

Plastics Interlaboratory Testing Program

Web Summary Report #66, 2nd Qtr 2008

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705	Tensile Stress at Break, Plastic Samples	755	Moisture Content of Plastics
706	Percent Elongation at Yield, Plastic Samples	757	Ash Content in Thermoplastics
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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 50 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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Key for Web Summary Report (Page 1 of 2)

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:

<u>DATA FLAG</u>	<u>STATISTICALLY INCLUDED/EXCLUDED</u>	<u>ACTION REQUIRED</u>
*	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.

Results Summary for Web Summary Report #66

Plastics Interlaboratory Testing Program

Analysis 704 - Tensile Stress at Yield

Material: ABS	Sample F69	7,037.63	psi	2.06% COV
	Sample F70	7,016.67	psi	2.20% COV

Analysis 705 - Tensile Stress at Break

Material: ABS	Sample F69	5,085.15	psi	4.91% COV
	Sample F70	5,079.72	psi	5.04% COV

Analysis 706 - Percent Elongation at Yield

Material: ABS	Sample F69	2.7835	Percent	3.93% COV
	Sample F70	2.7697	Percent	3.64% COV

Analysis 708 - Modulus of Elasticity

Material: ABS	Sample F69	349.78	ksi	6.68% COV
	Sample F70	350.33	ksi	5.82% COV

Analysis 730 - Tensile Stress at Yield, ISO Method

Material: HIPS	Sample C69	28.309	MPa	3.82% COV
	Sample C70	28.473	MPa	3.76% COV

Analysis 731 - Tensile Stress at Break, ISO Method

Material: HIPS	Sample C69	23.265	MPa	3.30% COV
	Sample C70	23.585	MPa	3.07% COV

Analysis 732 - Strain at Yield, ISO Method

Material: HIPS	Sample C69	1.4922	Percent	4.69% COV
	Sample C70	1.4909	Percent	4.35% COV

Analysis 734 - Modulus of Elasticity, ISO Method

Material: HIPS	Sample C69	2,165.25	MPa	4.21% COV
	Sample C70	2,167.86	MPa	4.29% COV

Analysis 720 - Flexural Modulus

Material: ABS	Sample J69	373.78	ksi	5.30% COV
	Sample J70	370.91	ksi	5.24% COV

Analysis 721 - Flexural Stress at 5% Strain

Material: ABS	Sample J69	11,136.13	psi	3.33% COV
	Sample J70	11,053.37	psi	3.37% COV

Analysis 722 - Flexural Stress at Yield

Material: ABS	Sample J69	11,095.29	psi	3.47% COV
	Sample J70	11,017.90	psi	3.43% COV

Analysis 736 - Flexural Modulus

Material: HIPS	Sample K69	2,199.06	MPa	2.83% COV
	Sample K70	2,203.53	MPa	2.91% COV

Analysis 737 - Flexural Stress at 3.5% Strain

Material: HIPS	Sample K69	44.429	MPa	1.84% COV
	Sample K70	44.475	MPa	2.06% COV

Results Summary for Web Summary Report #66

Plastics Interlaboratory Testing Program

Analysis 738 - Flexural Stress at Yield

Material: HIPS	Sample K69	44.356	MPa	1.70% COV
	Sample K70	44.459	MPa	1.88% COV

Analysis 790 - Notched Izod Impact

Material: ABS	Sample S69	4.2386	ft.lbf/in	4.61% COV
	Sample S70	6.6147	ft.lbf/in	6.61% COV

Analysis 792 - Notched Charpy Impact

Material: ABS/PC	Sample M69	29.741	kJ/m ²	6.98% COV
	Sample M70	32.755	kJ/m ²	6.76% COV

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

Material: ABS	Sample E69	82.185	Degrees C	1.73% COV
	Sample E70	82.962	Degrees C	1.68% COV

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

Material: PP	Sample G69	115.20	Degrees C	2.42% COV
	Sample G70	96.753	Degrees C	3.13% COV

Analysis 712 - Temperature of Deflection (1.80 MPa)

Material: HIPS	Sample N69	80.407	Degrees C	1.78% COV
	Sample N70	80.380	Degrees C	1.87% COV

Analysis 715 - Vicat Temperature (Rate A)

Material: ABS	Sample H69	104.15	Degrees C	0.908% COV
	Sample H70	104.04	Degrees C	0.948% COV

Analysis 716 - Vicat Temperature (Rate B)

Material: ABS	Sample R69	105.73	Degrees C	0.895% COV
	Sample R70	105.72	Degrees C	0.878% COV

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

Material: PP	Sample X69	8.3635	grams/10 mins	5.14% COV
	Sample X70	13.348	grams/10 mins	4.81% COV

Analysis 718 - Specific Gravity

Material: ABS	Sample T69	1.0445	sp gr 23/23 C	0.181% COV
	Sample T70	1.0459	sp gr 23/23 C	0.163% COV

Analysis 757 - Ash Content

Material: PP	Sample L69	31.368	Percent	0.794% COV
	Sample L70	39.761	Percent	0.553% COV

Analysis 770 - Tensile Stress at Yield, Films

Material: LDPE	Sample B69	2,052.57	psi	17.5% COV
	Sample B70	2,080.87	psi	17.5% COV

Analysis 771 - Tensile Stress at Break, Films

Material: LDPE	Sample B69	3,745.45	psi	9.36% COV
	Sample B70	3,726.48	psi	9.21% COV

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Analysis 772 - Elongation at Yield, Films

Material: LDPE	Sample B69	71.238	Percent	62.1% COV
	Sample B70	70.352	Percent	61.5% COV

Analysis 773 - Elongation at Break, Films

Material: LDPE	Sample B69	724.35	Percent	16.4% COV
	Sample B70	720.94	Percent	21.3% COV

Analysis 774 - Thickness of Film Specimens

Material: LDPE	Sample B69	2.8994	mils	2.21% COV
	Sample B70	2.8808	mils	2.77% COV

Analysis 775 - Secant Modulus at 1% Strain

Material: LDPE	Sample B69	31,748.74	psi	18.8% COV
	Sample B70	31,706.18	psi	19.9% COV

Analysis 776 - Secant Modulus at 2% Strain

Material: LDPE	Sample B69	26,632.10	psi	19.0% COV
	Sample B70	26,808.04	psi	18.8% COV

Analysis 780 - Static Friction

Material: LDPE	Sample P69	0.19372	COF	25.3% COV
	Sample P70	0.20900	COF	39.7% COV

Analysis 781 - Kinetic Friction

Material: LDPE	Sample P69	0.13592	COF	34.4% COV
	Sample P70	0.14343	COF	49.9% COV

Analysis 782 - Tear Resistance of Film

Material: LDPE	Sample Q69	156.07	grams-force	18.6% COV
	Sample Q70	151.01	grams-force	20.6% COV

Analysis 785 - Percent Haze

Material: LDPE	Sample D69	23.476	Percent	7.45% COV
	Sample D70	23.488	Percent	7.44% COV

Analysis 786 - Total Transmittance

Material: LDPE	Sample D69	92.236	Percent	1.63% COV
	Sample D70	92.256	Percent	1.59% COV

Analysis 755 - Moisture Content

Material: ABS	Sample Y69	0.15560	Percent	15.7% COV
	Sample Y70	0.16941	Percent	15.0% COV

Analysis 704

Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1AUK4A		6,968.8	-68.8	-0.48	6,968.5	-48.1	-0.31
24K98E		7,088.0	50.4	0.35	7,122.0	105.3	0.68
284P59		7,060.2	22.6	0.16	7,023.7	7.0	0.05
2C56LV		7,197.6	160.0	1.11	7,109.4	92.7	0.60
39PEE5		7,073.6	36.0	0.25	7,067.4	50.7	0.33
3Q9T9H		7,095.6	58.0	0.40	7,162.4	145.7	0.94
417DFB		6,888.6	-149.0	-1.03	6,918.4	-98.3	-0.64
4EGNQR		7,119.0	81.4	0.56	7,112.0	95.3	0.62
4H8BDJ		6,920.0	-117.6	-0.81	6,893.2	-123.5	-0.80
4V6TZ6		7,137.4	99.8	0.69	7,100.8	84.1	0.54
59WZSR		6,869.6	-168.0	-1.16	6,842.8	-173.9	-1.13
5B1UBV		7,214.2	176.6	1.22	7,166.6	149.9	0.97
5E1Y7P		6,971.5	-66.2	-0.46	6,950.3	-66.3	-0.43
5TZ9RG		7,194.0	156.4	1.08	7,202.0	185.3	1.20
63W54Z		7,060.5	22.9	0.16	7,077.9	61.2	0.40
6H1QZG		7,113.0	75.4	0.52	7,059.8	43.1	0.28
6NEDY4		7,037.0	-0.6	0.00	6,936.0	-80.7	-0.52
7JRT5P		7,202.6	165.0	1.14	7,196.8	180.2	1.17
7RLNR6		7,196.0	158.4	1.09	7,160.8	144.1	0.93
7TVJPG		6,883.0	-154.6	-1.07	6,771.6	-245.1	-1.59
7ZZEMC		6,842.1	-195.6	-1.35	6,830.5	-186.2	-1.21
89YWH D		6,935.8	-101.8	-0.70	6,948.7	-68.0	-0.44
8Q6EPZ		7,121.4	83.8	0.58	7,063.4	46.7	0.30
91E5J1		6,927.0	-110.6	-0.76	6,866.8	-149.9	-0.97
92Q4FV		7,138.8	101.2	0.70	7,147.2	130.6	0.85
ARMBK7		6,845.8	-191.8	-1.33	6,816.8	-199.8	-1.29
AZ29RK		6,994.1	-43.6	-0.30	6,984.8	-31.9	-0.21
B1QR68		7,182.0	144.4	1.00	7,181.5	164.8	1.07
BJ6HZF		6,982.4	-55.2	-0.38	7,052.2	35.5	0.23
CWB615	*	7,390.2	352.6	2.44	7,338.2	321.5	2.08
CWSZMT		6,952.4	-85.2	-0.59	6,849.6	-167.1	-1.08
D4UE6F		7,022.2	-15.4	-0.11	7,028.8	12.1	0.08

