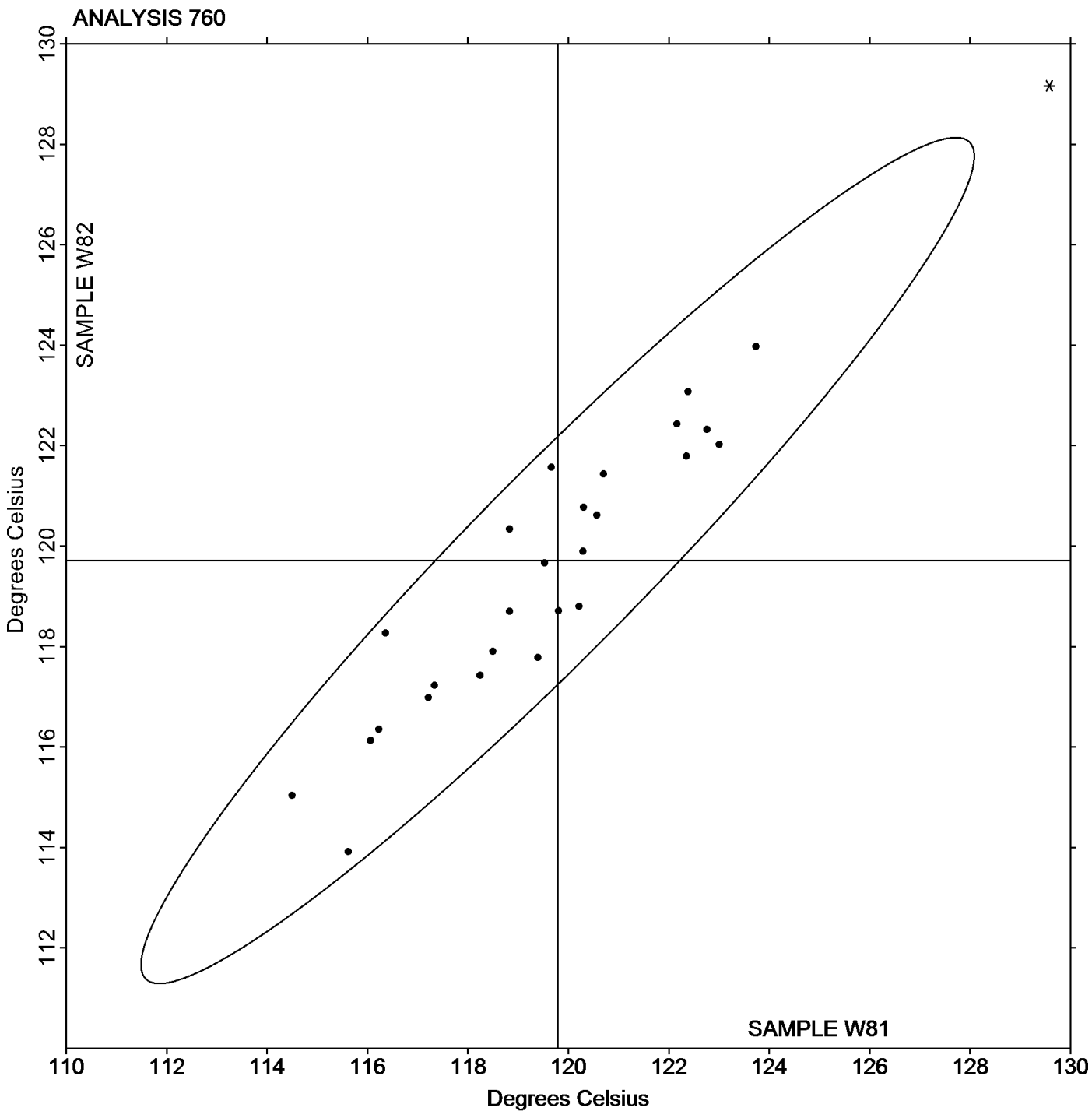
WebCode	Data Flag	Sample W81 Lab Mean	Diff from Grand Mean	CPV	Sample W82 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3NEXTJ		165.55	0.39	0.24	166.22	0.84	0.48	XX
4UXJEB	*	162.67	-2.50	-1.55	164.77	-0.61	-0.35	MT
69UEP9		165.24	0.08	0.05	164.57	-0.80	-0.46	TA
6QC9LP		167.58	2.41	1.50	166.79	1.41	0.80	TA
79PCGF	*	169.30	4.14	2.57	168.99	3.61	2.05	XX
79TW9P		165.57	0.40	0.25	166.70	1.33	0.75	XX
9ABRVF		162.52	-2.64	-1.64	162.60	-2.78	-1.58	TA
AT4YVJ		164.03	-1.13	-0.70	163.30	-2.08	-1.18	TA
BG8GDV		166.13	0.97	0.60	166.12	0.74	0.42	SH
CGNQ9H		164.85	-0.31	-0.19	165.57	0.19	0.11	TA
D2ND67		164.30	-0.87	-0.54	164.27	-1.11	-0.63	TA
DDGWGQ		166.55	1.39	0.86	166.33	0.96	0.54	TA
E26R8A		166.35	1.19	0.74	168.30	2.93	1.66	TA
GCE2T6		162.14	-3.03	-1.88	162.28	-3.10	-1.76	XX
GLHGD4		165.67	0.50	0.31	165.10	-0.28	-0.16	TA
GQTAP3		165.10	-0.07	-0.04	164.27	-1.11	-0.63	XX
GVJVAA		166.50	1.33	0.83	167.20	1.82	1.03	MT
JF7Y62		165.02	-0.15	-0.09	164.28	-1.10	-0.62	TA
KNE77L		164.50	-0.67	-0.41	164.03	-1.34	-0.76	TA
LH6792		165.09	-0.08	-0.05	165.10	-0.28	-0.16	TA
NA2ZQ6		166.32	1.15	0.71	167.75	2.37	1.34	TA
PCPT3Y		167.51	2.35	1.46	168.63	3.25	1.84	PE
QQN2GR		165.33	0.17	0.10	166.67	1.29	0.73	MT
R4QUKN		164.17	-1.00	-0.62	164.40	-0.98	-0.55	TA
R9XKMU		166.18	1.01	0.63	166.28	0.91	0.51	XX
RB44MB		165.24	0.07	0.05	165.43	0.05	0.03	TA
T2WJ3U		164.80	-0.37	-0.23	164.17	-1.21	-0.69	TA
TK8H7N		161.33	-3.83	-2.38	161.53	-3.84	-2.18	TA
UQRQCZ		165.26	0.10	0.06	165.17	-0.20	-0.12	TA
UWXMWZ		164.77	-0.40	-0.25	165.00	-0.38	-0.21	TA
VAFQPN		166.17	1.00	0.62	166.63	1.26	0.71	NZ
XMTZ4P		163.30	-1.87	-1.16	163.72	-1.66	-0.94	TA
YKNM7N		165.43	0.27	0.17	165.30	-0.08	-0.04	NZ

Summary Statistics

	Sample W81	Sample W82
Grand Means	165.166 Degrees Celsius	165.378 Degrees Celsius
Stnd Dev Btwn Labs	1.610 Degrees Celsius	1.764 Degrees Celsius

Statistics based on 33 of 33 reporting participants

Sample W81: PP & Sample W82: PP

Key to Instrument Codes Reported by Participants

MT	Mettler Toledo Instruments	NZ	Netzsch Instruments
PE	Perkins Elmer Instruments	SH	Shimadzu
TA	TA Instruments	XX	Instrument manufacturer not specified by lab

Grand Mean Sample W81: 165.17 Degrees Celsius   Grand Mean Sample W82: 165.38 Degrees Celsius
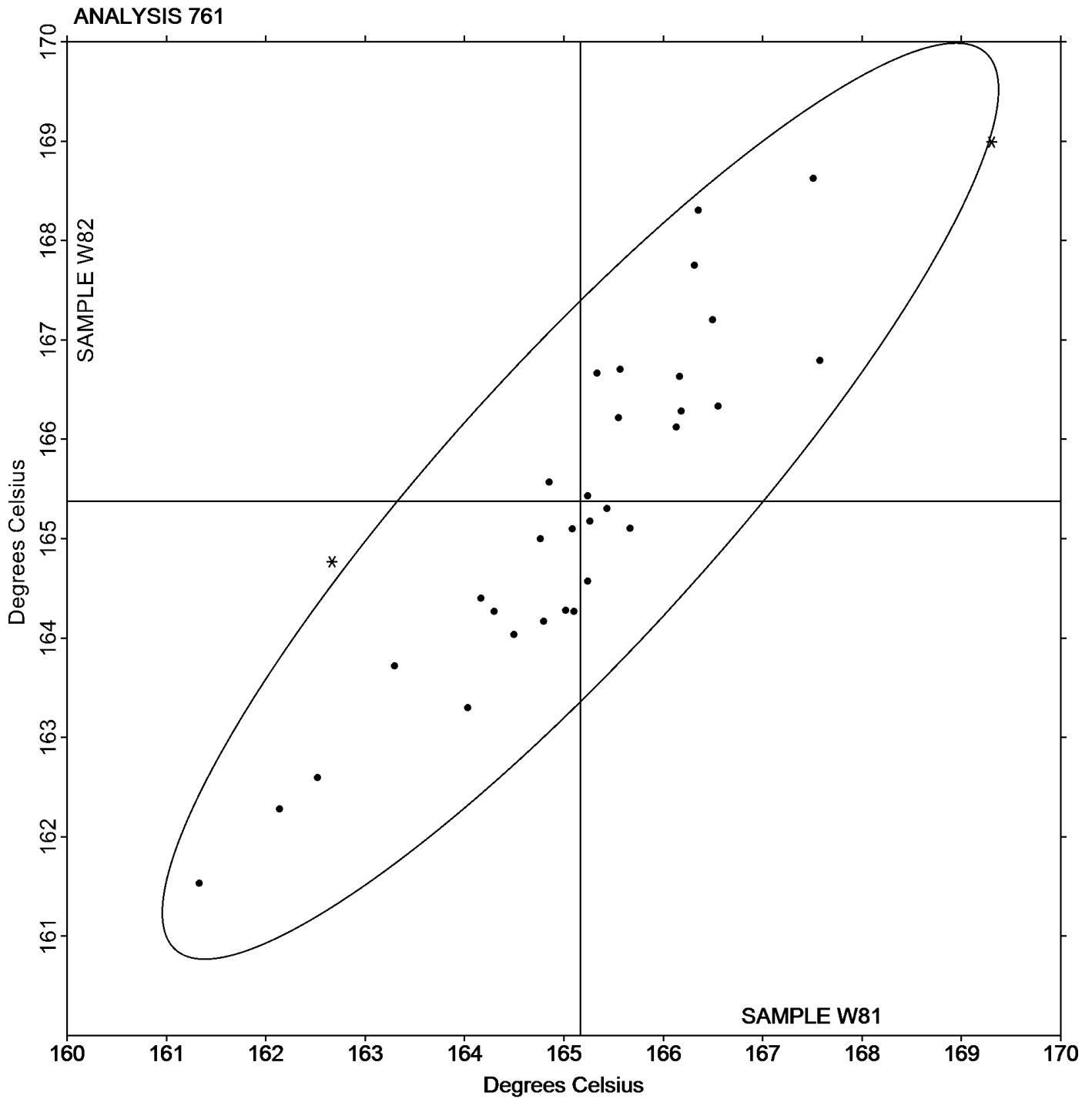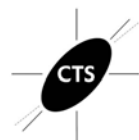
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SAMPLE W82

Degrees Celsius

SAMPLE W81

Degrees Celsius

WebCode	Data Flag	Sample W81 Lab Mean	Sample W81 Diff from Grand Mean	Sample W81 CPV	Sample W82 Lab Mean	Sample W82 Diff from Grand Mean	Sample W82 CPV	Instr Code
3NEXTJ		105.17	3.84	0.60	103.97	2.90	0.47	XX
4UXJEB		113.53	12.20	1.91	108.48	7.41	1.19	MT
69UEP9		103.80	2.47	0.39	103.93	2.87	0.46	TA
79PCGF		90.09	-11.24	-1.77	90.79	-10.27	-1.65	XX
9ABRVF		97.66	-3.67	-0.58	96.10	-4.97	-0.80	TA
AT4YVJ		101.63	0.30	0.05	102.67	1.60	0.26	TA
BG8GDV		91.99	-9.34	-1.47	86.69	-14.37	-2.31	SH
D2ND67		108.83	7.50	1.18	110.84	9.78	1.57	TA
DDGWGQ		101.70	0.37	0.06	103.10	2.03	0.33	TA
E26R8A		103.20	1.87	0.29	100.22	-0.85	-0.14	TA
GCE2T6		104.20	2.87	0.45	102.33	1.27	0.20	XX
GLHGD4		105.85	4.52	0.71	103.33	2.26	0.36	TA
GQTAP3		95.13	-6.20	-0.97	94.80	-6.27	-1.01	XX
JF7Y62		108.03	6.70	1.05	108.07	7.00	1.12	TA
KNE77L		93.10	-8.23	-1.29	94.63	-6.43	-1.03	TA
LH6792		100.56	-0.77	-0.12	102.77	1.71	0.27	TA
NA2ZQ6		103.87	2.54	0.40	101.77	0.70	0.11	TA
PCPT3Y		97.41	-3.92	-0.62	94.15	-6.92	-1.11	PE
R4QUKN		97.99	-3.34	-0.53	96.77	-4.29	-0.69	TA
T2WJ3U		100.90	-0.43	-0.07	104.80	3.73	0.60	TA
UQRQCZ		105.47	4.14	0.65	105.53	4.47	0.72	TA
UWXMWZ		110.34	9.01	1.41	110.68	9.61	1.54	TA
VAFQPN	*	90.18	-11.15	-1.75	98.11	-2.96	-0.48	NZ
XMTZ4P	X	135.40	34.07	5.35	135.55	34.48	5.54	XX

Summary Statistics

	Sample W81	Sample W82
Grand Means	101.332 Joules Per Gram	101.067 Joules Per Gram
Stnd Dev Btwn Labs	6.370 Joules Per Gram	6.225 Joules Per Gram

Statistics based on 23 of 24 reporting participants

Sample W81: PP & Sample W82: PP

Comments on Assigned Data Flags for Test #762

XMTZ4P (X) - Data for both samples are high. Possible Systematic Error.

Key to Instrument Codes Reported by Participants

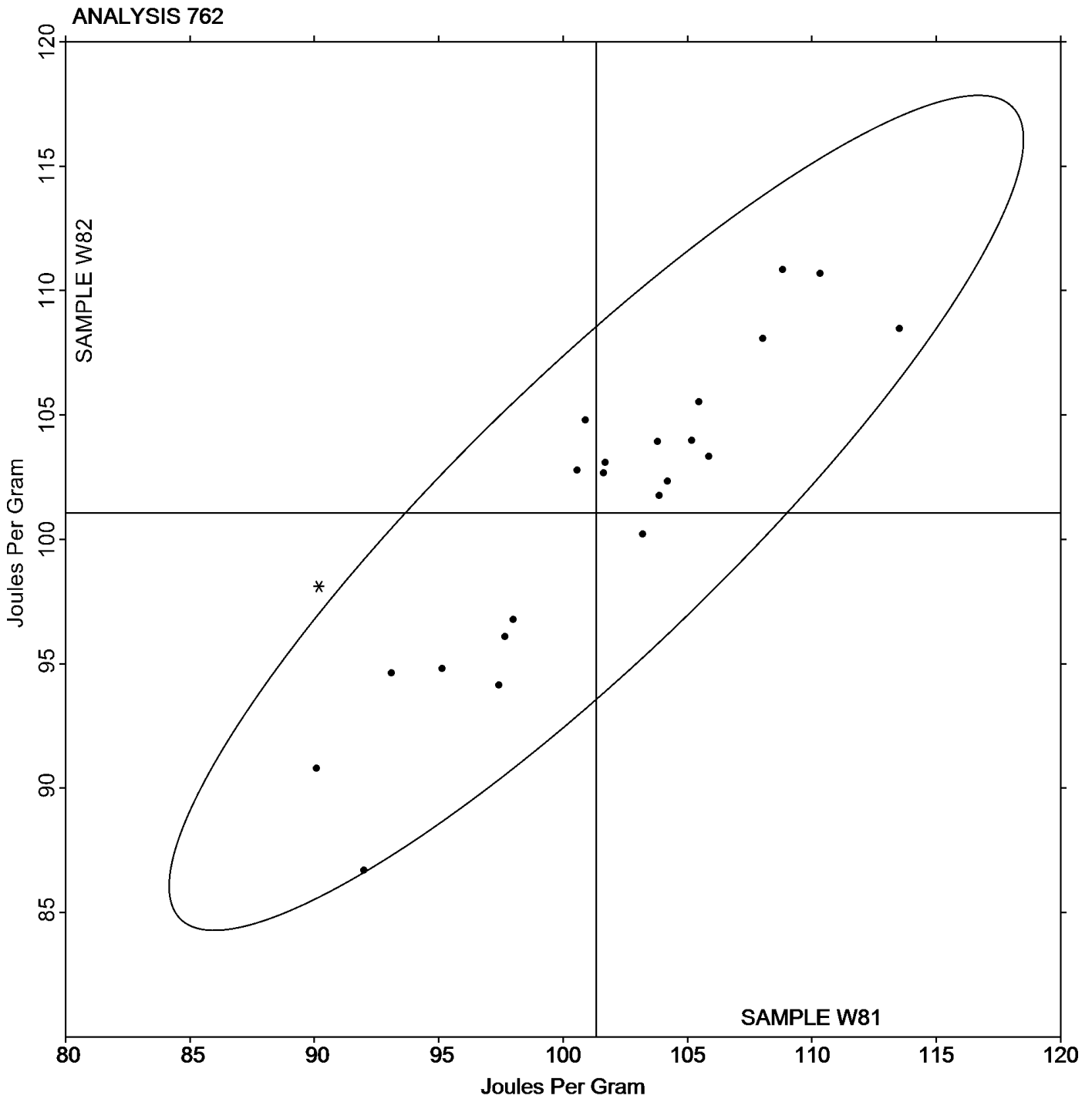|				
MT	Mettler Toledo Instruments		**NZ**	Netzsch Instruments
PE	Perkins Elmer Instruments		**SH**	Shimadzu
TA	TA Instruments		**XX**	Instrument manufacturer not specified by lab

Grand Mean Sample W81: 101.33 Joules Per Gram   Grand Mean Sample W82: 101.07 Joules Per Gram

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SAMPLE W82

Joules Per Gram

SAMPLE W81

Joules Per Gram

WebCode	Data Flag	Sample W81 Lab Mean	Sample W81 Diff from Grand Mean	Sample W81 CPV	Sample W82 Lab Mean	Sample W82 Diff from Grand Mean	Sample W82 CPV	Instr Code
3NEXTJ		105.63	9.42	0.98	105.30	8.58	0.79	XX
4UXJEB		99.22	3.01	0.31	105.10	8.38	0.77	MT
69UEP9		103.53	7.32	0.76	105.63	8.92	0.82	TA
6QC9LP		96.25	0.04	0.00	94.62	-2.09	-0.19	TA
79PCGF		73.66	-22.55	-2.35	73.91	-22.80	-2.11	XX
9ABRVF		80.46	-15.75	-1.64	74.74	-21.98	-2.03	TA
AT4YVJ		92.30	-3.91	-0.41	94.97	-1.75	-0.16	TA
BG8GDV		86.69	-9.52	-0.99	86.28	-10.44	-0.96	SH
D2ND67		106.94	10.73	1.12	108.53	11.81	1.09	TA
DDGWGQ		90.09	-6.12	-0.64	92.22	-4.50	-0.42	TA
E26R8A		101.96	5.75	0.60	97.75	1.03	0.10	TA
GCE2T6		97.55	1.34	0.14	102.14	5.42	0.50	XX
GLHGD4		103.08	6.87	0.72	106.64	9.92	0.92	TA
GQTAP3		91.76	-4.45	-0.46	95.87	-0.85	-0.08	XX
GVJVAA		97.00	0.79	0.08	98.00	1.28	0.12	XX
JF7Y62		105.33	9.12	0.95	107.23	10.52	0.97	TA
KNE77L		72.93	-23.28	-2.43	69.17	-27.55	-2.55	TA
LH6792		102.60	6.39	0.67	103.83	7.11	0.66	TA
NA2ZQ6		99.93	3.72	0.39	98.78	2.07	0.19	TA
PCPT3Y		96.83	0.62	0.06	92.78	-3.93	-0.36	PE
R4QUKN		94.84	-1.37	-0.14	94.34	-2.38	-0.22	TA
RB44MB	X	100.10	3.89	0.41	68.38	-28.33	-2.62	TA
T2WJ3U		102.73	6.52	0.68	105.63	8.92	0.82	TA
UQRQCZ		100.07	3.86	0.40	99.17	2.45	0.23	TA
UWXMWZ		112.44	16.23	1.69	112.44	15.73	1.45	TA
VAFQPN		91.28	-4.93	-0.51	96.90	0.18	0.02	NZ
XMTZ4P	X	152.77	56.56	5.90	151.77	55.05	5.09	XX
YKNM7N		96.39	0.18	0.02	92.63	-4.09	-0.38	NZ

Summary Statistics

	Sample W81	Sample W82
Grand Means	96.211 Joules Per Gram	96.715 Joules Per Gram
Stnd Dev Btwn Labs	9.584 Joules Per Gram	10.824 Joules Per Gram

Statistics based on 26 of 28 reporting participants

Sample W81: PP & Sample W82: PP

Comments on Assigned Data Flags for Test #763

RB44MB (X) - Data for sample W82 are low. Inconsistent within the determinations of sample W81.

XMTZ4P (X) - Data for both samples are high. Possible Systematic Error.

Key to Instrument Codes Reported by Participants		

MT	Mettler Toledo Instruments	**NZ**	Netzsch Instruments
PE	Perkins Elmer Instruments	**SH**	Shimadzu
TA	TA Instruments	**XX**	Instrument manufacturer not specified by lab

Grand Mean Sample W81: 96.211 Joules Per Gram   **Grand Mean Sample W82: 96.715 Joules Per Gram**
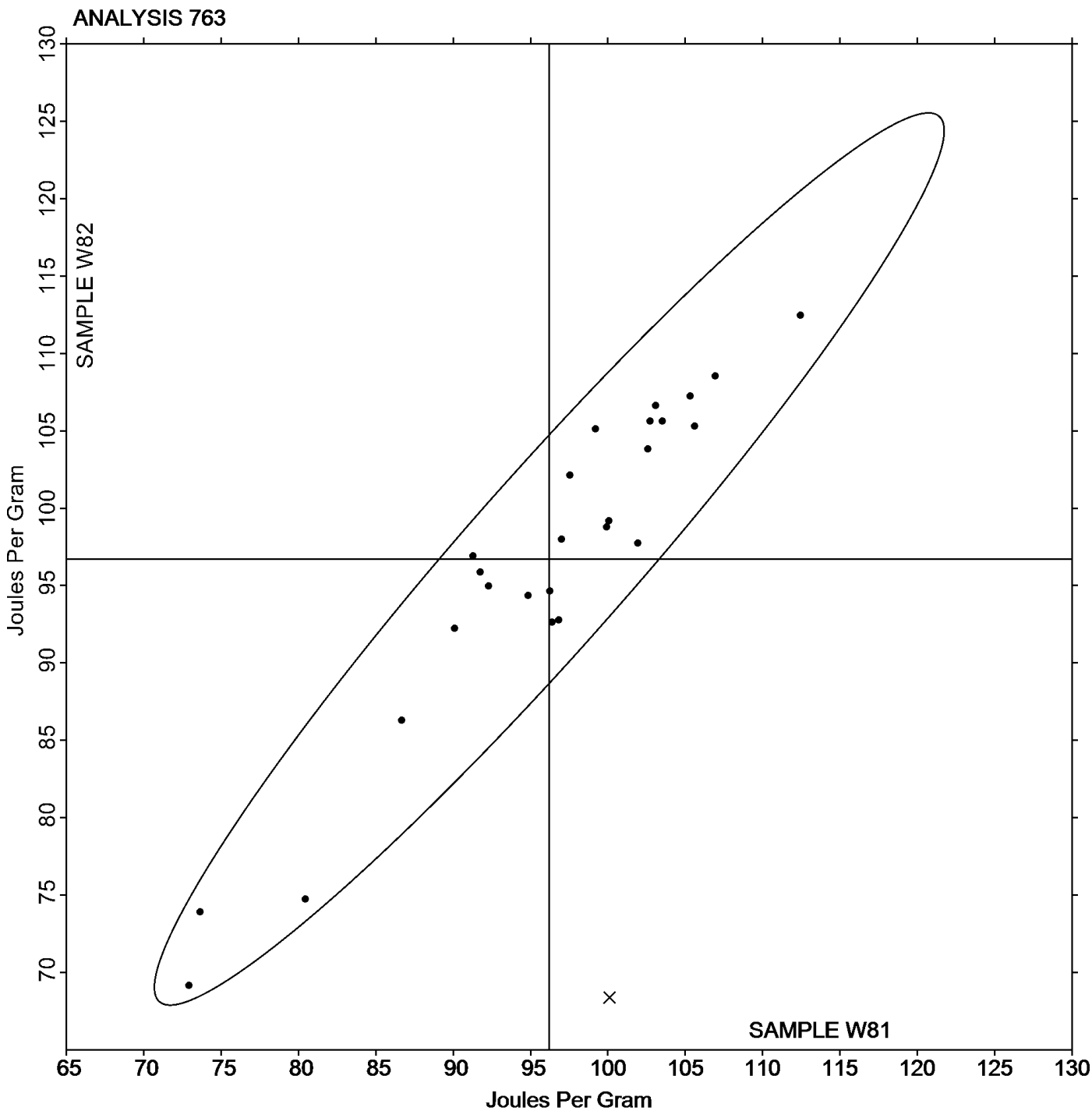
WebCode	Data Flag	Sample V81			Sample V82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3NEXTJ		107.10	1.81	0.76	110.33	1.24	0.45	XX
4UXJEB		102.30	-2.99	-1.25	106.90	-2.20	-0.80	MT
69UEP9		107.36	2.08	0.87	112.69	3.60	1.30	TA
6QC9LP		106.45	1.17	0.49	110.98	1.89	0.68	TA
79PCGF		100.30	-4.99	-2.08	107.37	-1.73	-0.63	XX
9ABRVF		99.83	-5.46	-2.27	104.83	-4.27	-1.55	TA
AT4YVJ		104.67	-0.62	-0.26	107.00	-2.10	-0.76	TA
BG8GDV		101.57	-3.71	-1.55	102.69	-6.40	-2.32	SH
D2ND67		104.47	-0.82	-0.34	105.73	-3.36	-1.22	TA
E26R8A		108.04	2.75	1.15	109.83	0.74	0.27	TA
GCE2T6		106.48	1.19	0.50	110.47	1.37	0.50	XX
GLHGD4		106.13	0.85	0.35	112.83	3.74	1.35	TA
GQTAP3		106.52	1.24	0.51	110.37	1.27	0.46	XX
JF7Y62		106.46	1.17	0.49	110.39	1.29	0.47	TA
KNE77L		108.10	2.81	1.17	112.08	2.98	1.08	XX
NA2ZQ6		107.90	2.61	1.09	110.55	1.46	0.53	TA
PCPT3Y		107.66	2.38	0.99	109.60	0.50	0.18	PE
QQN2GR		108.12	2.84	1.18	109.99	0.90	0.32	MT
R4QUKN		105.90	0.61	0.26	113.50	4.40	1.59	TA
T2WJ3U		104.83	-0.45	-0.19	106.03	-3.06	-1.11	TA
UQRQCZ		104.91	-0.38	-0.16	107.71	-1.39	-0.50	TA
UWXMWZ		104.90	-0.39	-0.16	109.33	0.24	0.09	TA
VAFQPN		104.13	-1.15	-0.48	111.20	2.10	0.76	NZ
XMTZ4P		102.55	-2.74	-1.14	105.25	-3.85	-1.39	TA
YKNM7N		105.50	0.21	0.09	109.77	0.67	0.24	NZ

Summary Statistics

	Sample V81	Sample V82
Grand Means	105.288 Degrees Celsius	109.098 Degrees Celsius
Stnd Dev Btwn Labs	2.399 Degrees Celsius	2.761 Degrees Celsius

Statistics based on 25 of 25 reporting participants

Sample V81: ABS & Sample V82: ABS

Key to Instrument Codes Reported by Participants

MT	Mettler Toledo Instruments	**NZ**	Netzsch Instruments
PE	Perkins Elmer Instruments	**SH**	Shimadzu
TA	TA Instruments	**XX**	Instrument manufacturer not specified by lab

Grand Mean Sample V81: 105.29 Degrees Celsius   Grand Mean Sample V82: 109.10 Degrees Celsius
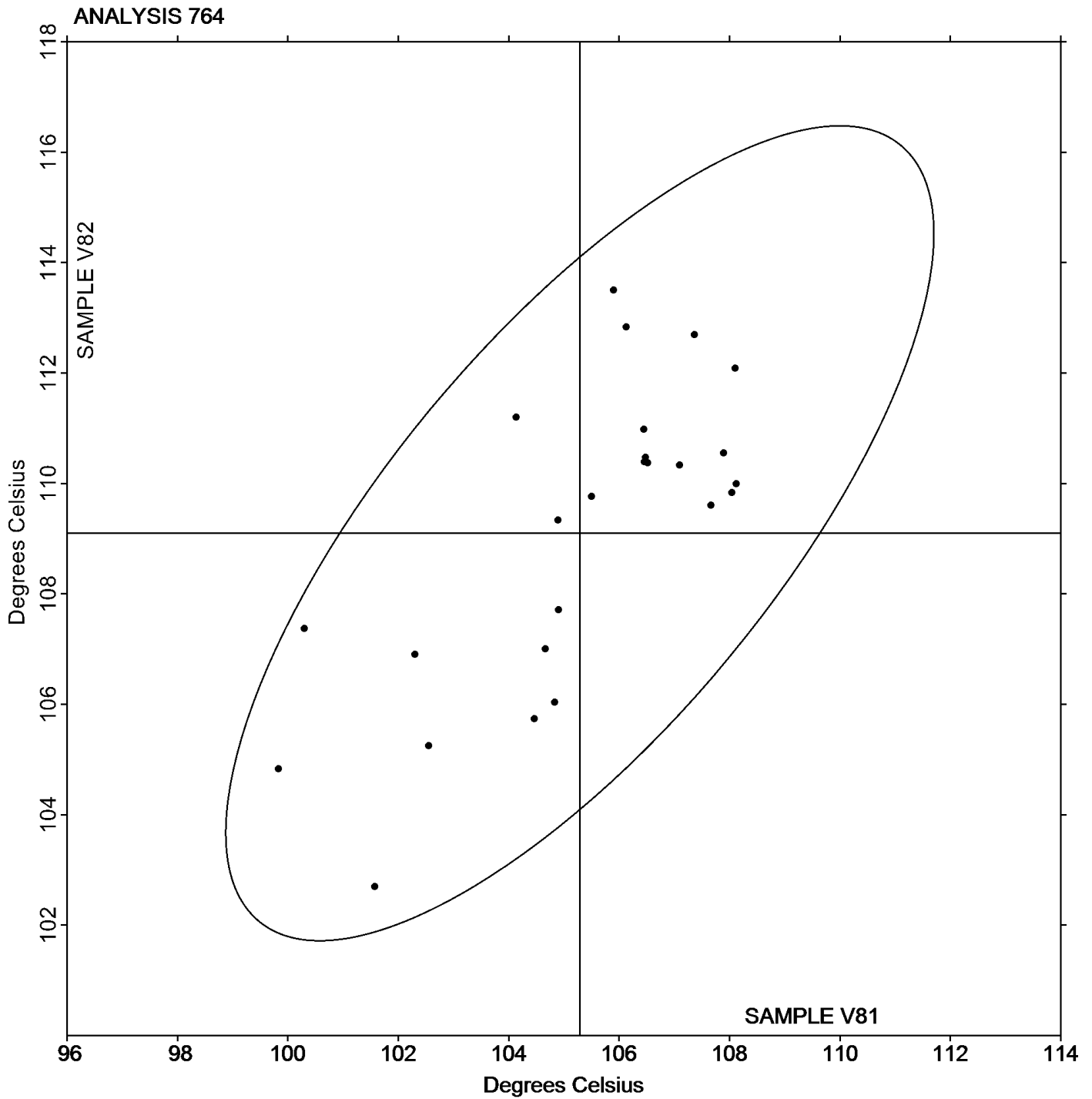
WebCode	Data Flag	Sample W81 Lab Mean	Sample W81 Diff from Grand Mean	Sample W81 CPV	Sample W82 Lab Mean	Sample W82 Diff from Grand Mean	Sample W82 CPV	Instr Code
4CYP4W		121.77	2.47	1.18	121.82	2.44	0.92	SH
69UEP9		116.23	-3.07	-1.47	116.35	-3.03	-1.15	TA
79PCGF		118.47	-0.84	-0.40	117.93	-1.45	-0.55	XX
7VMNMZ		119.50	0.20	0.09	121.60	2.22	0.84	TA
9ABRVF		115.62	-3.68	-1.76	113.91	-5.47	-2.08	XX
AT4YVJ		121.00	1.70	0.81	121.07	1.69	0.64	XX
GCE2T6		120.57	1.27	0.61	120.61	1.23	0.47	XX
PCPT3Y		117.39	-1.92	-0.92	117.30	-2.08	-0.79	XX
R4QUKN		120.30	1.00	0.48	120.77	1.39	0.53	TA
UWXMWZ		121.20	1.90	0.91	121.93	2.55	0.97	XX
XMTZ4P		120.30	0.99	0.48	119.89	0.51	0.19	TA