Plastics Interlaboratory Testing Program

Analysis 704

Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
D6ESH4		7,144.0	106.4	0.74	7,214.0	197.3	1.28
DRQQ5Z		6,896.9	-140.7	-0.97	6,900.1	-116.6	-0.76
FPGLY2		7,051.9	14.3	0.10	6,993.1	-23.5	-0.15
G55WL4		7,025.4	-12.2	-0.08	7,028.4	11.7	0.08
GKWMWK		7,109.2	71.6	0.49	7,095.4	78.7	0.51
GUYJAS		7,258.2	220.6	1.52	7,262.2	245.5	1.59
JAK2WV		7,072.1	34.5	0.24	7,037.6	20.9	0.14
JNX5MA		6,901.0	-136.7	-0.94	6,903.0	-113.7	-0.74
LJ2K4K		6,816.8	-220.8	-1.53	6,874.8	-141.8	-0.92
LPGG3F	*	6,655.4	-382.3	-2.64	6,584.5	-432.2	-2.80
LQ8EDU		7,006.0	-31.6	-0.22	6,992.0	-24.7	-0.16
M317QB		7,088.4	50.8	0.35	7,086.4	69.7	0.45
M3BNV2		7,116.4	78.8	0.54	7,094.4	77.7	0.50
MDM7P5	X	6,480.6	-557.0	-3.85	6,501.6	-515.1	-3.34
MF4AZ2		6,911.0	-126.6	-0.88	6,906.6	-110.1	-0.71
MV1VNX		7,058.4	20.8	0.14	7,019.2	2.5	0.02
PTXPRG		7,051.8	14.2	0.10	6,995.4	-21.3	-0.14
Q2DB3H		7,181.4	143.8	0.99	7,198.0	181.3	1.17
QGBDQJ		6,736.0	-301.7	-2.09	6,746.2	-270.5	-1.75
QH2ME1		7,184.7	147.0	1.02	7,142.9	126.2	0.82
QK774M	*	6,687.8	-349.8	-2.42	6,610.6	-406.1	-2.63
QZKZT5		7,143.8	106.2	0.73	7,084.2	67.5	0.44
RPX46H		7,173.6	136.0	0.94	7,167.8	151.2	0.98
TX6M3S		6,997.8	-39.8	-0.28	6,965.6	-51.1	-0.33
TZTZTW		6,942.8	-94.8	-0.66	6,960.4	-56.3	-0.36
U1RMVV		7,082.4	44.8	0.31	7,106.4	89.7	0.58
UKDJW8		7,214.8	177.2	1.22	7,208.4	191.7	1.24
UKZQNY		6,859.9	-177.7	-1.23	6,853.5	-163.1	-1.06
VBNCF5	*	6,828.0	-209.6	-1.45	6,692.6	-324.1	-2.10
W2QUUQ		6,984.4	-53.2	-0.37	6,981.6	-35.1	-0.23
W5EZV7		7,222.6	184.9	1.28	7,124.3	107.7	0.70
WBJJTG	X	6,936.8	-100.8	-0.70	7,081.6	64.9	0.42

Analysis 704

Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
X1XKSD		7,193.1	155.4	1.07	7,179.7	163.1	1.06
XNFM2Y		7,226.4	188.8	1.30	7,176.2	159.6	1.03
XNLIUY		7,090.0	52.4	0.36	7,107.0	90.3	0.58
XS18HX		7,159.6	122.0	0.84	7,161.6	144.9	0.94
YEAUQW		6,938.8	-98.8	-0.68	6,938.0	-78.7	-0.51
YFGDHD	*	6,924.0	-113.6	-0.79	6,790.4	-226.3	-1.47

Summary Statistics	
Grand Means	7,037.63 psi 7,016.67 psi
Std Dev Btwn Labs	144.67 psi 154.42 psi
Statistics based on 68 of 70 reporting participants	

Sample F69: ABS & Sample F70: ABS

Comments on assigned Data Flags for Test #704

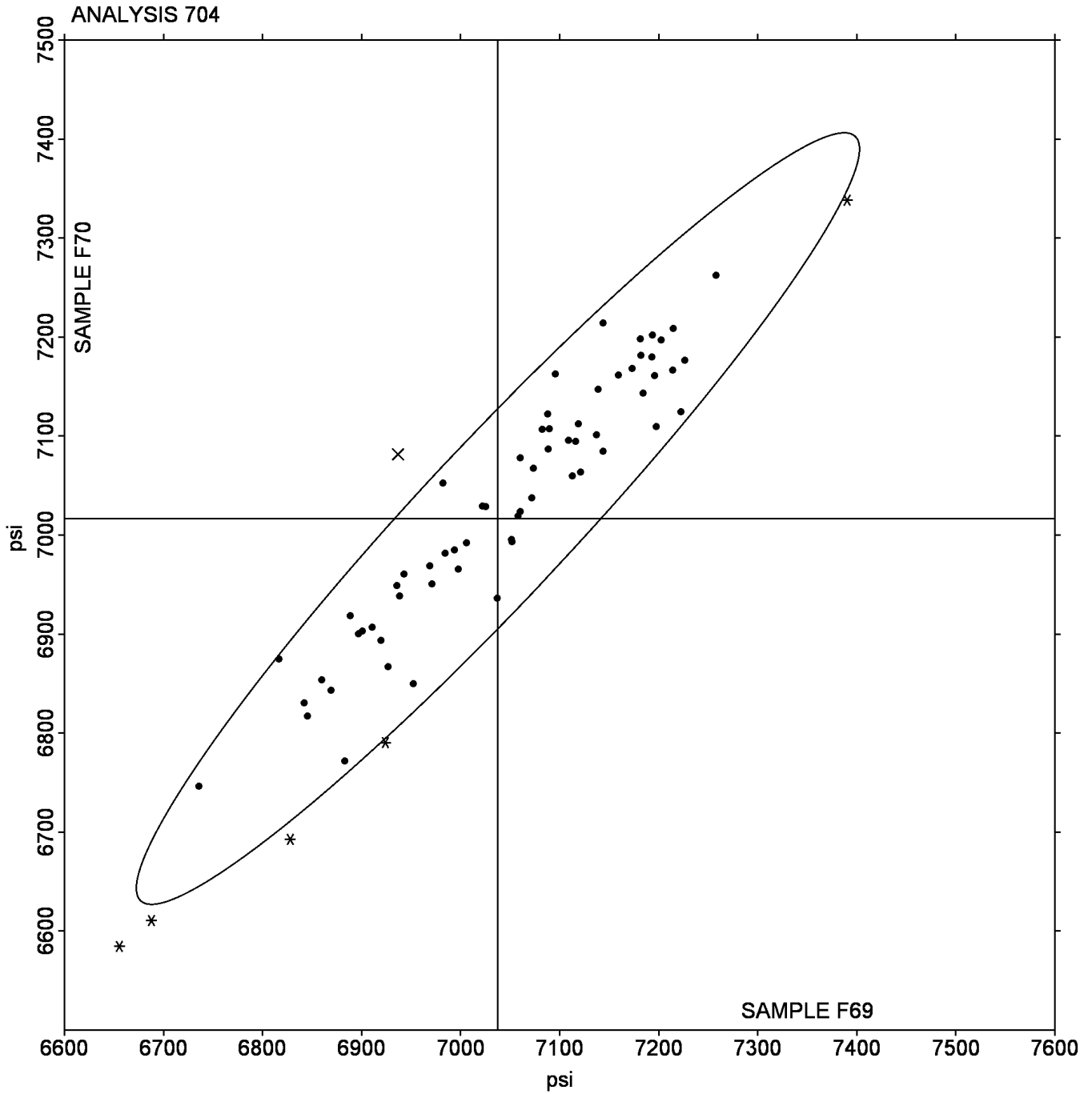
MDM7P5 (X) - Data for both samples are low. Possible Systematic Error.

WBJJTG (X) - Inconsistent in testing between samples.