Summary Statistics

	Sample W81	Sample W82
Grand Means	119.304 Degrees Celsius	119.380 Degrees Celsius
Stnd Dev Btwn Labs	2.088 Degrees Celsius	2.635 Degrees Celsius

Statistics based on 11 of 11 reporting participants

Sample W81: PP & Sample W82: PP

Key to Instrument Codes Reported by Participants

SH   Shimadzu

TA   TA Instruments

XX   Instrument manufacturer not specified by lab

Grand Mean Sample W81: 119.30 Degrees Celsius   Grand Mean Sample W82: 119.38 Degrees Celsius

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If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample W81 Lab Mean	Sample W81 Diff from Grand Mean	Sample W81 CPV	Sample W82 Lab Mean	Sample W82 Diff from Grand Mean	Sample W82 CPV	Instr Code
4CYP4W		167.21	2.27	1.19	165.42	0.60	0.36	SH
69UEP9		165.24	0.30	0.16	164.57	-0.24	-0.14	TA
79PCGF		169.33	4.39	2.29	168.97	4.15	2.47	XX
7VMNMZ		164.03	-0.91	-0.47	163.60	-1.21	-0.72	TA
9ABRVF		162.52	-2.42	-1.26	162.60	-2.22	-1.32	XX
AT4YVJ		164.70	-0.24	-0.13	165.00	0.19	0.11	XX
CGNQ9H		164.85	-0.09	-0.05	165.57	0.76	0.45	TA
GCE2T6		162.14	-2.80	-1.46	162.28	-2.54	-1.51	XX
PCPT3Y		166.10	1.16	0.60	165.71	0.90	0.53	XX
R4QUKN		164.20	-0.74	-0.39	164.40	-0.41	-0.25	TA
RB44MB		165.24	0.30	0.16	165.43	0.62	0.37	TA
UWXMWZ		165.37	0.42	0.22	165.33	0.52	0.31	TA
XMTZ4P		163.30	-1.65	-0.86	163.72	-1.10	-0.65	TA

Summary Statistics

	Sample W81	Sample W82
Grand Means	164.942 Degrees Celsius	164.815 Degrees Celsius
Stnd Dev Btwn Labs	1.915 Degrees Celsius	1.682 Degrees Celsius

Statistics based on 13 of 13 reporting participants
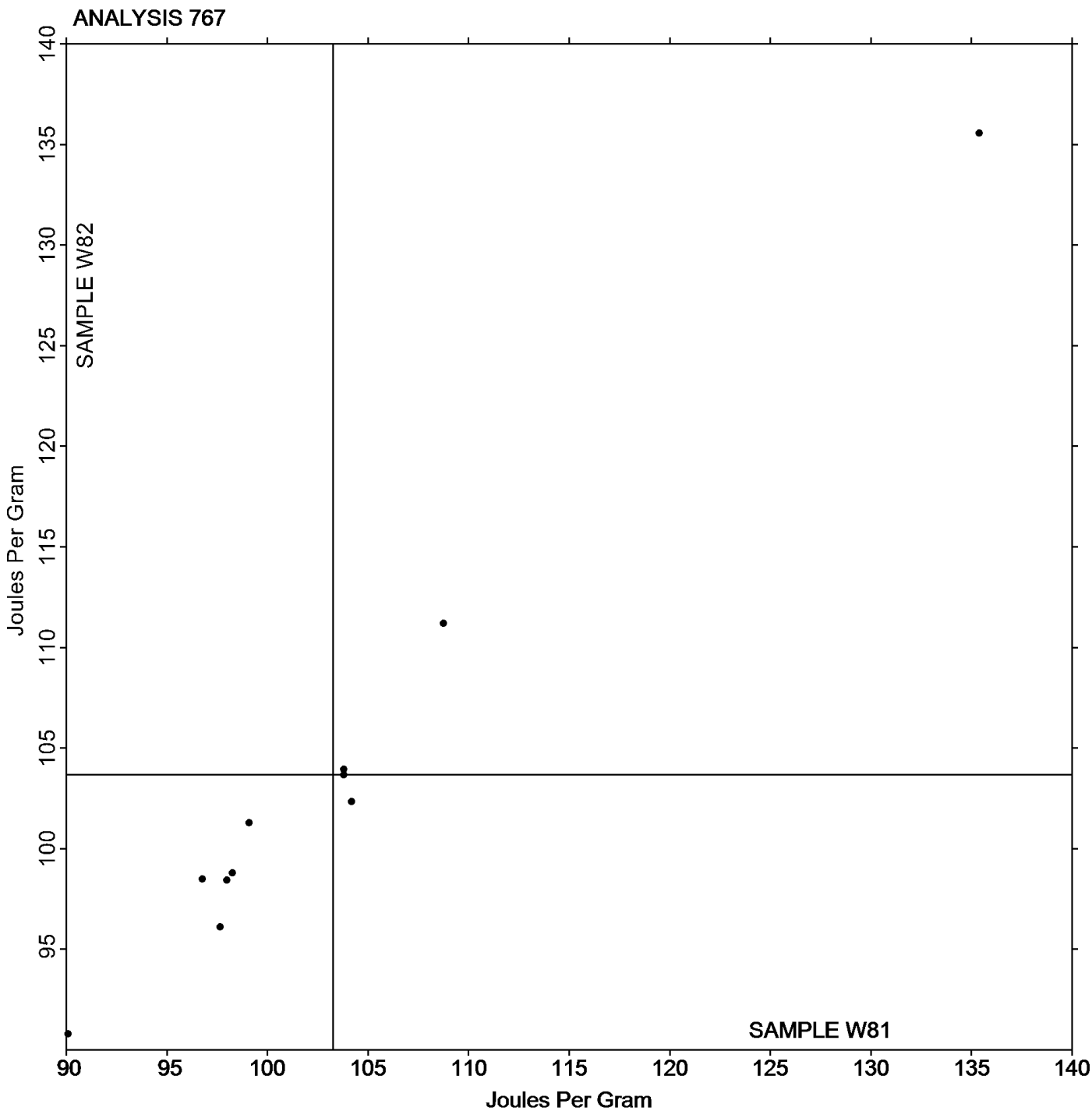
Sample W81: PP & Sample W82: PP

Key to Instrument Codes Reported by Participants

SH   Shimadzu   TA   TA Instruments

XX   Instrument manufacturer not specified by lab

Grand Mean Sample W81: 164.94 Degrees Celsius   Grand Mean Sample W82: 164.81 Degrees Celsius

If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample W81 Lab Mean	Sample W81 Diff from Grand Mean	Sample W81 CPV	Sample W82 Lab Mean	Sample W82 Diff from Grand Mean	Sample W82 CPV	Instr Code
4CYP4W		96.78	-6.48	-0.55	98.49	-5.20	-0.44	SH
69UEP9		103.80	0.54	0.05	103.93	0.24	0.02	TA
79PCGF		90.10	-13.16	-1.12	90.80	-12.89	-1.10	XX
7VMNMZ		103.80	0.54	0.05	103.67	-0.02	0.00	TA
9ABRVF		97.66	-5.60	-0.48	96.10	-7.59	-0.65	XX
AT4YVJ		98.27	-4.99	-0.42	98.80	-4.89	-0.42	XX
GCE2T6		104.20	0.94	0.08	102.33	-1.36	-0.12	XX
PCPT3Y		99.10	-4.16	-0.35	101.28	-2.41	-0.21	XX
R4QUKN		97.99	-5.27	-0.45	98.44	-5.25	-0.45	TA
UWXMWZ		108.76	5.50	0.47	111.19	7.50	0.64	TA
XMTZ4P		135.40	32.14	2.73	135.55	31.86	2.71	TA

Summary Statistics

	Sample W81	Sample W82
Grand Means	103.260 Joules Per Gram	103.690 Joules Per Gram
Stnd Dev Btwn Labs	11.753 Joules Per Gram	11.752 Joules Per Gram

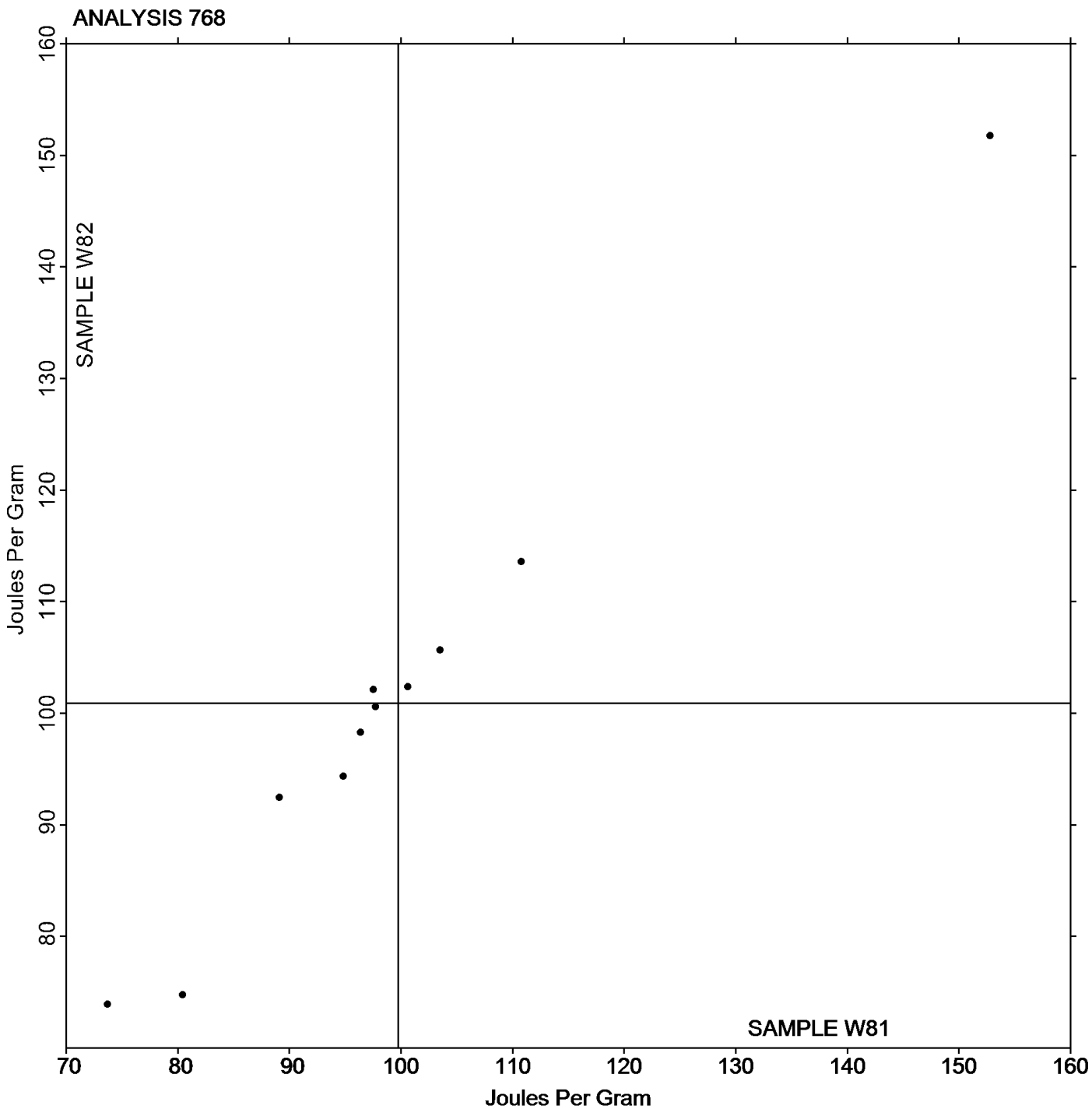Statistics based on 11 of 11 reporting participants

Sample W81: PP & Sample W82: PP

Key to Instrument Codes Reported by Participants

SH Shimadzu   TA TA Instruments

XX Instrument manufacturer not specified by lab

Grand Mean Sample W81: 103.26 Joules Per Gram   **Grand Mean Sample W82: 103.69 Joules Per Gram**

If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample W81 Lab Mean	Sample W81 Diff from Grand Mean	Sample W81 CPV	Sample W82 Lab Mean	Sample W82 Diff from Grand Mean	Sample W82 CPV	Instr Code
4CYP4W		97.72	-2.06	-0.10	100.59	-0.31	-0.01	SH
69UEP9		103.53	3.76	0.18	105.63	4.74	0.23	TA
79PCGF		73.70	-26.07	-1.28	73.90	-26.99	-1.30	XX
7VMNMZ		96.41	-3.36	-0.16	98.29	-2.60	-0.13	TA
9ABRVF		80.46	-19.32	-0.95	74.74	-26.15	-1.26	XX
AT4YVJ		89.10	-10.67	-0.52	92.43	-8.46	-0.41	XX
GCE2T6		97.55	-2.22	-0.11	102.14	1.24	0.06	XX
PCPT3Y		100.61	0.84	0.04	102.38	1.49	0.07	XX
R4QUKN		94.84	-4.94	-0.24	94.34	-6.55	-0.32	TA
UWXMWZ		110.79	11.02	0.54	113.60	12.71	0.61	TA
XMTZ4P		152.78	53.01	2.60	151.77	50.87	2.45	TA

Summary Statistics

|	Sample W81	Sample W82
Grand Means	99.772 Joules Per Gram	100.892 Joules Per Gram
Stnd Dev Btwn Labs	20.390 Joules Per Gram	20.760 Joules Per Gram

Statistics based on 11 of 11 reporting participants

Sample W81: PP & Sample W82: PP

Key to Instrument Codes Reported by Participants

SH Shimadzu

TA TA Instruments

XX Instrument manufacturer not specified by lab

Grand Mean Sample W81: 99.772 Joules Per Gram   Grand Mean Sample W82: 100.89 Joules Per Gram

If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample V81 Lab Mean	Sample V81 Diff from Grand Mean	Sample V81 CPV	Sample V82 Lab Mean	Sample V82 Diff from Grand Mean	Sample V82 CPV	Instr Code
4CYP4W		104.80	0.57	0.23	108.22	-0.37	-0.14	SH
69UEP9		107.36	3.14	1.27	112.69	4.11	1.52	TA
79PCGF		100.30	-3.93	-1.59	107.37	-1.22	-0.45	XX
7VMNMZ		105.23	1.01	0.41	107.70	-0.88	-0.33	TA
9ABRVF		99.83	-4.40	-1.78	104.83	-3.75	-1.39	XX
AT4YVJ		103.67	-0.56	-0.23	107.70	-0.88	-0.33	XX
GCE2T6		106.48	2.25	0.91	110.47	1.89	0.70	XX
PCPT3Y		105.72	1.49	0.60	107.70	-0.88	-0.33	XX
R4QUKN		105.83	1.61	0.65	113.27	4.68	1.73	TA
UWXMWZ		105.10	0.87	0.35	109.37	0.78	0.29	TA
XMTZ4P		102.16	-2.07	-0.84	105.11	-3.48	-1.29	TA

Summary Statistics

	Sample V81	Sample V82
Grand Means	104.225 Degrees Celsius	108.583 Degrees Celsius
Stnd Dev Btwn Labs	2.473 Degrees Celsius	2.704 Degrees Celsius

Statistics based on 11 of 11 reporting participants

Sample V81: ABS & Sample V82: ABS

Key to Instrument Codes Reported by Participants

SH   Shimadzu   TA   TA Instruments

XX   Instrument manufacturer not specified by lab

Grand Mean Sample V81: 104.23 Degrees Celsius   Grand Mean Sample V82: 108.58 Degrees Celsius
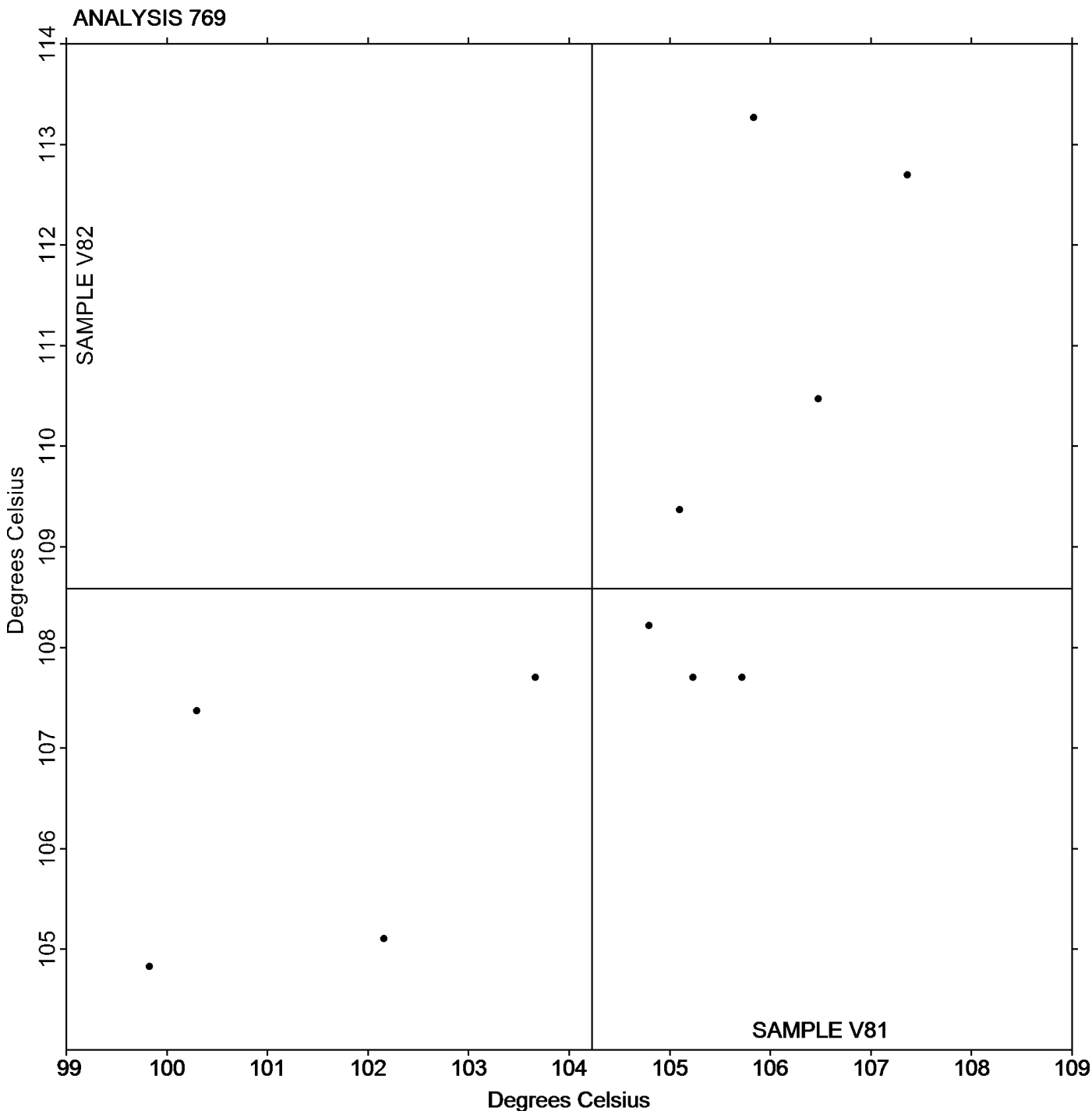
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample B81			Sample B82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
324VW3		1,978	66	0.51	2,097	-11	-0.05	IN
7VMNMZ		2,043	131	1.00	2,248	140	0.67	IN
9B6FEB		1,941	29	0.22	2,261	153	0.73	IN
BG8GDV		2,029	117	0.90	2,207	100	0.48	WZ
BWEDUA		1,659	-253	-1.94	1,669	-439	-2.11	IN
HQNHPX		1,963	51	0.39	2,159	51	0.25	SH
LAC2DF		1,639	-273	-2.09	1,694	-414	-1.99	TO
LT6WRN		1,904	-8	-0.06	2,210	102	0.49	IN
MN4BGW		1,998	86	0.66	2,158	50	0.24	OA
UQRQCZ		1,909	-3	-0.02	2,152	44	0.21	IM
WT7A49		1,916	4	0.03	2,317	209	1.00	LI
YBE6NQ		1,964	52	0.40	2,124	16	0.08	IN

Summary Statistics

	Sample B81	Sample B82
Grand Means	1,911.9 psi	2,107.9 psi
Stnd Dev Btwn Labs	130.5 psi	208.5 psi

Statistics based on 12 of 12 reporting participants

Sample B81: LDPE & Sample B82: LDPE

Key to Instrument Codes Reported by Participants

IM	Instru-Met Instruments		IN	Instron
LI	Lloyd Instruments		OA	Oakland Testing
SH	Shimadzu		TO	Tinius Olsen
WZ	Zwick			

Grand Mean Sample B81: 1,911.92 psi   Grand Mean Sample B82: 2,107.94 psi

If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample B81 Lab Mean	Sample B81 Diff from Grand Mean	Sample B81 CPV	Sample B82 Lab Mean	Sample B82 Diff from Grand Mean	Sample B82 CPV	Instr Code
324VW3		4,139	366	0.82	4,633	408	0.78	IN
7VMNMZ		4,325	553	1.24	4,737	511	0.98	IN
9B6FEB		3,853	80	0.18	4,917	691	1.33	IN
AGM4N8		3,161	-611	-1.37	3,407	-819	-1.57	XX
AYD2XE		3,213	-560	-1.25	3,334	-891	-1.71	IN
BG8GDV		4,062	289	0.65	4,486	261	0.50	WZ
BWEDUA		3,837	64	0.14	3,843	-383	-0.73	IN
HQNHPX		4,021	248	0.56	4,540	315	0.60	SH
LAC2DF		2,915	-858	-1.92	3,357	-868	-1.67	TO
LT6WRN		3,750	-22	-0.05	4,327	102	0.20	IN
MN4BGW		4,027	254	0.57	4,302	76	0.15	OA
TRKFQ2		4,292	519	1.16	4,735	510	0.98	TH
UQRQCZ		3,942	170	0.38	4,381	155	0.30	IM
WT7A49		3,141	-632	-1.41	4,011	-214	-0.41	LI
YBE6NQ		3,913	140	0.31	4,372	146	0.28	IN

Summary Statistics

	Sample B81	Sample B82
Grand Means	3,772.8 psi	4,225.5 psi
Stnd Dev Btwn Labs	447.3 psi	521.4 psi

Statistics based on 15 of 15 reporting participants

Sample B81: LDPE & Sample B82: LDPE

Key to Instrument Codes Reported by Participants

IM	Instru-Met Instruments	IN	Instron
LI	Lloyd Instruments	OA	Oakland Testing
SH	Shimadzu	TH	Thwing Albert
TO	Tinius Olsen	WZ	Zwick
XX	Instrument manufacturer not specified by lab		

Grand Mean Sample B81: 3,772.83 psi   Grand Mean Sample B82: 4,225.48 psi

If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

		Sample B81			Sample B82			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
324VW3		85.85	12.78	0.45	101.56	12.47	0.33	IN
7VMNMZ		69.07	-4.00	-0.14	81.02	-8.06	-0.21	IN
9B6FEB		87.10	14.03	0.49	120.35	31.26	0.83	IN
BG8GDV		67.70	-5.37	-0.19	85.90	-3.19	-0.08	WZ
BWEDUA		8.55	-64.52	-2.27	8.67	-80.41	-2.14	IN
HQNHPX		92.83	19.77	0.70	115.74	26.65	0.71	SH
LAC2DF		25.66	-47.41	-1.67	33.31	-55.78	-1.48	TO
LT6WRN		70.41	-2.66	-0.09	85.24	-3.85	-0.10	IN
TRKFQ2		88.26	15.19	0.53	104.75	15.67	0.42	TH
UQRQCZ		101.39	28.33	1.00	142.41	53.33	1.42	IM
WT7A49		84.44	11.37	0.40	74.25	-14.84	-0.39	LI
YBE6NQ		95.53	22.46	0.79	115.83	26.74	0.71	IN

Summary Statistics

	Sample B81	Sample B82
Grand Means	73.066 Percent	89.086 Percent
Stnd Dev Btwn Labs	28.413 Percent	37.580 Percent

Statistics based on 12 of 12 reporting participants

Sample B81: LDPE & Sample B82: LDPE

Key to Instrument Codes Reported by Participants

IM	Instru-Met Instruments	IN	Instron
LI	Lloyd Instruments	SH	Shimadzu
TH	Thwing Albert	TO	Tinius Olsen
WZ	Zwick		

Grand Mean Sample B81: 73.066 Percent   Grand Mean Sample B82: 89.086 Percent

If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample B81 Lab Mean	Sample B81 Diff from Grand Mean	Sample B81 CPV	Sample B82 Lab Mean	Sample B82 Diff from Grand Mean	Sample B82 CPV	Instr Code
324VW3		1,113.3	267.0	1.54	1,077.2	200.8	1.19	IN
7VMNMZ		655.6	-190.7	-1.10	661.3	-215.1	-1.28	IN
9B6FEB		815.8	-30.5	-0.18	916.9	40.5	0.24	IN
AGM4N8		673.1	-173.3	-1.00	686.1	-190.3	-1.13	XX
AYD2XE		992.9	146.5	0.84	1,091.3	215.0	1.28	IN
BG8GDV		792.0	-54.3	-0.31	722.0	-154.4	-0.92	WZ
BWEDUA		659.0	-187.3	-1.08	782.0	-94.4	-0.56	IN
HQNHPX		938.9	92.6	0.53	997.1	120.7	0.72	SH
LAC2DF		774.7	-71.6	-0.41	838.2	-38.2	-0.23	TO
LT6WRN		606.8	-239.5	-1.38	595.1	-281.3	-1.67	IN
MN4BGW		888.5	42.1	0.24	866.1	-10.3	-0.06	OA
TRKFQ2		1,172.0	325.7	1.87	1,147.9	271.5	1.61	TH
UQRQCZ		1,018.9	172.6	0.99	1,009.9	133.6	0.79	IM
WT7A49		723.6	-122.7	-0.71	821.2	-55.2	-0.33	LI
YBE6NQ		869.9	23.6	0.14	933.4	57.0	0.34	IN

Summary Statistics

	Sample B81	Sample B82
Grand Means	846.33 Percent	876.37 Percent
Stnd Dev Btwn Labs	173.71 Percent	168.28 Percent

Statistics based on 15 of 15 reporting participants

Sample B81: LDPE & Sample B82: LDPE

Key to Instrument Codes Reported by Participants

IM	Instru-Met Instruments	IN	Instron
LI	Lloyd Instruments	OA	Oakland Testing
SH	Shimadzu	TH	Thwing Albert
TO	Tinius Olsen	WZ	Zwick
XX	Instrument manufacturer not specified by lab		

Grand Mean Sample B81: 846.33 Percent   Grand Mean Sample B82: 876.37 Percent
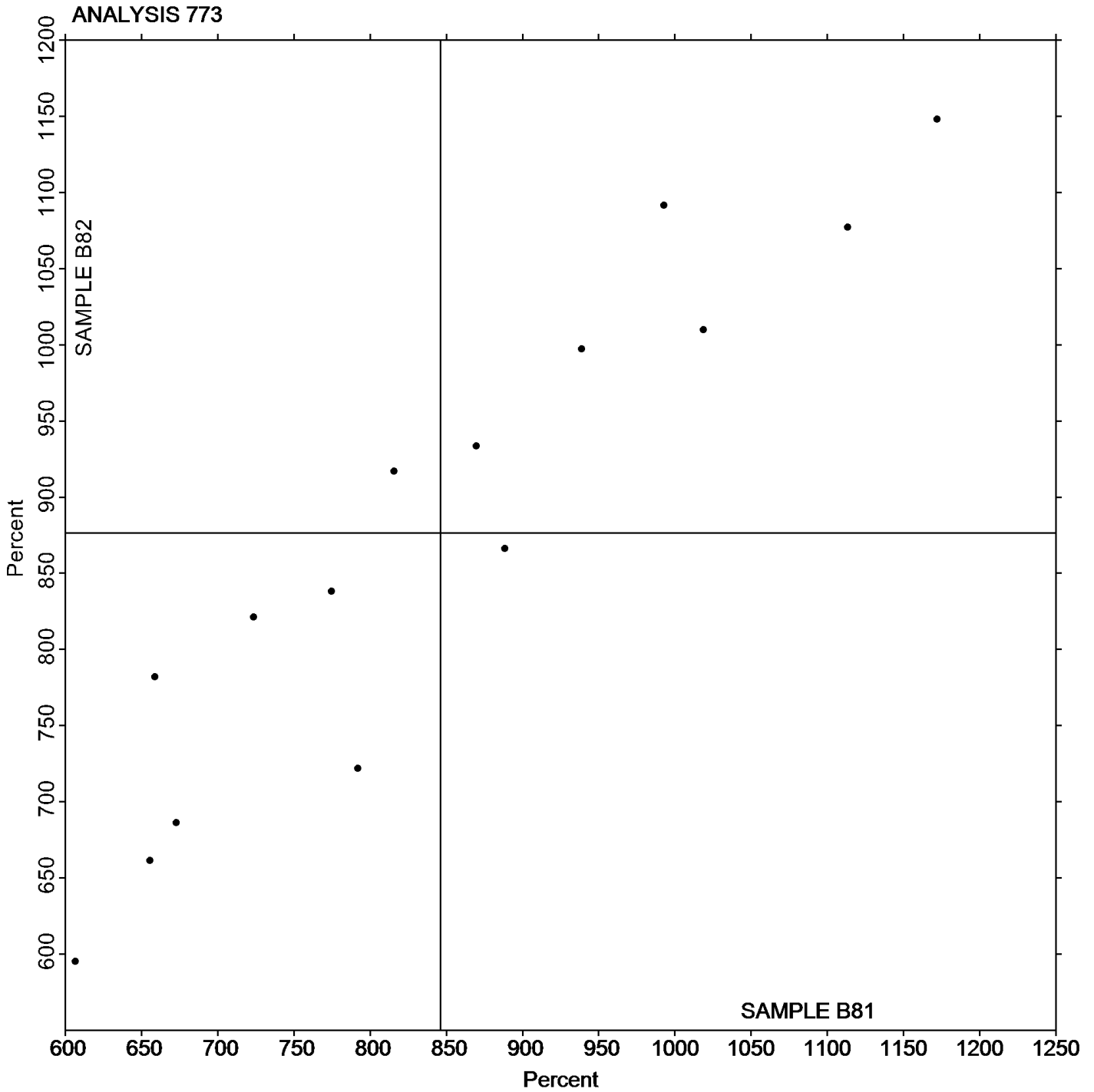
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If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample B81			Sample B82		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2PDUMM		3.7740	0.0539	0.40	4.0620	0.1148	0.69
324VW3		3.7400	0.0199	0.15	3.8200	-0.1272	-0.76
7VMNMZ		3.5470	-0.1731	-1.27	3.9410	-0.0062	-0.04
9B6FEB		3.7200	-0.0001	0.00	3.8600	-0.0872	-0.52
AYD2XE		3.6102	-0.1099	-0.81	4.0669	0.1198	0.72
BG8GDV	*	4.1378	0.4177	3.07	3.6732	-0.2739	-1.64
BWEDUA		3.6680	-0.0521	-0.38	4.1120	0.1648	0.98
HQNHPX		3.5635	-0.1566	-1.15	3.7457	-0.2014	-1.20
LAC2DF		3.6615	-0.0586	-0.43	3.7009	-0.2463	-1.47
LT6WRN		3.7442	0.0241	0.18	4.0237	0.0765	0.46
MN4BGW		3.7200	-0.0001	0.00	4.0540	0.1068	0.64
UQRQCZ		3.7120	-0.0081	-0.06	4.2020	0.2548	1.52
WT7A49		3.7662	0.0461	0.34	3.8422	-0.1050	-0.63
YBE6NQ		3.7740	0.0539	0.40	4.1580	0.2108	1.26
YWJPTQ		3.6630	-0.0571	-0.42	3.9460	-0.0012	-0.01