Analysis 704

Tensile Stress at Yield - psi

Grand Mean Sample F69: 7,037.63 psi Grand Mean Sample F70: 7,016.67 psi



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

Analysis 705

Tensile Stress at Break - psi

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
11Z7JW		4,747.7	-337.5	-1.35	4,764.6	-315.1	-1.23
14ECNC		5,396.3	311.2	1.25	5,277.1	197.4	0.77
2HQDLM		5,464.0	378.9	1.52	5,513.4	433.7	1.70
2QCWJU	X	6,887.6	1,802.5	7.22	6,856.2	1,776.5	6.95
33S5CS		4,884.0	-201.1	-0.81	4,857.9	-221.8	-0.87
4R92D7		5,364.1	279.0	1.12	5,120.5	40.7	0.16
57L461		4,809.5	-275.7	-1.10	4,687.7	-392.1	-1.53
5QDAY2		5,500.2	415.0	1.66	5,519.6	439.9	1.72
5YHRJ7		4,687.2	-397.9	-1.59	4,529.0	-550.7	-2.15
6CYMCG		5,511.2	426.1	1.71	5,536.2	456.5	1.78
72RZFU		5,216.4	131.3	0.53	5,159.2	79.5	0.31
91AFRG		5,092.6	7.5	0.03	5,097.8	18.1	0.07
9C124Y		4,775.8	-309.3	-1.24	4,969.4	-110.3	-0.43
9VBG1C		5,533.2	448.1	1.80	5,398.6	318.9	1.25
ARRMPR		5,172.1	86.9	0.35	5,238.8	159.1	0.62
B7CJBD		5,208.0	122.9	0.49	5,152.8	73.1	0.29
BX5SNJ		5,203.4	118.3	0.47	5,202.8	123.1	0.48
CSZWSV		5,224.3	139.2	0.56	5,238.8	159.1	0.62
D9634R		5,365.4	280.3	1.12	5,445.0	365.3	1.43
DGS755		5,073.2	-12.0	-0.05	5,026.2	-53.5	-0.21
ETW5FB		4,628.6	-456.5	-1.83	4,744.8	-335.0	-1.31
EYXAJ8		4,924.0	-161.1	-0.65	5,104.0	24.3	0.09
FJ6CL1		5,022.0	-63.1	-0.25	5,000.0	-79.7	-0.31
GET34S		5,082.2	-2.9	-0.01	5,093.8	14.1	0.06
GME7JU		5,194.1	109.0	0.44	5,124.5	44.8	0.18
GPJFR6		4,927.1	-158.1	-0.63	5,005.6	-74.1	-0.29
H25L4F	X	4,480.0	-605.1	-2.42	4,134.0	-945.7	-3.70
HH1SV3		4,864.0	-221.1	-0.89	4,901.2	-178.5	-0.70
HPSV7F		4,971.8	-113.3	-0.45	4,756.2	-323.5	-1.26
JGWHN3	*	5,440.2	355.1	1.42	5,162.4	82.7	0.32
JU8661	X	6,497.5	1,412.3	5.66	6,466.7	1,387.0	5.42
JU9Z6U		4,810.8	-274.3	-1.10	4,677.8	-401.9	-1.57

Analysis 705

Tensile Stress at Break - psi

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LPM5SR		5,085.6	0.5	0.00	5,016.3	-63.4	-0.25
MBPRNM		5,235.9	150.8	0.60	5,259.1	179.4	0.70
MG2VT9		5,048.2	-36.9	-0.15	5,093.2	13.5	0.05
N8UVLF		5,186.9	101.7	0.41	5,230.4	150.7	0.59
NLWXQP		4,916.6	-168.5	-0.68	4,933.2	-146.5	-0.57
NWWLJ5	*	4,370.2	-714.9	-2.86	4,288.8	-790.9	-3.09
P522GN		5,016.0	-69.1	-0.28	5,122.0	42.3	0.17
PPCUKS		5,062.6	-22.5	-0.09	5,237.4	157.7	0.62
Q7SD53		5,197.3	112.2	0.45	5,363.5	283.8	1.11
QJKCY5		5,150.3	65.2	0.26	5,056.1	-23.7	-0.09
QKFYHN		4,965.2	-119.9	-0.48	4,984.6	-95.1	-0.37
R2CC8V		5,126.8	41.7	0.17	5,236.6	156.9	0.61
RW3YRY		5,113.6	28.4	0.11	5,127.9	48.2	0.19
ST1UQ2		5,260.0	174.9	0.70	5,371.2	291.5	1.14
SYJD5B		5,168.0	82.9	0.33	5,039.0	-40.7	-0.16
T1UY2X		5,117.8	32.7	0.13	5,079.6	-0.1	0.00
T9TF18		5,688.2	603.1	2.42	5,714.8	635.1	2.48
TLGMBP		5,018.3	-66.8	-0.27	4,873.3	-206.4	-0.81
TSDF9X		4,938.4	-146.7	-0.59	5,159.8	80.1	0.31
TTZGKL		5,102.8	17.7	0.07	5,044.6	-35.1	-0.14
V62CAT		4,989.4	-95.7	-0.38	4,932.4	-147.3	-0.58
VP9FF6		4,902.3	-182.8	-0.73	4,913.9	-165.8	-0.65
W56PB8		4,652.0	-433.1	-1.74	4,828.0	-251.7	-0.98
XE9A7F		4,945.2	-139.9	-0.56	4,919.4	-160.3	-0.63
XMD2ZA		5,091.6	6.5	0.03	5,081.6	1.9	0.01
Z7L92N		5,240.2	155.1	0.62	5,172.2	92.5	0.36

Analysis 705

Tensile Stress at Break - psi

Summary Statistics

Grand Means

5,085.15 psi

5,079.72 psi

Std Dev Btwn Labs

249.55 psi

255.77 psi

Statistics based on 55 of 58 reporting participants

Sample F69: ABS & Sample F70: ABS

Comments on assigned Data Flags for Test #705

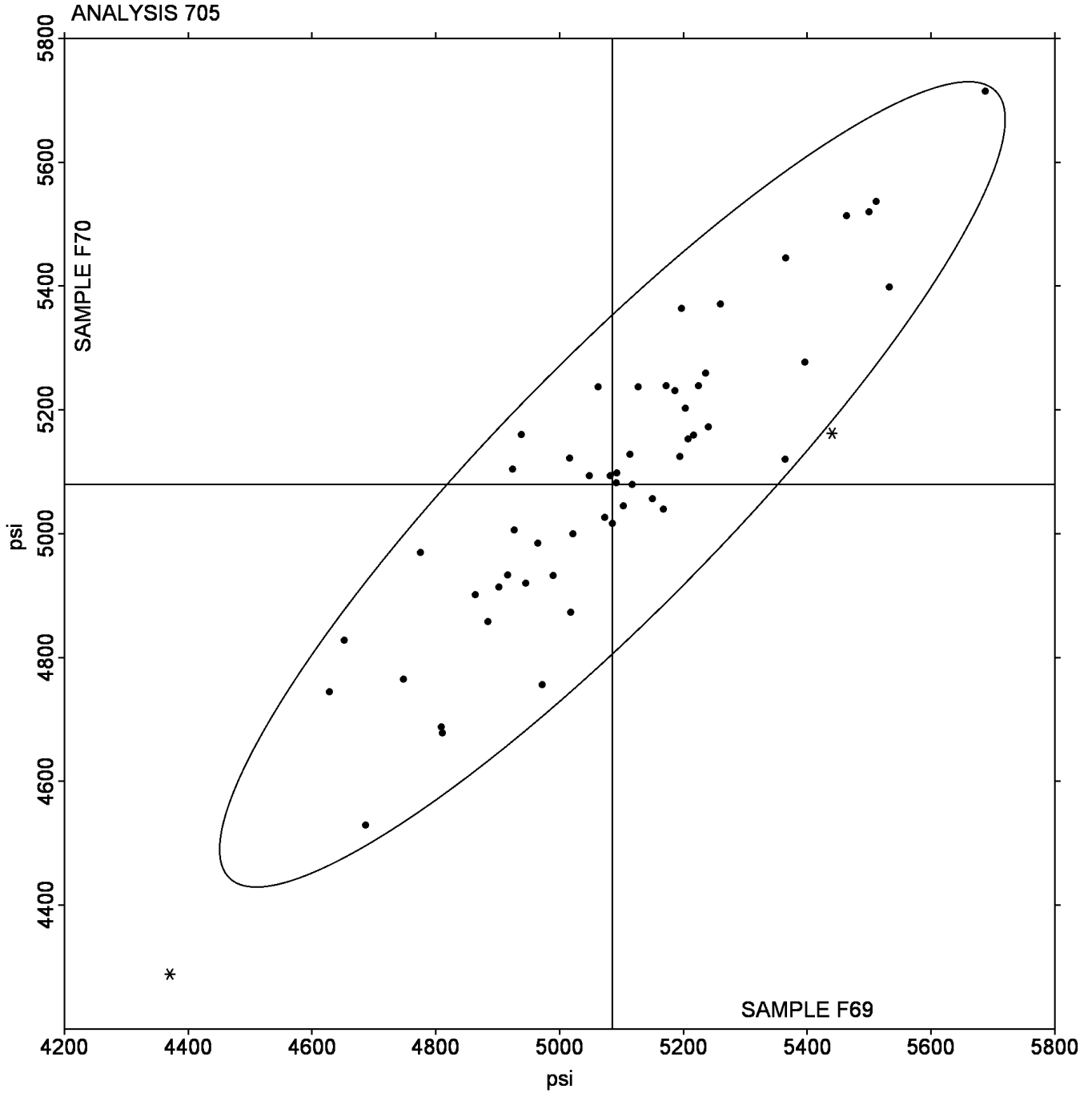
2QCWJU (X) - Data for both samples are high.

H25L4F (X) - Inconsistent in testing between samples, data for Sample F70 are low.

JU8661 (X) - High data for all samples.