Summary Statistics

	Sample B81	Sample B82
Grand Means	3.72009 mils	3.94718 mils
Stnd Dev Btwn Labs	0.13613 mils	0.16743 mils

Statistics based on 15 of 15 reporting participants

Sample B81: LDPE & Sample B82: LDPE

Grand Mean Sample B81: 3.7201 mils   Grand Mean Sample B82: 3.9472 mils

If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample B81 Lab Mean	Diff from Grand Mean	CPV	Sample B82 Lab Mean	Diff from Grand Mean	CPV	Instr Code
324VW3		34,496	2,035	0.38	37,997	5,664	0.94	IN
7VMNMZ		33,246	785	0.14	34,497	2,164	0.36	IN
AYD2XE		18,617	-13,843	-2.55	17,187	-15,146	-2.52	IN
BG8GDV		39,842	7,382	1.36	29,441	-2,891	-0.48	SH
BWEDUA		27,781	-4,679	-0.86	27,178	-5,155	-0.86	IN
HQNHPX		36,661	4,200	0.77	38,007	5,674	0.94	SH
LAC2DF		33,140	680	0.13	33,720	1,387	0.23	TO
MN4BGW		32,952	492	0.09	33,055	722	0.12	OA
UQRQCZ		33,350	890	0.16	35,259	2,926	0.49	IM
WT7A49		33,734	1,274	0.23	36,414	4,081	0.68	LI
YBE6NQ		33,244	784	0.14	32,907	574	0.10	IN

Summary Statistics

	Sample B81	Sample B82
Grand Means	32,460.3 psi	32,332.8 psi
Stnd Dev Btwn Labs	5,423.6 psi	6,010.7 psi

Statistics based on 11 of 11 reporting participants

Sample B81: LDPE & Sample B82: LDPE

Key to Instrument Codes Reported by Participants

IM	Instru-Met Instruments	IN	Instron
LI	Lloyd Instruments	OA	Oakland Testing
SH	Shimadzu	TO	Tinius Olsen

Grand Mean Sample B81: 32,460.29 psi   Grand Mean Sample B82: 32,332.80 psi
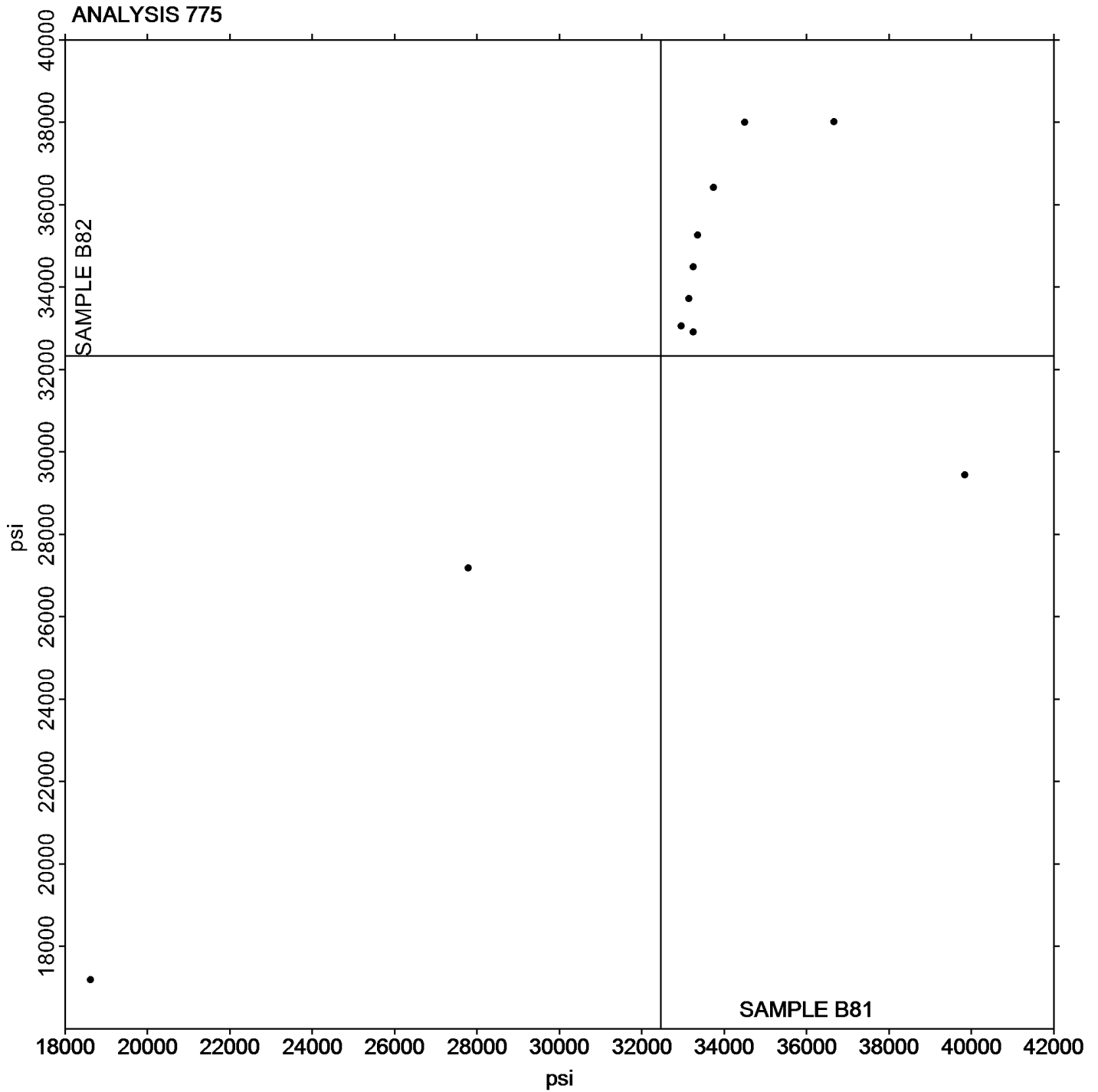
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

| WebCode | Data Flag | Sample B81 | | | Sample B82 | | | Instr Code |
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
324VW3		29,259	314	0.06	31,611	3,030	0.70	IN
7VMNMZ		29,116	171	0.04	29,777	1,197	0.27	IN
AYD2XE		19,470	-9,474	-1.95	18,113	-10,467	-2.40	IN
BG8GDV		38,399	9,454	1.95	29,462	882	0.20	SH
BWEDUA		25,360	-3,585	-0.74	25,102	-3,478	-0.80	MT
HQNHPX		29,139	194	0.04	30,161	1,581	0.36	SH
LAC2DF		33,240	4,295	0.89	33,830	5,250	1.20	TO
UQRQCZ		28,231	-713	-0.15	29,127	547	0.13	IM
WT7A49		29,033	89	0.02	31,103	2,523	0.58	LI
YBE6NQ		28,199	-746	-0.15	27,516	-1,064	-0.24	IN

Summary Statistics

	Sample B81	Sample B82
Grand Means	28,944.5 psi	28,580.2 psi
Stnd Dev Btwn Labs	4,849.9 psi	4,357.6 psi

Statistics based on 10 of 10 reporting participants

Sample B81: LDPE & Sample B82: LDPE

Key to Instrument Codes Reported by Participants

IM	Instru-Met Instruments	IN	Instron
LI	Lloyd Instruments	MT	MTS/Sintech
SH	Shimadzu	TO	Tinius Olsen

Grand Mean Sample B81: 28,944.50 psi   Grand Mean Sample B82: 28,580.19 psi
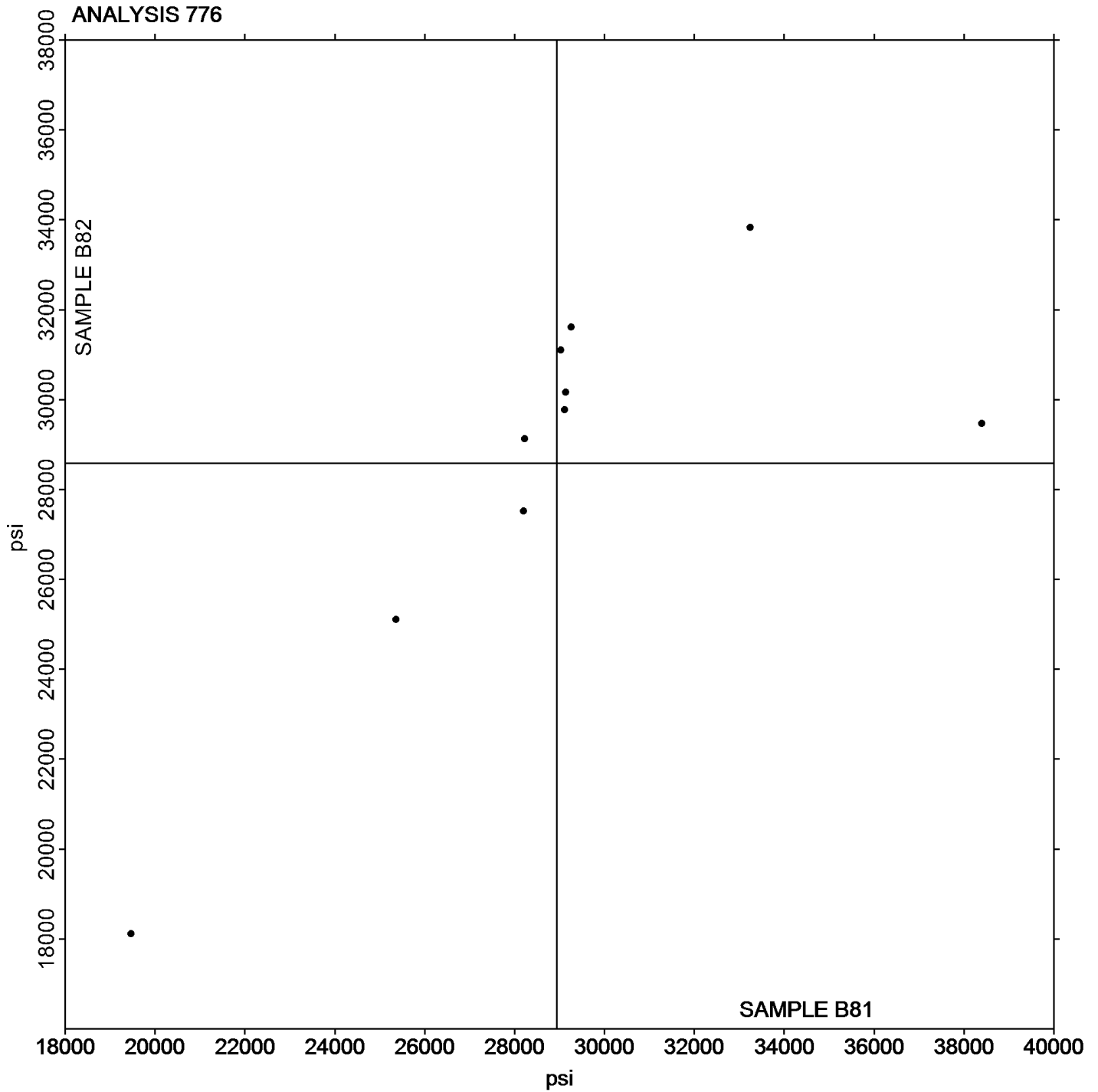
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample P81 Lab Mean	Sample P81 Diff from Grand Mean	Sample P81 CPV	Sample P82 Lab Mean	Sample P82 Diff from Grand Mean	Sample P82 CPV	Instr Code
324VW3	*	0.1924	0.0312	0.87	0.2768	0.1008	2.68	TM
6CTQK9		0.1018	-0.0594	-1.66	0.1368	-0.0392	-1.04	TN
7EYDXC		0.1350	-0.0262	-0.73	0.1837	0.0078	0.21	IG
7VMNMZ		0.1158	-0.0454	-1.27	0.1402	-0.0358	-0.95	TH
9JHD9A		0.1468	-0.0144	-0.40	0.1366	-0.0394	-1.05	TH
9KD39W		0.2006	0.0394	1.10	0.1824	0.0064	0.17	LI
BG8GDV		0.1320	-0.0292	-0.82	0.1420	-0.0340	-0.90	SA
BWEDUA		0.1552	-0.0060	-0.17	0.1818	0.0058	0.16	MI
EYVQ33		0.1766	0.0154	0.43	0.1684	-0.0076	-0.20	IS
HQNHPX		0.1876	0.0264	0.74	0.1924	0.0164	0.44	SA
JA4XY6		0.1978	0.0366	1.02	0.2060	0.0300	0.80	IS
LAC2DF		0.1336	-0.0276	-0.77	0.1358	-0.0402	-1.07	RD
MN4BGW		0.1380	-0.0232	-0.65	0.1710	-0.0050	-0.13	DY
PBV6J4		0.2370	0.0758	2.12	0.2244	0.0484	1.29	XX
UQRQCZ		0.1620	0.0008	0.02	0.1640	-0.0120	-0.32	MS
VZBTPR		0.1672	0.0060	0.17	0.1730	-0.0030	-0.08	XX

Summary Statistics

	Sample P81	Sample P82
Grand Means	0.16121 COF	0.17596 COF
Stnd Dev Btwn Labs	0.03583 COF	0.03758 COF

Statistics based on 16 of 16 reporting participants

Sample P81: LDPE & Sample P82: LDPE

Key to Instrument Codes Reported by Participants

DY	Dynisco Model D1055	IG	Instron
IS	Instron 5000 Series	LI	Lloyd Instruments
MI	MTS Insight	MS	MTS
RD	RDM CF	SA	Shimadzu Autograph
TH	Thwing Albert Friction/Peel Tester Model 225-1	TM	TMI Slip and Friction Tester
TN	TMI #32-06	XX	Instrument make/model not specified by lab