Analysis 705
Tensile Stress at Break - psi

Grand Mean Sample F69: 5,085.15 psi Grand Mean Sample F70: 5,079.72 psi



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

Analysis 706

Percent Elongation at Yield - Percent

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1B5YF6		2.804	0.020	0.19	2.808	0.038	0.38
1D7YAY		2.656	-0.128	-1.17	2.638	-0.132	-1.31
2DAVEE		2.786	0.002	0.02	2.780	0.010	0.10
2QX7JV		2.920	0.136	1.25	2.852	0.082	0.82
2YWH37		2.830	0.046	0.43	2.774	0.004	0.04
3Z446D	X	2.848	0.064	0.59	2.536	-0.234	-2.32
49YAAP		2.900	0.116	1.07	2.810	0.040	0.40
4N9L9Q	X	2.572	-0.212	-1.94	2.434	-0.336	-3.33
5EEAQ2		2.804	0.020	0.19	2.858	0.088	0.88
614UR5		2.700	-0.084	-0.76	2.700	-0.070	-0.69
7B1QCJ		2.752	-0.032	-0.29	2.780	0.010	0.10
843GKQ		2.636	-0.148	-1.35	2.640	-0.130	-1.29
8ESJ8Z		2.752	-0.032	-0.29	2.690	-0.080	-0.79
915GHT		2.924	0.140	1.29	2.900	0.130	1.29
93NQCL		2.822	0.038	0.35	2.788	0.018	0.18
93Q5HE		2.772	-0.012	-0.11	2.758	-0.012	-0.12
A9J743		2.852	0.068	0.63	2.846	0.076	0.76
AKTCF1		2.802	0.018	0.17	2.776	0.006	0.06
ASVW3A		2.564	-0.220	-2.01	2.560	-0.210	-2.08
CNEGXP		2.720	-0.064	-0.58	2.700	-0.070	-0.69
CXC12P		2.766	-0.018	-0.16	2.814	0.044	0.44
DGFR9V		2.810	0.026	0.24	2.808	0.038	0.38
DMBDDZ	X	2.004	-0.780	-7.13	2.376	-0.394	-3.91
DQH5YC		2.804	0.020	0.19	2.792	0.022	0.22
EPJUQA		2.780	-0.004	-0.03	2.700	-0.070	-0.69
EVK9TQ		2.770	-0.014	-0.12	2.744	-0.026	-0.25
EZHPM7	X	7.102	4.318	39.52	7.166	4.396	43.64
FGQKYW	X	3.930	1.146	10.49	2.300	-0.470	-4.66
HFRZFD	*	3.040	0.256	2.35	3.046	0.276	2.74
HLFBJW		2.828	0.044	0.41	2.778	0.008	0.08
HXN1X7	*	2.470	-0.314	-2.87	2.550	-0.220	-2.18
KBCV8C		2.880	0.096	0.88	2.872	0.102	1.02

Analysis 706

Percent Elongation at Yield - Percent

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
M5X124		2.766	-0.018	-0.16	2.772	0.002	0.02
M6VEGY	X	7.838	5.054	46.25	7.700	4.930	48.93
PM3TH6		2.664	-0.120	-1.09	2.688	-0.082	-0.81
RQE96M		2.830	0.046	0.43	2.832	0.062	0.62
SCHFCKX		2.770	-0.014	-0.12	2.748	-0.022	-0.21
SS2AMU		2.782	-0.002	-0.01	2.726	-0.044	-0.43
UB6KQP		2.868	0.084	0.77	2.836	0.066	0.66
UDE5NH		2.812	0.028	0.26	2.794	0.024	0.24
UMEME1		2.598	-0.186	-1.70	2.580	-0.190	-1.88
UMJDUJ	X	7.700	4.916	44.99	7.000	4.230	41.99
VTULH8	X	8.420	5.636	51.58	8.262	5.492	54.52
W6TJHQ		2.814	0.030	0.28	2.784	0.014	0.14
WA7P54	*	2.832	0.048	0.44	2.700	-0.070	-0.69
WP26TR		2.586	-0.198	-1.81	2.654	-0.116	-1.15
WUY5KD		2.822	0.038	0.35	2.822	0.052	0.52
ZG16NU	X	2.244	-0.540	-4.94	2.274	-0.496	-4.92
ZG64VN		2.900	0.116	1.07	2.920	0.150	1.49
ZJDRHN	X	2.281	-0.503	-4.60	2.418	-0.352	-3.49
ZLNNAX		2.936	0.152	1.40	2.938	0.168	1.67

Summary Statistics			
Grand Means	2.7835	Percent	2.7697
Std Dev Btwn Labs	0.1093	Percent	0.1007
Statistics based on 41 of 51 reporting participants			

Sample F69: ABS & Sample F70: ABS

Analysis 706

Percent Elongation at Yield - Percent

Comments on assigned Data Flags for Test #706

3Z446D (X) - Inconsistent in testing between samples and inconsistent in testing within Sample F69.

4N9L9Q (X) - Inconsistent in testing between samples, data for Sample F70 are low.

DMBDDZ (X) - Data for both samples are low

EZHPM7 (X) - Data for both samples are high.

FGQKYW (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

M6VEGY (X) - Data for both samples are high.

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

VTULH8 (X) - Data for both samples are high.

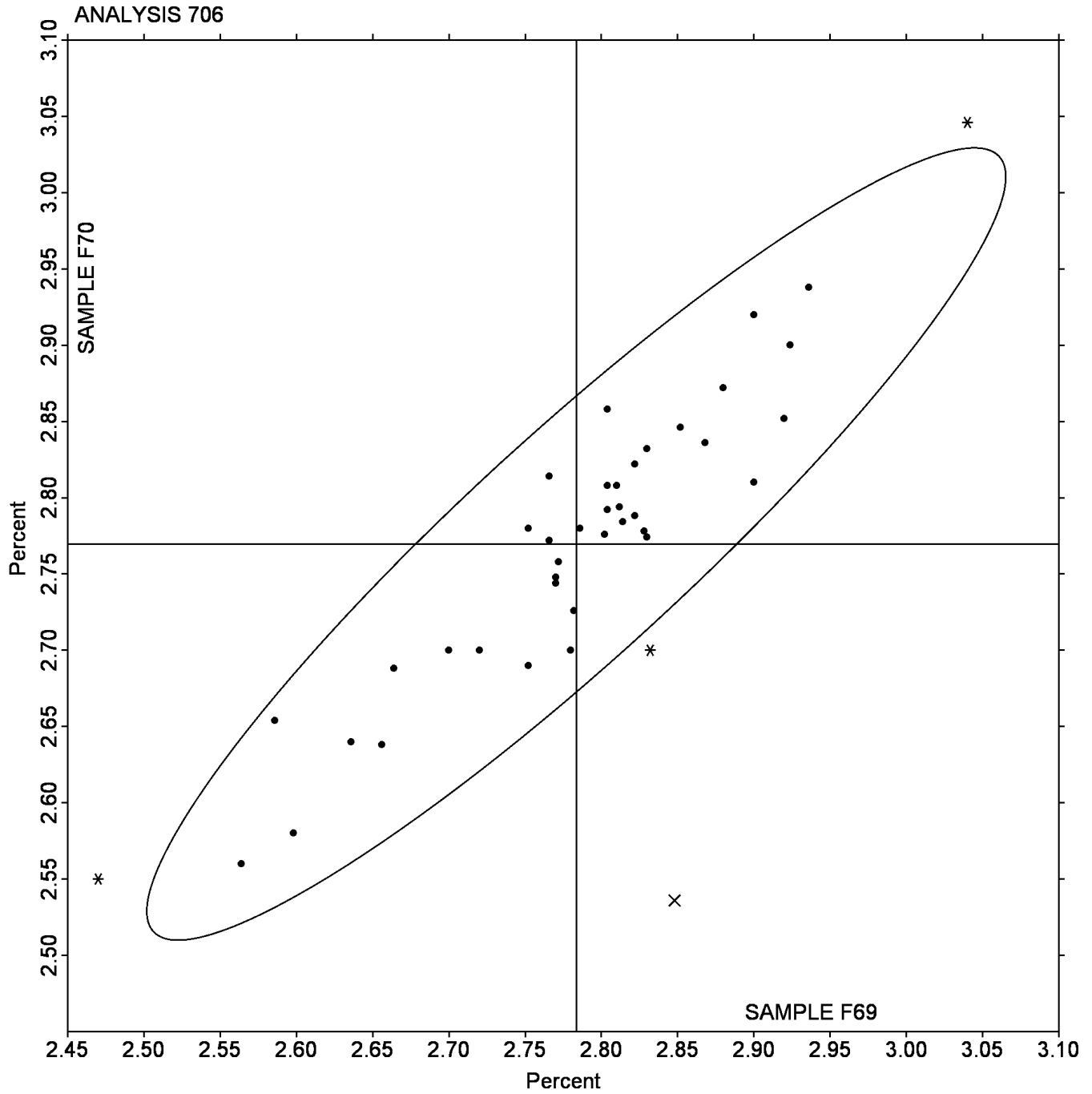
ZG16NU (X) - Data for both samples are low. Also inconsistent in testing within both sample sets.

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

Analysis 706

Percent Elongation at Yield - Percent

Grand Mean Sample F69: 2.7835 Percent Grand Mean Sample F70: 2.7697 Percent



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

Plastics Interlaboratory Testing Program
Analysis 708
Modulus of Elasticity - ksi

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
166NS7		351.37	1.59	0.07	349.86	-0.47	-0.02
213Z6B		363.14	13.36	0.57	355.92	5.59	0.27
27KMNU		351.40	1.62	0.07	345.80	-4.53	-0.22
3Z3U8S		347.98	-1.80	-0.08	353.90	3.56	0.17
4QPRFT	X	397.60	47.82	2.05	350.60	0.27	0.01
5HK8JN		306.79	-42.99	-1.84	306.60	-43.73	-2.15
5QCB1K		361.62	11.84	0.51	363.60	13.27	0.65
6GS5D7		338.28	-11.50	-0.49	353.06	2.73	0.13
6WAUL7		353.70	3.92	0.17	340.12	-10.21	-0.50
7UJNT3		346.99	-2.79	-0.12	344.59	-5.75	-0.28
8MYVMF		314.44	-35.34	-1.51	314.32	-36.01	-1.77
BBEVEB		331.20	-18.58	-0.80	328.80	-21.53	-1.06
BET2R7		363.32	13.54	0.58	358.06	7.73	0.38
CQMX6D	X	359.80	10.02	0.43	443.38	93.05	4.57
D178P6		351.55	1.77	0.08	348.59	-1.75	-0.09
DK6Y3J		314.89	-34.89	-1.49	338.57	-11.76	-0.58
EEE9F7		342.48	-7.30	-0.31	341.77	-8.56	-0.42
ES75PF		361.20	11.42	0.49	366.63	16.30	0.80
EZPU97		346.64	-3.14	-0.13	352.70	2.37	0.12
FQFY4M		330.07	-19.71	-0.84	330.56	-19.77	-0.97
FXSNK3		365.61	15.83	0.68	368.51	18.18	0.89
G6VTLA		371.55	21.77	0.93	370.35	20.02	0.98
JPJ1QJ		335.88	-13.90	-0.60	329.38	-20.95	-1.03
JUQLJH	X	399.98	50.20	2.15	422.66	72.33	3.55
K2575B		327.05	-22.73	-0.97	326.12	-24.21	-1.19
K2RJCE		346.90	-2.88	-0.12	357.68	7.35	0.36
KC3ZLQ		336.88	-12.90	-0.55	334.76	-15.57	-0.76
KRW5FZ		303.09	-46.70	-2.00	318.10	-32.24	-1.58
KW528T		350.32	0.54	0.02	342.51	-7.83	-0.38
LNNP7U		345.42	-4.36	-0.19	348.04	-2.29	-0.11
M2V4LY	X	132.41	-217.37	-9.31	136.03	-214.31	-10.52
PPNESL		371.82	22.04	0.94	372.90	22.56	1.11

**Plastics Interlaboratory Testing Program
Analysis 708
Modulus of Elasticity - ksi**

WebCode	Data Flag	Sample F69			Sample F70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RGGS1D	X	95.73	-254.05	-10.88	96.07	-254.26	-12.48
RQPKDE		363.08	13.30	0.57	363.46	13.13	0.64
SKR292	*	422.27	72.49	3.10	404.52	54.19	2.66
T7D87L		342.00	-7.78	-0.33	343.80	-6.53	-0.32
VAY66P	*	339.54	-10.24	-0.44	367.32	16.99	0.83
VLHJ9W		365.00	15.22	0.65	362.08	11.75	0.58
X8NGTV		406.88	57.10	2.44	402.00	51.67	2.54
YJL2ZP	X	109.56	-240.22	-10.29	112.00	-238.33	-11.70
YVLWT3		368.81	19.03	0.81	365.05	14.72	0.72
YVY5BY		358.70	8.92	0.38	344.66	-5.67	-0.28
YWWCV4		332.23	-17.55	-0.75	338.93	-11.40	-0.56
ZPJADE		361.58	11.80	0.51	359.00	8.67	0.43

Summary Statistics	
Grand Means	349.780 ksi 350.332 ksi
Std Dev Btwn Labs	23.356 ksi 20.378 ksi
Statistics based on 38 of 44 reporting participants	

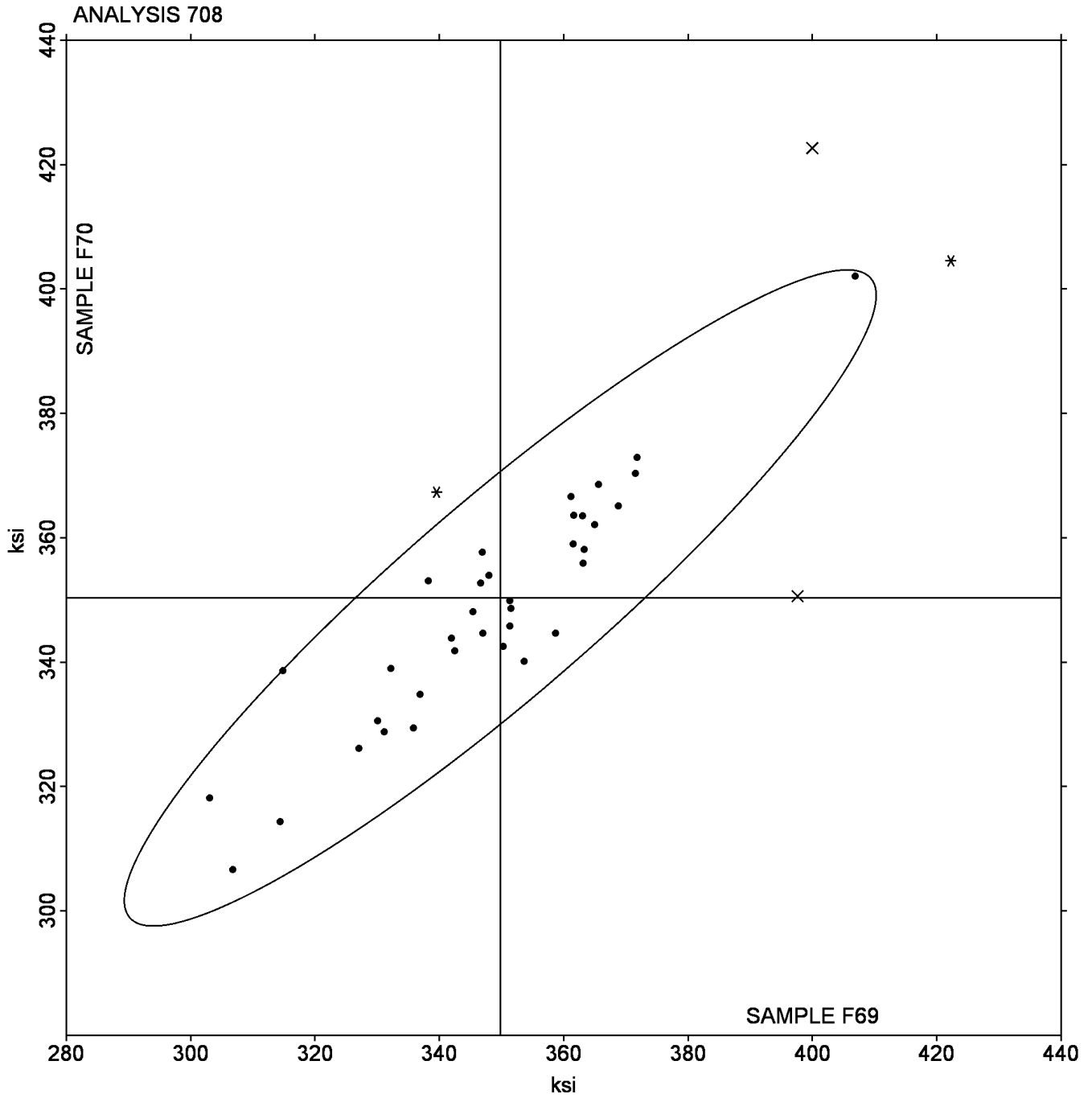
Sample F69: ABS & Sample F70: ABS

Comments on assigned Data Flags for Test #708

- 4QPRFT (X) - Inconsistent in testing between samples and inconsistent in testing within Sample F70.
- CQMX6D (X) - Inconsistent in testing between samples, data for Sample F70 are high. Also inconsistent in testing within both sample sets.
- JUQLJH (X) - Inconsistent in testing between samples, data for Sample F70 are high. Also inconsistent in testing within Sample Set F70.
- M2V4LY (X) - Low data for both samples.
- RGGS1D (X) - Low data for both samples.
- YJL2ZP (X) - Low data for both samples.

Plastics Interlaboratory Testing Program
Analysis 708
Modulus of Elasticity - ksi

Grand Mean Sample F69: 349.78 ksi Grand Mean Sample F70: 350.33 ksi



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

Analysis 730

Tensile Stress at Yield - MPa

WebCode	Data Flag	Sample C69			Sample C70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2P6YMD		29.42	1.11	1.03	29.73	1.26	1.18
3F4DDR		27.86	-0.45	-0.42	27.57	-0.90	-0.84
44UEGH		28.90	0.59	0.55	28.84	0.37	0.34
4LB4N9		28.20	-0.11	-0.10	29.48	1.01	0.94
4UY7BC		28.62	0.31	0.29	28.41	-0.07	-0.06
56ALJ5		27.92	-0.39	-0.36	28.51	0.04	0.04
6GPPXT		29.84	1.53	1.42	29.61	1.14	1.06
6HSJ4R		28.31	0.00	0.00	29.14	0.66	0.62
6MUW9C		29.13	0.82	0.76	30.09	1.62	1.51
6UHF44		28.93	0.62	0.58	28.75	0.28	0.26
6X14DX	*	25.49	-2.82	-2.61	25.48	-2.99	-2.80
6YSBBF		26.78	-1.53	-1.42	27.68	-0.79	-0.74
7DP2CP		28.37	0.06	0.06	27.97	-0.50	-0.47
7W7ZT8		29.19	0.88	0.81	29.11	0.64	0.59
7WCTQ2		28.80	0.49	0.45	28.52	0.05	0.05
88ERSG		29.49	1.18	1.09	29.73	1.26	1.17
A4KAUL		27.08	-1.23	-1.14	27.28	-1.19	-1.11
AVBC78		30.26	1.95	1.80	30.09	1.62	1.51
BD37DG		28.22	-0.09	-0.08	28.34	-0.13	-0.12
BUG78U		28.26	-0.05	-0.05	27.90	-0.57	-0.54
C4T798		30.08	1.77	1.64	29.74	1.27	1.18
C73KE2		27.04	-1.27	-1.17	27.90	-0.57	-0.53
DV16G4		29.44	1.13	1.05	29.24	0.77	0.72
ESEAGV		27.60	-0.71	-0.66	26.82	-1.65	-1.54
F15PWN		28.75	0.44	0.41	29.86	1.39	1.30
FTFZMS		28.12	-0.19	-0.18	28.10	-0.37	-0.35
HEJYY8		27.55	-0.76	-0.70	27.45	-1.02	-0.96
HYT639		28.15	-0.16	-0.15	27.31	-1.16	-1.08
J3CP94		27.33	-0.98	-0.90	27.67	-0.80	-0.75
J6L677		27.74	-0.57	-0.52	28.44	-0.03	-0.03
JGVGWS		27.90	-0.41	-0.38	27.96	-0.51	-0.48
JPCYFC		29.04	0.73	0.67	29.10	0.62	0.58