Grand Mean Sample P81: 0.16121 COF   Grand Mean Sample P82: 0.17596 COF
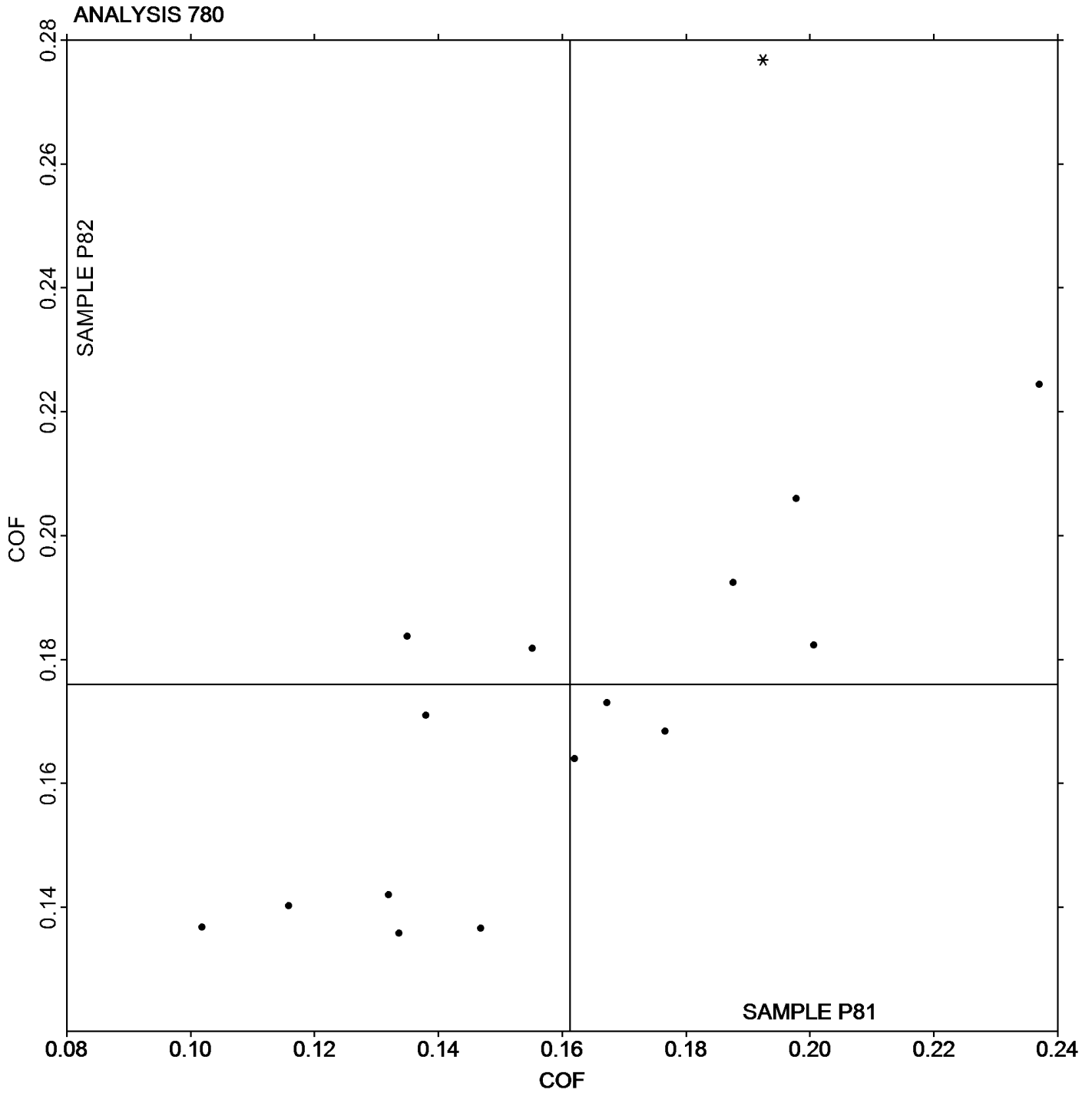
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample P81 Lab Mean	Sample P81 Diff from Grand Mean	Sample P81 CPV	Sample P82 Lab Mean	Sample P82 Diff from Grand Mean	Sample P82 CPV	Instr Code
324VW3		0.1040	0.0009	0.04	0.1158	-0.0100	-0.39	TM
6CTQK9		0.0660	-0.0371	-1.43	0.1066	-0.0192	-0.74	TN
7EYDXC		0.0906	-0.0125	-0.48	0.1157	-0.0101	-0.39	IG
7VMNMZ		0.1042	0.0011	0.04	0.1268	0.0010	0.04	TH
9JHD9A		0.1266	0.0235	0.91	0.1316	0.0058	0.22	TH
9KD39W		0.0982	-0.0048	-0.19	0.0998	-0.0260	-1.00	XX
BG8GDV		0.0560	-0.0471	-1.81	0.0900	-0.0358	-1.38	SA
BWEDUA		0.0850	-0.0181	-0.70	0.1210	-0.0048	-0.18	MI
EYVQ33		0.0844	-0.0187	-0.72	0.1174	-0.0084	-0.32	IS
HQNHPX		0.0782	-0.0249	-0.96	0.0803	-0.0455	-1.75	SA
JA4XY6		0.1424	0.0393	1.51	0.1534	0.0276	1.06	IS
LAC2DF		0.1212	0.0181	0.70	0.1246	-0.0012	-0.05	RD
MN4BGW		0.0962	-0.0069	-0.26	0.1628	0.0370	1.42	DY
PBV6J4		0.1364	0.0333	1.28	0.1752	0.0494	1.90	XX
UQRQCZ		0.1340	0.0309	1.19	0.1480	0.0222	0.85	MS
VZBTPR		0.1256	0.0225	0.87	0.1438	0.0180	0.69	XX

Summary Statistics

	Sample P81	Sample P82
Grand Means	0.10306 COF	0.12580 COF
Stnd Dev Btwn Labs	0.02597 COF	0.02597 COF

Statistics based on 16 of 16 reporting participants

Sample P81: LDPE & Sample P82: LDPE

Key to Instrument Codes Reported by Participants

DY	Dynisco Model D1055	IG	Instron
IS	Instron 5000 Series	MI	MTS Insight
MS	MTS	RD	RDM CF
SA	Shimadzu Autograph	TH	Thwing Albert Friction/Peel Tester Model 225-1
TM	TMI Slip and Friction Tester	TN	TMI #32-06
XX	Instrument make/model not specified by lab		

Grand Mean Sample P81: 0.10306 COF   Grand Mean Sample P82: 0.12580 COF
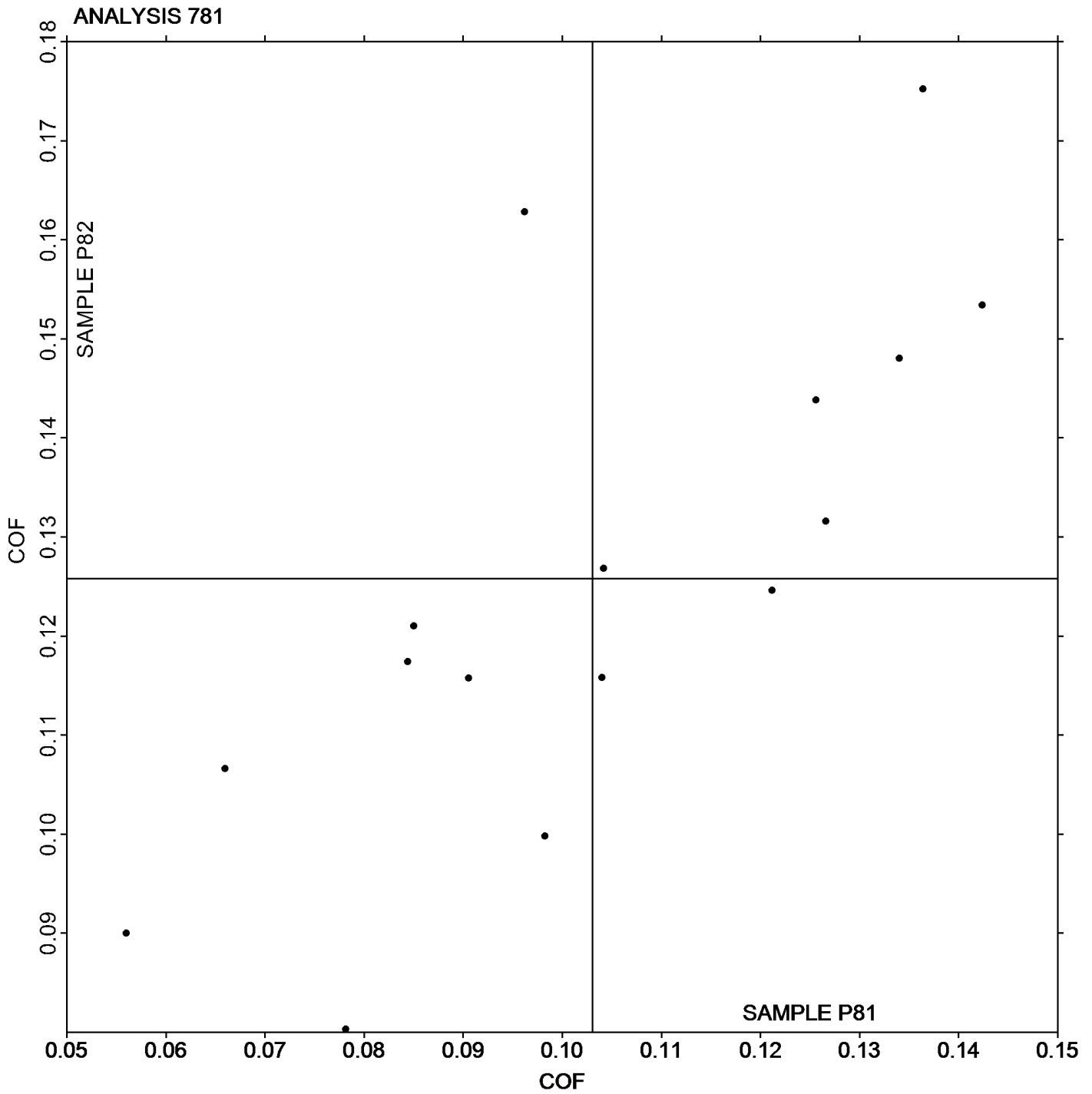
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample Q81			Sample Q82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
324VW3		232.9	-46.9	-1.77	474.3	41.9	0.56	TM
7VMNMZ		280.2	0.5	0.02	415.8	-16.6	-0.22	TE
BG8GDV		296.1	16.3	0.62	492.7	60.3	0.81	LO
BWEDUA		263.0	-16.8	-0.63	421.6	-10.8	-0.15	TE
HQNHPX		305.1	25.3	0.95	328.6	-103.8	-1.40	TE
LT6WRN		317.4	37.6	1.42	387.6	-44.8	-0.60	SZ
MN4BGW		270.7	-9.1	-0.34	376.2	-56.2	-0.76	TA
UQRQCZ		272.8	-7.0	-0.26	562.4	130.0	1.75	EM

Summary Statistics

	Sample Q81	Sample Q82
Grand Means	279.78 grams-force	432.41 grams-force
Stnd Dev Btwn Labs	26.55 grams-force	74.28 grams-force

Statistics based on 8 of 8 reporting participants

Sample Q81: LDPE & Sample Q82: LDPE

Key to Instrument Codes Reported by Participants

EM	Elmendorf Tear Tester	LO	Lorentzen & Wettre Model ll
SZ	Textest FX 3700	TA	Thwing-Albert
TE	Thwing-Albert Pro Tear	TM	TMI No. 83-1100

Grand Mean Sample Q81: 279.78 grams-force   Grand Mean Sample Q82: 432.41 grams-force
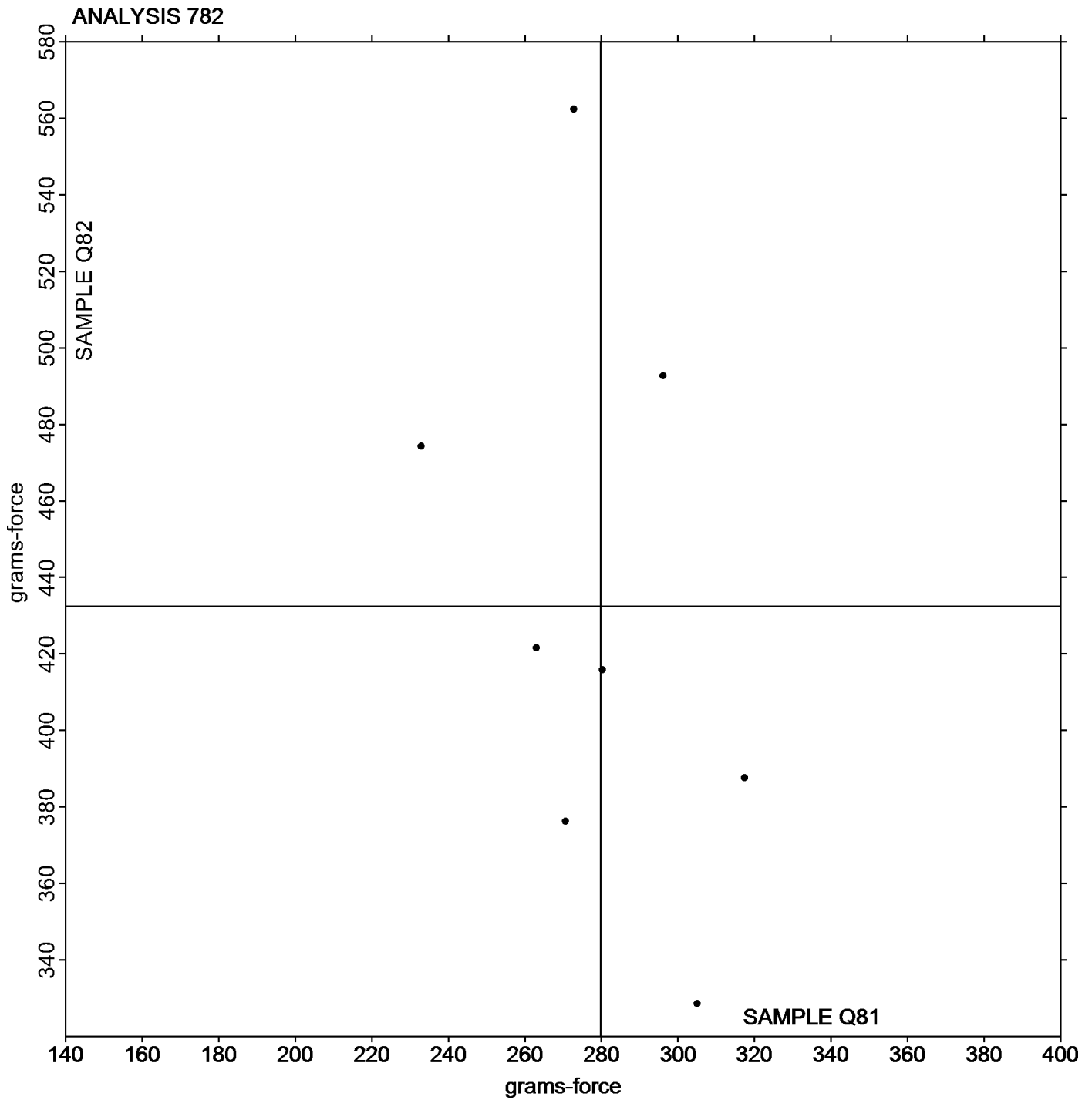
If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

WebCode	Data Flag	Sample D81 Lab Mean	Sample D81 Diff from Grand Mean	Sample D81 CPV	Sample D82 Lab Mean	Sample D82 Diff from Grand Mean	Sample D82 CPV	Instr Code
2PDUMM		19.488	-0.001	0.00	19.163	-0.630	-0.83	BJ
324VW3		20.075	0.586	0.65	20.250	0.458	0.61	BJ
4MGXDJ		21.639	2.150	2.37	21.164	1.372	1.81	XR
7VMNMZ		19.000	-0.489	-0.54	19.413	-0.380	-0.50	BJ
8284WP		17.914	-1.575	-1.73	19.065	-0.727	-0.96	HL
9AVLHB	*	19.929	0.440	0.48	19.063	-0.730	-0.96	BJ
9JHD9A		18.938	-0.551	-0.61	19.375	-0.417	-0.55	BJ
AMEGFM		21.054	1.565	1.72	21.055	1.263	1.67	XR
BWEDUA		19.738	0.249	0.27	20.150	0.358	0.47	BJ
HQNHPX		18.950	-0.539	-0.59	19.338	-0.455	-0.60	BJ
JA4XY6		19.425	-0.064	-0.07	20.113	0.320	0.42	BJ
JPB42N		19.500	0.011	0.01	20.350	0.558	0.74	BJ
K9HNGN		19.550	0.061	0.07	19.938	0.145	0.19	BJ
L9FFNV		18.075	-1.414	-1.56	18.100	-1.692	-2.24	HL
LT6WRN		19.488	-0.001	0.00	19.963	0.170	0.23	BJ
MN4BGW		21.889	2.400	2.64	21.529	1.737	2.29	XR
PBV6J4	X	23.875	4.386	4.83	24.475	4.683	6.19	XX
R2DHGD		18.813	-0.676	-0.74	19.050	-0.742	-0.98	BJ
TAM9KF		19.363	-0.126	-0.14	19.913	0.120	0.16	BJ
TMBDN7		18.450	-1.039	-1.14	18.863	-0.930	-1.23	BJ
UGNPQF		19.028	-0.461	-0.51	19.594	-0.198	-0.26	XR
UMRP7C		19.299	-0.190	-0.21	19.445	-0.347	-0.46	HL
UQRQCZ		19.438	-0.051	-0.06	19.813	0.020	0.03	BJ
X3ALXG		19.376	-0.113	-0.12	19.710	-0.082	-0.11	XX
XT2C7H		19.288	-0.201	-0.22	19.663	-0.130	-0.17	BJ
XVPQT7		19.533	0.044	0.05	20.513	0.720	0.95	BJ
YQV79M		19.475	-0.014	-0.02	20.006	0.214	0.28	BJ

Summary Statistics

	Sample D81	Sample D82
Grand Means	19.4888 Percent	19.7920 Percent
Stnd Dev Btwn Labs	0.9080 Percent	0.7568 Percent

Statistics based on 26 of 27 reporting participants

Sample D81: LDPE & Sample D82: LDPE

Comments on Assigned Data Flags for Test #785

PBV6J4 (X) - Data for both samples are high. Possible Systematic Error.