Plastics Interlaboratory Testing Program
Analysis 730
Tensile Stress at Yield - MPa

WebCode	Data Flag	Sample C69			Sample C70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
KR6K2N		28.69	0.38	0.35	28.02	-0.45	-0.42
KV8UJN	*	25.56	-2.75	-2.55	26.57	-1.91	-1.78
MBPQ2P		30.14	1.83	1.69	30.92	2.45	2.29
MSSQSW		28.29	-0.02	-0.02	28.25	-0.22	-0.21
NFJTLU		28.51	0.20	0.19	28.44	-0.03	-0.03
NRCF6W		29.00	0.69	0.64	28.96	0.49	0.46
RBGYJN	X	26.09	-2.22	-2.05	28.07	-0.40	-0.37
RTYH1F		30.33	2.02	1.87	30.34	1.87	1.74
RZM49U		28.93	0.62	0.57	29.17	0.69	0.65
SGVKF2		27.15	-1.16	-1.07	27.62	-0.85	-0.79
TYQP9N		28.58	0.27	0.25	28.23	-0.24	-0.23
UTGM1R		27.42	-0.89	-0.82	28.54	0.07	0.06
VBZU1S		28.93	0.62	0.58	29.38	0.91	0.85
VE8SP9		28.45	0.14	0.13	28.48	0.01	0.00
W6UX6R		26.70	-1.61	-1.49	27.34	-1.14	-1.06
X5V16T		28.99	0.68	0.63	28.86	0.39	0.36
X75FS3		26.33	-1.98	-1.84	26.08	-2.39	-2.23
XMP484		28.88	0.57	0.53	29.10	0.63	0.59
XRWM2C		27.67	-0.64	-0.59	28.49	0.02	0.02
YN1JCA		27.99	-0.32	-0.30	27.87	-0.60	-0.57
Z1JQQW		28.79	0.48	0.44	28.88	0.40	0.38
ZUBLYQ		27.24	-1.07	-0.99	27.70	-0.77	-0.72

Summary Statistics	
Grand Means	28.309 MPa 28.473 MPa
Std Dev Btwn Labs	1.080 MPa 1.070 MPa
Statistics based on 53 of 54 reporting participants	

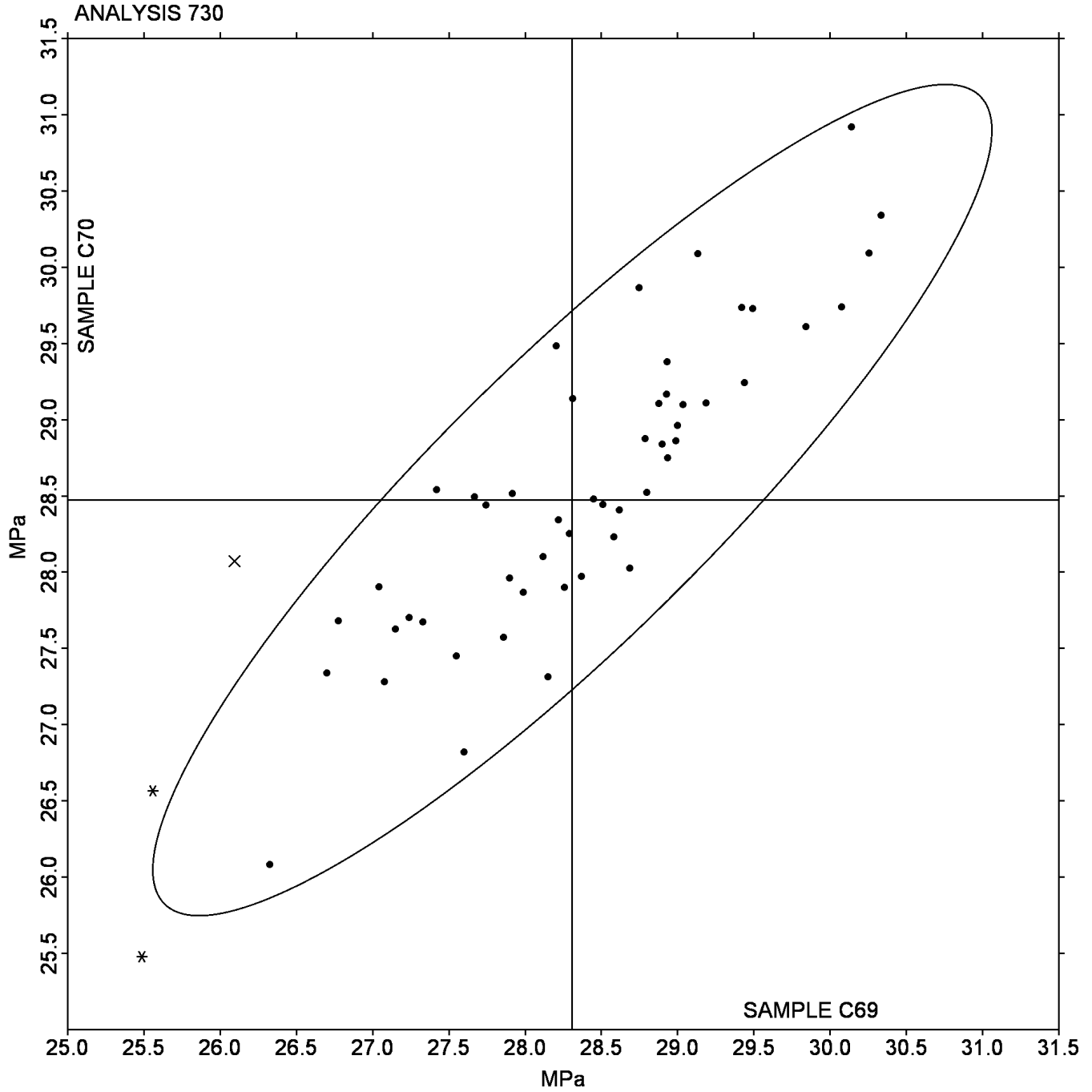
Sample C69: HIPS & Sample C70: HIPS

Comments on assigned Data Flags for Test #730

RBGYJN (X) - Inconsistent in testing between samples.

Analysis 730
Tensile Stress at Yield - MPa

Grand Mean Sample C69: 28.309 MPa Grand Mean Sample C70: 28.473 MPa



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

Plastics Interlaboratory Testing Program

Analysis 731

Tensile Stress at Break - MPa

WebCode	Data Flag	Sample C69			Sample C70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1MLUA9		24.51	1.24	1.62	23.93	0.34	0.47
1Y4JVG		23.16	-0.10	-0.14	23.66	0.08	0.10
2HHUJ6		23.76	0.50	0.64	23.66	0.08	0.10
3QUZJM		22.40	-0.87	-1.13	23.21	-0.38	-0.52
458FLA		23.54	0.27	0.36	23.79	0.20	0.28
53B9N5		22.87	-0.40	-0.52	23.48	-0.10	-0.14
56JCW7		23.32	0.06	0.07	23.26	-0.32	-0.45
59D4CC		22.89	-0.37	-0.49	23.17	-0.42	-0.58
6FCE1B		23.63	0.37	0.48	24.27	0.69	0.95
6K27LQ		23.02	-0.24	-0.32	22.90	-0.68	-0.95
6MPYZV	X	20.10	-3.17	-4.13	19.92	-3.66	-5.06
79GHHR	*	22.93	-0.34	-0.44	24.78	1.19	1.65
C9BAPJ		24.33	1.07	1.39	23.28	-0.30	-0.42
CD1WX7		23.13	-0.13	-0.18	24.74	1.16	1.60
CZRU6A		22.31	-0.96	-1.25	23.42	-0.16	-0.22
D3S8H8		23.52	0.25	0.33	24.18	0.59	0.82
DFFCMH		23.48	0.21	0.28	23.55	-0.04	-0.05
DZJD28		23.53	0.27	0.35	23.85	0.26	0.36
F51E8D		22.62	-0.64	-0.83	22.85	-0.74	-1.02
GSUNBM		22.62	-0.64	-0.84	22.97	-0.61	-0.84
HFB441		24.93	1.66	2.16	24.99	1.41	1.95
JW95C5		22.64	-0.62	-0.81	23.14	-0.44	-0.61
JZMN2V		23.61	0.34	0.44	24.03	0.44	0.61
K3NHB5		23.79	0.53	0.69	24.00	0.42	0.57
KJ6CR8		23.58	0.31	0.41	23.55	-0.03	-0.05
N3DNGN	*	24.68	1.42	1.84	25.54	1.96	2.70
PZ394E		23.71	0.45	0.58	23.79	0.20	0.28
QF9AHV		22.48	-0.79	-1.03	23.47	-0.11	-0.16
QTR84V		24.71	1.45	1.89	24.51	0.92	1.28
QW1L8P		22.59	-0.68	-0.88	23.00	-0.58	-0.81
SB4CV7		22.18	-1.09	-1.42	22.57	-1.01	-1.40
T5TNPG		23.64	0.38	0.49	24.06	0.47	0.65

Analysis 731

Tensile Stress at Break - MPa

WebCode	Data Flag	Sample C69			Sample C70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
UGWQ9X		23.43	0.16	0.21	23.37	-0.22	-0.30
UQHYC9		23.29	0.02	0.03	23.49	-0.09	-0.13
V5XQ38		22.78	-0.48	-0.63	23.04	-0.54	-0.75
VA9D2J		24.24	0.98	1.27	24.86	1.28	1.76
VR96AR		21.91	-1.35	-1.76	22.42	-1.16	-1.61
WZGR1D		23.28	0.02	0.02	22.96	-0.62	-0.86
X19JDP		22.80	-0.46	-0.61	22.46	-1.12	-1.55
X67T7P		21.68	-1.58	-2.06	23.27	-0.31	-0.43
XK5VDA		22.07	-1.19	-1.55	22.13	-1.46	-2.01
XU3UT3		24.06	0.80	1.04	23.71	0.13	0.17
YUCWLG		23.73	0.46	0.61	23.24	-0.35	-0.48
ZLL7QK		23.02	-0.24	-0.32	23.60	0.02	0.02

Summary Statistics

Grand Means

23.265 MPa

23.585 MPa

Std Dev Btwn Labs

0.768 MPa

0.723 MPa

Statistics based on 43 of 44 reporting participants

Sample C69: HIPS & Sample C70: HIPS

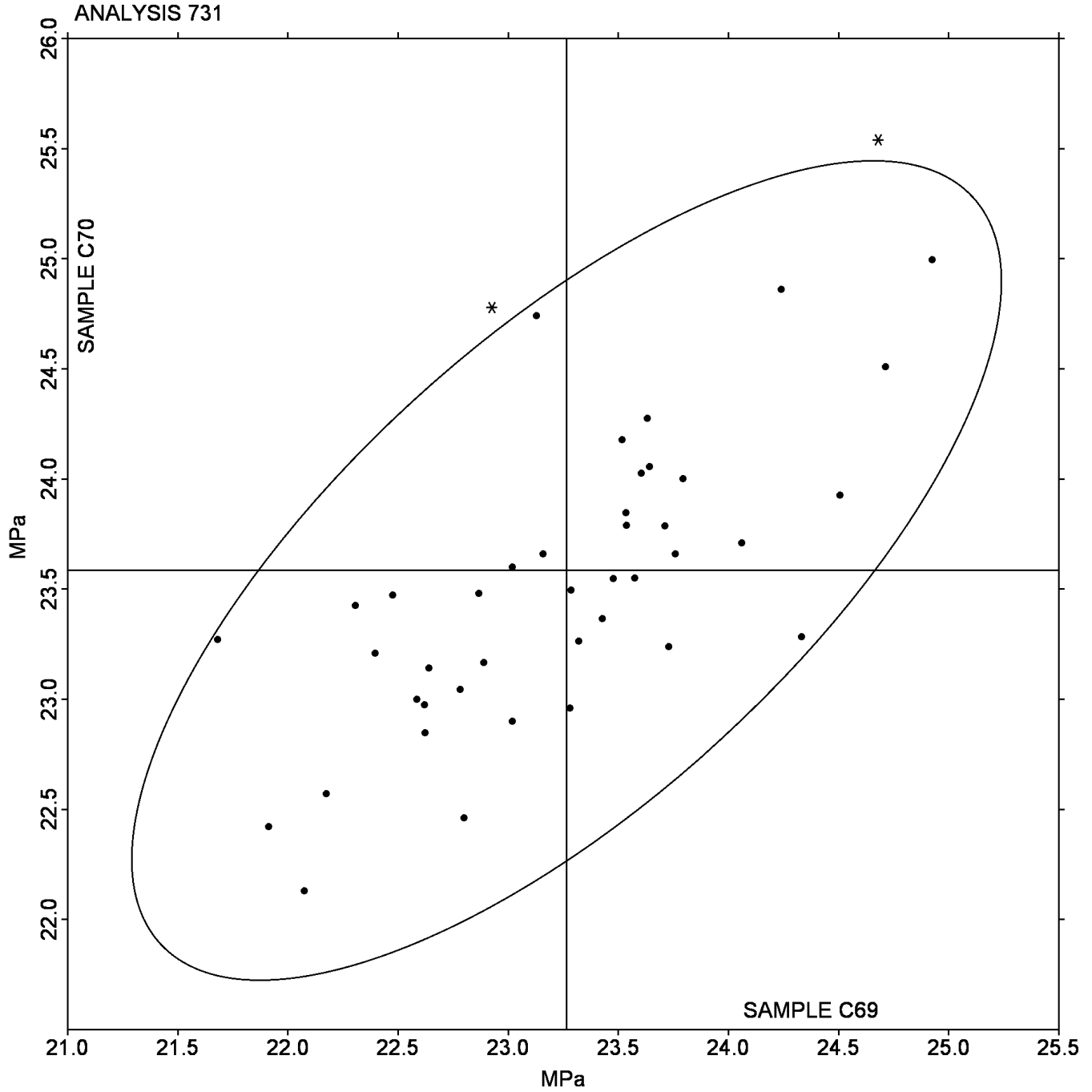
Comments on assigned Data Flags for Test #731

6MPYZV (X) - Data for both samples are low.

Analysis 731

Tensile Stress at Break - MPa

Grand Mean Sample C69: 23.265 MPa Grand Mean Sample C70: 23.585 MPa



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

Analysis 732
Percent Strain at Yield

WebCode	Data Flag	Sample C69			Sample C70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
16WMCD		1.400	-0.092	-1.32	1.400	-0.091	-1.40
1DLEEY		1.556	0.064	0.91	1.518	0.027	0.42
1GB1CM	X	1.200	-0.292	-4.17	1.240	-0.251	-3.87
2777WR		1.488	-0.004	-0.06	1.492	0.001	0.02
3D819J		1.592	0.100	1.42	1.584	0.093	1.43
41NAEU	*	1.310	-0.182	-2.60	1.324	-0.167	-2.57
4J6ZYM		1.484	-0.008	-0.12	1.452	-0.039	-0.60
4PTY2G		1.636	0.144	2.05	1.622	0.131	2.02
6132RB		1.516	0.023	0.33	1.505	0.014	0.21
85NCLC		1.500	0.008	0.11	1.488	-0.003	-0.04
8NNAC7		1.482	-0.010	-0.15	1.478	-0.013	-0.20
8QWXZ7		1.372	-0.120	-1.72	1.400	-0.091	-1.40
8VR79Q		1.490	-0.002	-0.03	1.500	0.009	0.14
8WAD2A		1.500	0.008	0.11	1.498	0.007	0.11
935DJ2		1.570	0.078	1.11	1.552	0.061	0.94
A14H1C		1.408	-0.084	-1.20	1.394	-0.097	-1.49
A5ZNMP		1.406	-0.086	-1.23	1.406	-0.085	-1.31
ADP4XQ		1.608	0.116	1.65	1.590	0.099	1.53
BBJ35C		1.506	0.013	0.19	1.509	0.018	0.28
BQ19SD		1.442	-0.050	-0.72	1.408	-0.083	-1.28
CQ86H3		1.524	0.032	0.45	1.512	0.021	0.32
CYVVTR		1.546	0.054	0.77	1.528	0.037	0.57
E53RD4		1.480	-0.012	-0.17	1.468	-0.023	-0.35
ETXLNN	X	0.956	-0.536	-7.66	0.974	-0.517	-7.96
G1S5FV		1.580	0.088	1.25	1.550	0.059	0.91
GVRD96		1.488	-0.004	-0.06	1.532	0.041	0.63
H9T6P7		1.578	0.086	1.22	1.600	0.109	1.68
J3BDKZ		1.522	0.030	0.42	1.560	0.069	1.06
LUT51R		1.468	-0.024	-0.35	1.434	-0.057	-0.88
LXQGDV		1.508	0.016	0.22	1.490	-0.001	-0.01
M5X2VR		1.500	0.008	0.11	1.500	0.009	0.14
NFK9RD		1.392	-0.100	-1.43	1.410	-0.081	-1.25

**Plastics Interlaboratory Testing Program
Analysis 732
Percent Strain at Yield**

WebCode	Data Flag	Sample C69			Sample C70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
R45KY7	X	2.072	0.580	8.28	1.892	0.401	6.18
RAXJQ7		1.480	-0.012	-0.17	1.490	-0.001	-0.01
S7XUXR		1.408	-0.084	-1.20	1.428	-0.063	-0.97
SBQWUC		1.452	-0.040	-0.57	1.446	-0.045	-0.69
SZUBG8	X	2.286	0.794	11.33	2.276	0.785	12.10
T56N6L		1.442	-0.050	-0.72	1.478	-0.013	-0.20
TA6AVT	*	1.476	-0.016	-0.23	1.548	0.057	0.88
VFQEJF		1.448	-0.044	-0.63	1.484	-0.007	-0.11
WL767S		1.580	0.088	1.25	1.520	0.029	0.45
XS7FT8		1.492	0.000	0.00	1.484	-0.007	-0.11
Y6SMQC		1.568	0.076	1.08	1.564	0.073	1.13

Summary Statistics			
Grand Means	1.4922	Percent	1.4909
Std Dev Btwn Labs	0.0700	Percent	0.0649
Statistics based on 39 of 43 reporting participants			

Sample C69: HIPS & Sample C70: HIPS

Comments on assigned Data Flags for Test #732

1GB1CM (X) - Data for both samples are low. Possible Systematic Error.