Key to Instrument Codes Reported by Participants			
BJ	BYK-Gardner Haze-Gard Plus/i	HL	Hunterlab Ultrascan
XR	X-Rite Spectrocolorimeter (any model)	XX	Instrument make/model not specified by lab

Grand Mean Sample D81: 19.489 Percent   Grand Mean Sample D82: 19.792 Percent
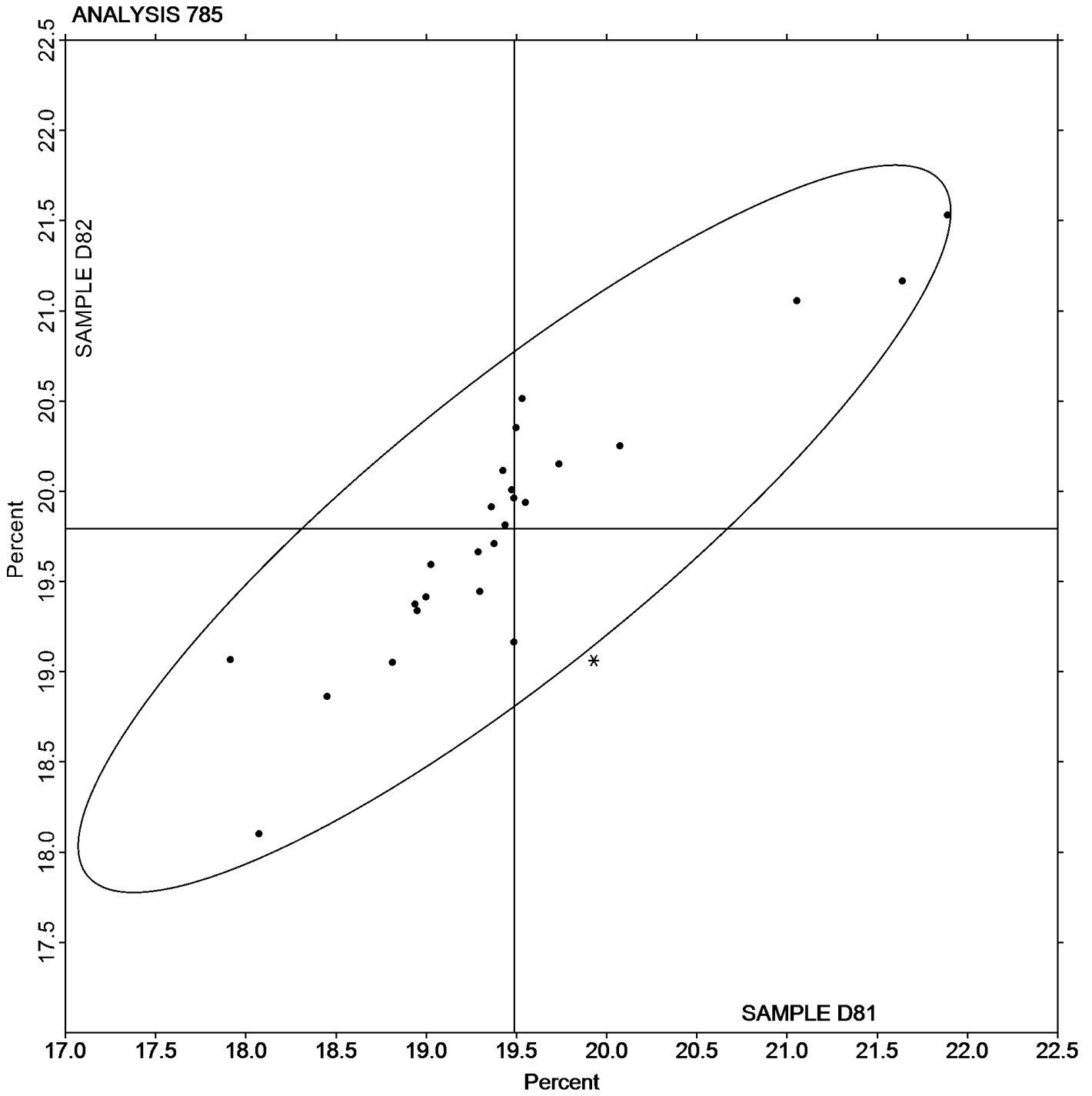
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SAMPLE D82

Percent

SAMPLE D81

Percent

WebCode	Data Flag	Sample D81 Lab Mean	Diff from Grand Mean	CPV	Sample D82 Lab Mean	Diff from Grand Mean	CPV	Instr Code
2PDUMM		93.14	0.61	0.56	93.20	0.66	0.60	BJ
324VW3		92.75	0.22	0.21	92.90	0.36	0.33	BJ
4MGXDJ		92.21	-0.32	-0.29	92.26	-0.28	-0.25	XR
7VMNMZ		90.31	-2.21	-2.02	90.38	-2.16	-1.96	BJ
8284WP		90.73	-1.80	-1.65	90.68	-1.86	-1.69	HL
9AVLHB		93.18	0.66	0.60	93.14	0.60	0.55	BJ
9JHD9A	*	94.03	1.50	1.37	93.75	1.21	1.10	BJ
AMEGFM		92.10	-0.43	-0.39	92.09	-0.45	-0.41	XR
BWEDUA		91.90	-0.63	-0.57	91.88	-0.66	-0.60	BJ
HQNHPX		92.60	0.07	0.07	92.70	0.16	0.15	BJ
JA4XY6		94.23	1.70	1.55	94.31	1.77	1.61	BJ
JPB42N		92.66	0.14	0.13	92.71	0.17	0.16	BJ
K9HNGN		93.45	0.92	0.85	93.44	0.90	0.81	BJ
L9FFNV		90.65	-1.88	-1.72	90.65	-1.89	-1.71	HL
LT6WRN		91.74	-0.79	-0.72	91.46	-1.08	-0.98	BJ
PBV6J4		92.09	-0.44	-0.40	92.01	-0.53	-0.48	XX
R2DHGD		93.63	1.10	1.01	93.64	1.10	1.00	BJ
TAM9KF		92.65	0.12	0.11	92.70	0.16	0.15	BJ
TMBDN7		93.63	1.10	1.01	93.63	1.09	0.98	BJ
UGNPQF		91.43	-1.10	-1.00	91.48	-1.06	-0.96	XR
UMRP7C		90.64	-1.89	-1.73	90.71	-1.83	-1.66	HL
UQRQCZ	*	93.13	0.60	0.55	93.45	0.91	0.83	BJ
X3ALXG		92.70	0.17	0.16	92.65	0.11	0.10	XX
XT2C7H		93.56	1.04	0.95	93.60	1.06	0.96	BJ
XVPQT7		93.08	0.55	0.51	93.12	0.58	0.52	BJ
YQV79M		93.48	0.95	0.87	93.49	0.95	0.87	BJ

Summary Statistics

	Sample D81	Sample D82
Grand Means	92.525 Percent	92.539 Percent
Stnd Dev Btwn Labs	1.093 Percent	1.102 Percent

Statistics based on 26 of 26 reporting participants

Sample D81: LDPE & Sample D82: LDPE

Key to Instrument Codes Reported by Participants

BJ   BYK-Gardner Haze-Gard Plus/i

XR   X-Rite Spectrocolorimeter (any model)

HL   Hunterlab Ultrascan XE

XX   Instrument make/model not specified by lab

Grand Mean Sample D81: 92.525 Percent   Grand Mean Sample D82: 92.539 Percent
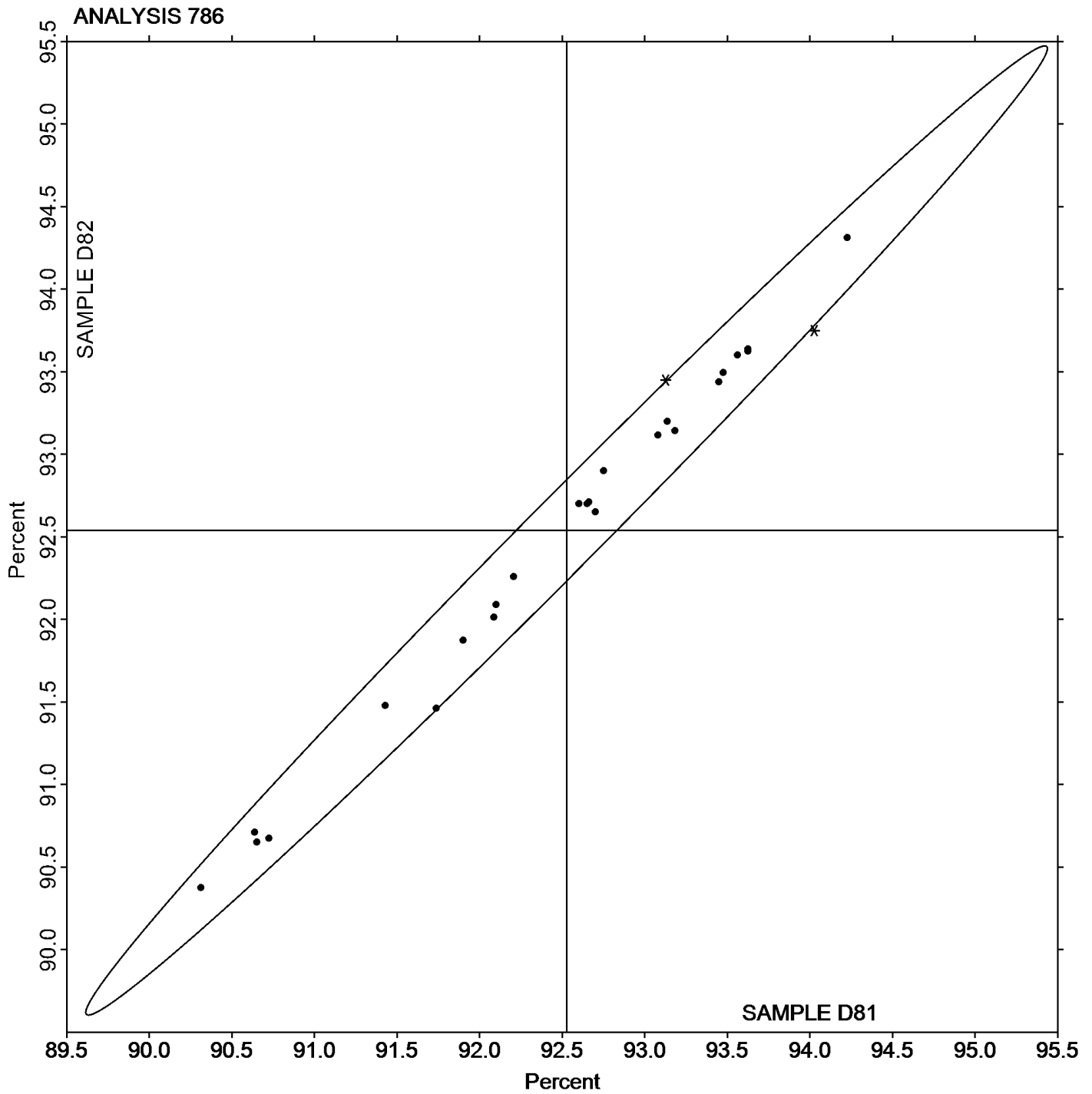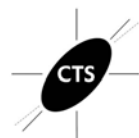
WebCode	Data Flag	Sample S81			Sample S82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2HEAKR		4.04	0.34	0.85	4.55	0.91	2.38	TO
2UL37D		3.94	0.24	0.60	3.60	-0.04	-0.10	BA
3BAWV9		3.97	0.27	0.66	4.08	0.44	1.15	TO
3JZKM6		4.35	0.65	1.61	3.78	0.14	0.36	XX
3Q2JFE		3.90	0.20	0.49	3.44	-0.19	-0.51	TO
484TJC		3.64	-0.06	-0.14	3.03	-0.61	-1.58	TO
62PPYM		4.44	0.74	1.83	4.53	0.89	2.31	TO
69UEP9		3.58	-0.12	-0.30	3.31	-0.33	-0.85	WZ
6CTQK9		3.93	0.23	0.57	3.60	-0.04	-0.11	TM
6LKXJD		3.43	-0.27	-0.67	2.95	-0.69	-1.79	TO
6QC9LP		3.27	-0.43	-1.07	3.27	-0.36	-0.95	TO
79TW9P		3.38	-0.32	-0.80	3.59	-0.05	-0.12	XX
7VMNMZ		3.69	-0.01	-0.03	3.69	0.05	0.12	CE
8284WP		2.87	-0.84	-2.07	3.33	-0.31	-0.79	TO
9AVLHB		3.83	0.13	0.31	3.89	0.25	0.65	TY
9FJWZL		3.35	-0.35	-0.87	3.67	0.03	0.07	TO
9JHD9A		3.88	0.18	0.44	3.78	0.14	0.36	TO
AT4YVJ		3.44	-0.26	-0.65	3.80	0.16	0.42	TO
B4GKCX		3.90	0.20	0.50	3.53	-0.11	-0.28	TO
BWEDUA		3.54	-0.16	-0.41	3.50	-0.13	-0.35	TO
E26R8A		3.24	-0.47	-1.15	3.61	-0.03	-0.07	WZ
ETP4D8		4.23	0.52	1.29	3.72	0.08	0.21	CE
F2YW29		3.61	-0.09	-0.22	3.53	-0.11	-0.28	CS
FFUDQ7		3.26	-0.44	-1.09	3.70	0.07	0.17	WZ
GCE2T6		4.32	0.62	1.53	4.43	0.79	2.07	CE
GLHGD4		4.28	0.58	1.43	4.45	0.81	2.10	TM
JKLFRC		3.18	-0.52	-1.28	3.73	0.09	0.23	TO
JPB42N		3.93	0.22	0.55	3.41	-0.23	-0.59	CE
JW79NX		3.80	0.10	0.25	3.23	-0.41	-1.08	TO
K7BF4X		3.83	0.13	0.33	3.58	-0.06	-0.16	TO
KAE4RZ		3.58	-0.12	-0.30	3.30	-0.34	-0.90	DS
KGUWW4		3.71	0.01	0.02	3.56	-0.08	-0.20	TO
KMJKDV		3.44	-0.26	-0.65	3.48	-0.16	-0.41	TM
NPUL3X		3.58	-0.12	-0.30	3.26	-0.38	-0.98	TM
QGWJ66		3.56	-0.14	-0.36	3.73	0.09	0.25	TO

WebCode	Data Flag	Sample S81			Sample S82			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
QQN2GR	*	4.82	1.11	2.76	3.88	0.24	0.64	RR
R2DHGD		3.60	-0.10	-0.24	4.29	0.65	1.71	TM
R3QRUK		3.86	0.16	0.39	4.10	0.46	1.21	XX
R4QUKN		3.55	-0.15	-0.38	3.12	-0.52	-1.36	CE
R9XKMU		3.82	0.12	0.29	3.46	-0.18	-0.48	XX
TK8H7N		3.55	-0.15	-0.38	3.50	-0.14	-0.37	TO
UEGKXR		3.47	-0.23	-0.57	3.35	-0.29	-0.74	TO
UJRGZF		3.92	0.21	0.53	3.57	-0.07	-0.19	WZ
UWXMWZ		3.40	-0.30	-0.75	3.77	0.13	0.33	TO
V9PFZG	*	2.66	-1.04	-2.57	3.07	-0.57	-1.48	TO

Summary Statistics

	Sample S81	Sample S82
Grand Means	3.702 ft.lbf/in	3.639 ft.lbf/in
Stnd Dev Btwn Labs	0.404 ft.lbf/in	0.384 ft.lbf/in

Statistics based on 45 of 45 reporting participants

Sample S81: ABS & Sample S82: ABS

Key to Instrument Codes Reported by Participants

BA	Baldwin	CE	Ceast
CS	CSI	DS	Dynisco
RR	Ray-Ran Polymer Testing Equipment	TM	TMI
TO	Tinius Olsen	TY	Toyoseiki
WZ	Zwick	XX	Instrument manufacturer not specified by lab

Grand Mean Sample S81: 3.7023 ft.lbf/in   Grand Mean Sample S82: 3.6391 ft.lbf/in
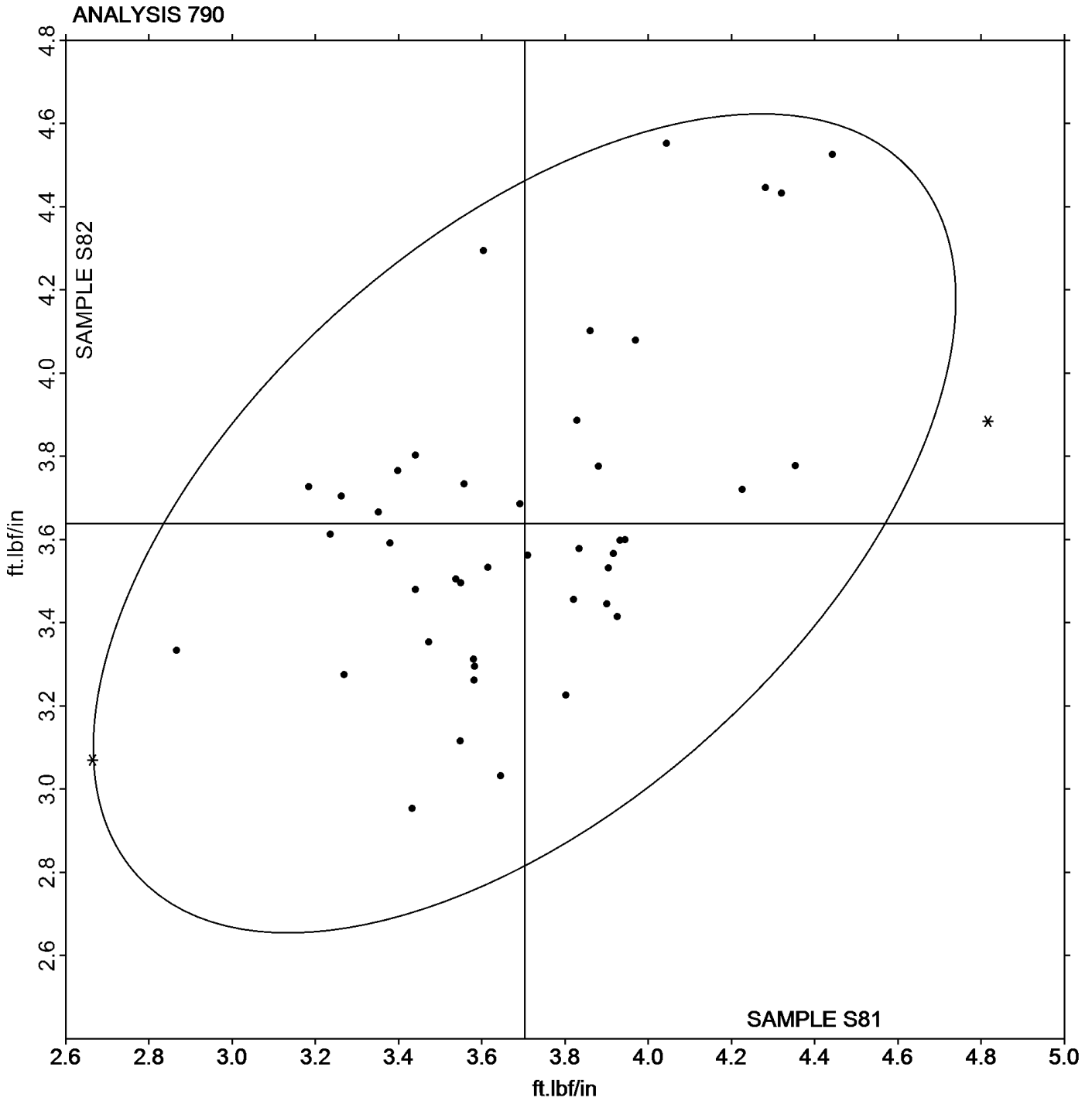
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SAMPLE S82

ft.lbf/in

SAMPLE S81

ft.lbf/in

WebCode	Data Flag	Sample Z81 Lab Mean	Diff from Grand Mean	CPV	Sample Z82 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3F3R2M		15.36	-0.77	-0.96	15.76	-0.47	-0.59	CE
69UEP9		16.77	0.64	0.80	17.23	1.00	1.25	WZ
79TW9P		15.11	-1.02	-1.27	15.15	-1.09	-1.36	XX
7M6HN9		15.98	-0.15	-0.19	15.70	-0.53	-0.67	CE
7VMNMZ		14.54	-1.59	-1.99	14.44	-1.79	-2.24	CE
9AVLHB		16.78	0.65	0.81	16.92	0.69	0.86	XX
9JHD9A		16.02	-0.11	-0.14	16.02	-0.21	-0.27	TO
AGC8BF		16.32	0.19	0.24	16.88	0.65	0.81	CE
B4GKCX		16.05	-0.08	-0.09	15.90	-0.33	-0.41	TO
BWEDUA		15.77	-0.36	-0.46	15.62	-0.62	-0.77	XX
CXAA2J		16.08	-0.05	-0.07	15.86	-0.37	-0.46	XX
DAXVKJ		15.58	-0.55	-0.69	15.98	-0.25	-0.32	CE
DDGWGQ		16.14	0.01	0.01	16.80	0.57	0.71	TM
DFLAGD		15.57	-0.56	-0.70	15.61	-0.62	-0.78	CE
F9VPCN		16.20	0.07	0.09	16.12	-0.11	-0.14	TO
GQTAP3		15.64	-0.49	-0.62	15.78	-0.46	-0.57	XX
JAKYX2		16.77	0.64	0.80	16.72	0.49	0.61	WZ
JF7Y62		16.18	0.05	0.07	16.83	0.60	0.75	CE
KNE77L		15.44	-0.69	-0.86	15.84	-0.39	-0.49	CE
KQ46QC		17.36	1.23	1.55	17.54	1.30	1.63	CE
KQGVMA		17.73	1.60	2.01	17.64	1.41	1.76	TO
R9XKMU		16.18	0.05	0.06	15.86	-0.38	-0.47	XX
RB44MB		16.36	0.23	0.29	16.44	0.21	0.26	CE
TVNCCP		14.65	-1.48	-1.85	15.22	-1.02	-1.27	TO
U7MHRA		16.60	0.47	0.59	16.38	0.15	0.19	TO
UJRGZF		16.96	0.83	1.04	16.79	0.56	0.70	WZ
UMRP7C		15.88	-0.25	-0.31	15.96	-0.27	-0.34	TM
XBJD2J		15.74	-0.39	-0.49	15.74	-0.49	-0.61	TO
YVLGHL		17.99	1.86	2.33	18.01	1.77	2.22	TM

Summary Statistics

	Sample Z81	Sample Z82
Grand Means	16.129 kJ/m^2	16.232 kJ/m^2
Stnd Dev Btwn Labs	0.799 kJ/m^2	0.799 kJ/m^2

Statistics based on 29 of 29 reporting participants

Sample Z81: ABS & Sample Z82: ABS

Key to Instrument Codes Reported by Participants

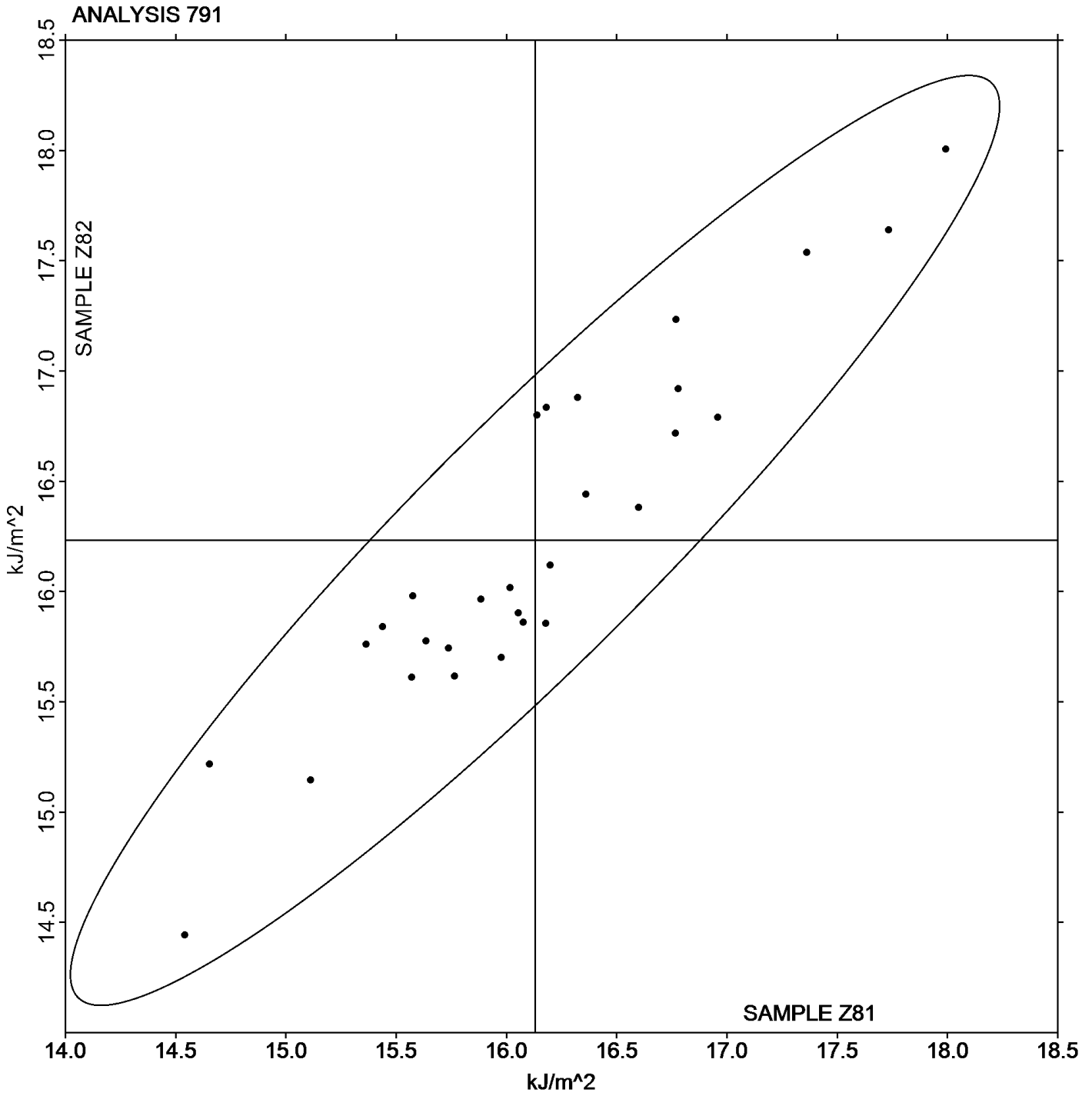|			
CE	Ceast	TM	TMI
TO	Tinius Olsen	WZ	Zwick
XX	Instrument manufacturer not specified by lab		

Grand Mean Sample Z81: 16.129 kJ/m^2   Grand Mean Sample Z82: 16.232 kJ/m^2

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SAMPLE Z82

kJ/m^2

SAMPLE Z81

kJ/m^2

| WebCode | Data Flag | Sample M81 | | | Sample M82 | | | Instr Code |
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2HEAKR	*	18.89	3.23	2.54	18.77	3.08	2.63	TO
3JZKM6		17.94	2.28	1.79	17.69	1.99	1.70	XX
3NEXTJ		15.96	0.30	0.24	15.96	0.26	0.22	WZ
4UWQF3	X	16.87	1.22	0.96	15.50	-0.20	-0.17	CE
64XQ92		17.39	1.74	1.36	17.15	1.45	1.24	TO
69UEP9		15.20	-0.46	-0.36	15.53	-0.16	-0.14	WZ
6V8633	*	17.88	2.22	1.75	18.50	2.80	2.39	TO
6Y6QU7	X	15.09	-0.57	-0.45	11.23	-4.47	-3.81	PO
79TW9P		15.12	-0.53	-0.42	14.97	-0.73	-0.62	XX
7M6HN9		15.60	-0.06	-0.05	15.35	-0.35	-0.30	CE
7VMNMZ		12.77	-2.89	-2.27	13.18	-2.52	-2.15	CE
9AVLHB		15.72	0.06	0.05	15.28	-0.42	-0.36	TY
9JHD9A		15.84	0.18	0.15	16.07	0.37	0.32	TO
AGC8BF		15.53	-0.13	-0.10	15.36	-0.33	-0.29	IN
B4GKCX	*	19.49	3.83	3.01	18.98	3.28	2.80	TO
BWEDUA		14.79	-0.87	-0.68	15.24	-0.45	-0.39	XX
CXAA2J		14.28	-1.38	-1.08	14.33	-1.36	-1.16	TM
D2ND67		15.38	-0.28	-0.22	15.37	-0.33	-0.28	WZ
DAXVKJ		14.84	-0.82	-0.64	14.97	-0.73	-0.62	CE
EPTCAG		16.70	1.04	0.82	16.39	0.70	0.59	CE
EVVF83		13.34	-2.32	-1.82	13.49	-2.21	-1.88	TM
F9VPCN		15.92	0.26	0.21	15.56	-0.14	-0.12	TO
FVNQFB		15.59	-0.07	-0.05	16.04	0.34	0.29	WZ
GQTAP3		14.46	-1.19	-0.94	14.63	-1.07	-0.91	WZ
HM9QY6		14.63	-1.03	-0.81	14.60	-1.10	-0.94	WZ
JAKYX2		16.07	0.41	0.32	15.92	0.22	0.19	WZ
JF7Y62		14.72	-0.94	-0.74	15.44	-0.26	-0.22	CE
KNE77L		15.81	0.15	0.12	15.13	-0.57	-0.49	CE
KQ46QC		15.57	-0.09	-0.07	15.59	-0.11	-0.09	IN
KQGVMA		15.65	-0.01	-0.01	16.17	0.47	0.40	TO
MG6FU7		14.91	-0.75	-0.59	14.99	-0.71	-0.61	CE
R2DHGD		14.78	-0.87	-0.69	15.11	-0.59	-0.50	TM
R4QUKN		15.44	-0.22	-0.17	15.21	-0.48	-0.41	WZ
R9XKMU		14.51	-1.15	-0.90	14.65	-1.04	-0.89	XX
RB44MB		15.02	-0.64	-0.50	15.26	-0.44	-0.37	CE

WebCode	Data Flag	Sample M81 Lab Mean	Sample M81 Diff from Grand Mean	Sample M81 CPV	Sample M82 Lab Mean	Sample M82 Diff from Grand Mean	Sample M82 CPV	Instr Code
RTMY2J		16.09	0.43	0.34	15.67	-0.03	-0.03	TM
TCQ2CT		16.06	0.41	0.32	16.67	0.97	0.83	CE
U7MHRA		14.68	-0.98	-0.77	15.06	-0.64	-0.54	TO
UJRGZF		15.81	0.15	0.12	15.77	0.07	0.06	WZ
UMRP7C		15.79	0.13	0.10	15.88	0.18	0.15	TM
UQRQCZ		15.63	-0.03	-0.02	15.39	-0.31	-0.26	WZ
V9PFZG		16.57	0.91	0.71	16.19	0.49	0.42	TO
XBJD2J		16.13	0.48	0.37	16.18	0.48	0.41	TO
YLXPU9		14.51	-1.15	-0.90	15.23	-0.46	-0.40	TO
ZM9U6B		16.27	0.61	0.48	16.06	0.36	0.31	XX

Summary Statistics

	Sample M81	Sample M82
Grand Means	15.657 kJ/m^2	15.698 kJ/m^2
Stnd Dev Btwn Labs	1.272 kJ/m^2	1.171 kJ/m^2

Statistics based on 43 of 45 reporting participants

Sample M81: ABS & Sample M82: ABS

Comments on Assigned Data Flags for Test #792

6Y6QU7 (X) - Data for sample M82 are low.

4UWQF3 (X) - Inconsistent in testing between samples.

Key to Instrument Codes Reported by Participants

CE	Ceast	IN	Instron
PO	POE	TM	TMI
TO	Tinius Olsen	TY	Toyoseiki
WZ	Zwick	XX	Instrument manufacturer not specified by lab

Grand Mean Sample M81: 15.657 kJ/m^2   Grand Mean Sample M82: 15.698 kJ/m^2

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SAMPLE M82

kJ/m^2

SAMPLE M81

kJ/m^2

-End of Report-