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

R45KY7 (X) - Data for both samples are high. Also inconsistent in testing within Sample Set C69.

SZUBG8 (X) - Data for both samples are high.

Analysis 734

Modulus of Elasticity - MPa

WebCode	Data Flag	Sample C69			Sample C70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3YEN65		2,164	-1	-0.01	2,060	-108	-1.16
44XZNH		2,016	-150	-1.64	2,014	-154	-1.66
4FEZJW		2,150	-15	-0.17	2,154	-13	-0.14
51MXPZ		2,169	4	0.04	2,200	32	0.35
5ATDDQ		2,032	-134	-1.47	2,111	-57	-0.61
7WYAYH		1,957	-209	-2.29	1,931	-237	-2.55
7YMTVA		2,147	-18	-0.20	2,157	-11	-0.12
82GV9A		2,159	-7	-0.07	2,147	-20	-0.22
964WE9		2,188	23	0.25	2,235	67	0.72
9ZBQN2		2,137	-28	-0.31	2,151	-17	-0.18
A6PZCF		1,996	-169	-1.86	2,016	-152	-1.63
AACCCB		2,142	-23	-0.26	2,160	-8	-0.08
BAUN65		2,111	-54	-0.59	2,111	-57	-0.61
CF6YZA	*	2,334	169	1.85	2,226	58	0.63
CGQ76C		2,156	-9	-0.10	2,192	24	0.26
D75K8A		2,293	127	1.40	2,274	107	1.15
D8Q5EJ		2,255	90	0.99	2,240	72	0.77
DJBSLM		2,143	-22	-0.24	2,189	21	0.23
DZP3RK		2,099	-66	-0.73	2,058	-110	-1.18
H2VKR6		2,113	-52	-0.57	2,137	-31	-0.33
K1JQVC		2,210	45	0.49	2,222	55	0.59
KCECST		2,224	59	0.65	2,225	57	0.61
KHW2WV		2,273	108	1.18	2,273	105	1.13
LKELXT		2,142	-24	-0.26	2,143	-24	-0.26
LKNATJ		2,319	153	1.68	2,350	182	1.96
LTQ6HV		2,096	-69	-0.76	2,120	-48	-0.52
M8QBEY	*	2,399	234	2.57	2,348	181	1.94
ME7BQP		2,165	0	0.00	2,193	25	0.27
NVMZ9Q		2,184	18	0.20	2,161	-7	-0.08
P739EA		2,158	-7	-0.08	2,177	9	0.10
QFJDVR		2,091	-74	-0.82	2,127	-41	-0.44
ST7XNU		2,180	15	0.16	2,199	32	0.34

Plastics Interlaboratory Testing Program
Analysis 734
Modulus of Elasticity - MPa

WebCode	Data Flag	Sample C69			Sample C70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
SW1PAK		2,182	17	0.19	2,214	46	0.50
UNTEN5		2,293	127	1.40	2,369	201	2.16
UVVLKL	*	2,131	-35	-0.38	2,027	-140	-1.51
W85SV4		2,203	38	0.41	2,186	18	0.19
WN7382		2,165	0	0.00	2,190	23	0.24
YB6EZ4	X	2,177	12	0.13	2,543	376	4.04
ZAKMJL		2,106	-59	-0.65	2,092	-76	-0.82

Summary Statistics

Grand Means

2,165.3 MPa

2,167.9 MPa

Std Dev Btwn Labs

91.2 MPa

93.0 MPa

Statistics based on 38 of 39 reporting participants

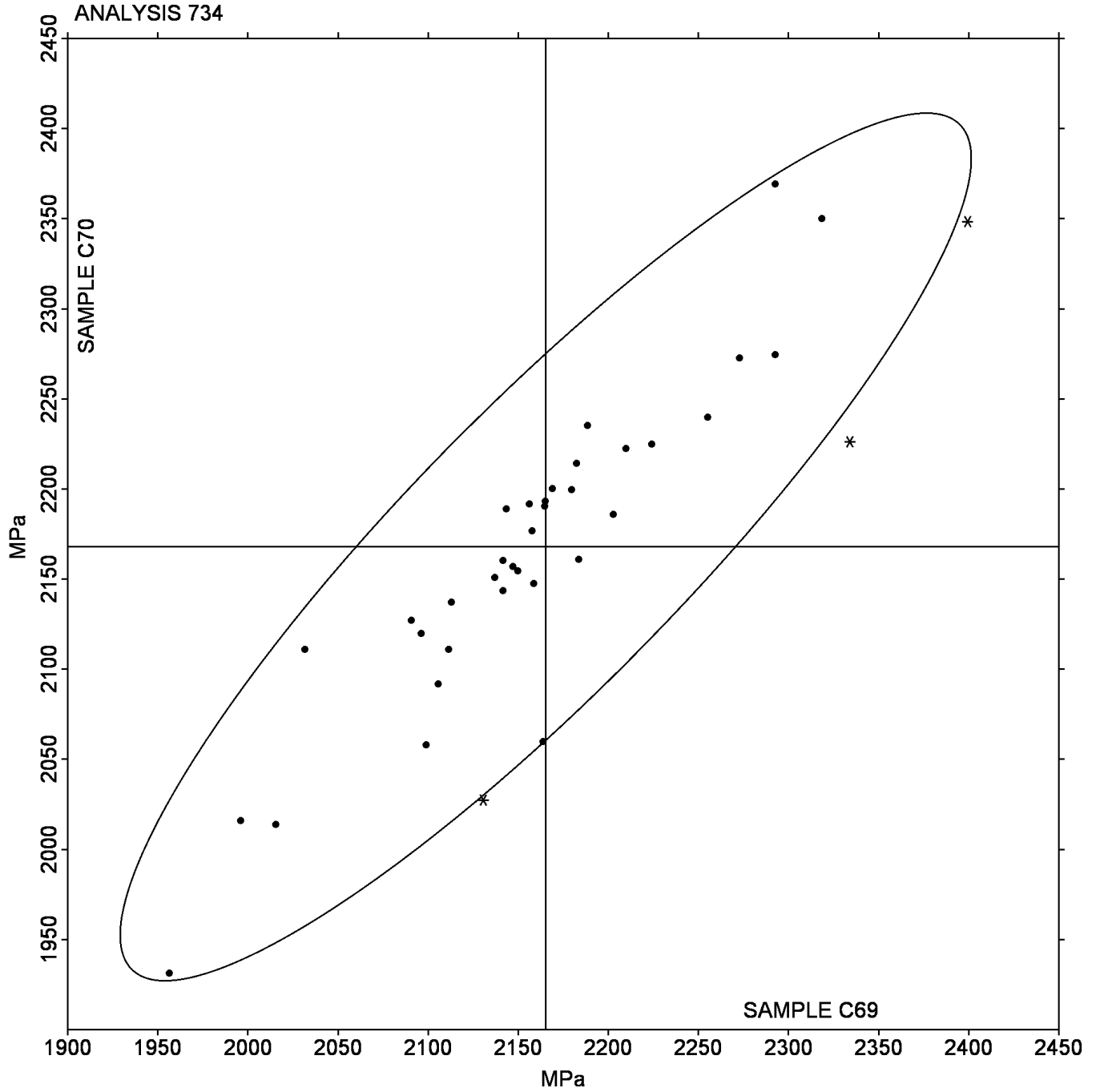
Sample C69: HIPS & Sample C70: HIPS

Comments on assigned Data Flags for Test #734

YB6EZ4 (X) - Inconsistent in testing between samples, data for Sample C70 are high. Also inconsistent in testing within sample C70.

Analysis 734
Modulus of Elasticity - MPa

Grand Mean Sample C69: 2,165.25 MPa Grand Mean Sample C70: 2,167.86 MPa



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

Plastics Interlaboratory Testing Program
Analysis 720
Flexural Modulus- ksi

WebCode	Data Flag	Sample J69			Sample J70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
15WPYB		363.4	-10.3	-0.52	358.4	-12.5	-0.64
16FWGR		376.0	2.2	0.11	369.1	-1.8	-0.09
27NJDV		371.4	-2.4	-0.12	368.4	-2.5	-0.13
3RN9RQ	X	441.0	67.2	3.39	443.8	72.9	3.75
46M8KE		334.6	-39.1	-1.97	337.0	-34.0	-1.75
4E4QH8		362.7	-11.1	-0.56	359.0	-11.9	-0.61
5KCLKGQ		360.7	-13.1	-0.66	357.2	-13.7	-0.71
5LWTZ3		401.2	27.4	1.38	399.7	28.8	1.48
6TNWZJ		366.6	-7.2	-0.36	365.8	-5.1	-0.26
7X6LLM	*	398.2	24.4	1.23	402.0	31.1	1.60
884NEG		406.8	33.0	1.67	404.3	33.4	1.72
89ELVJ	X	321.2	-52.6	-2.65	330.6	-40.3	-2.07
8B9T7G		402.2	28.4	1.43	400.3	29.4	1.51
8BH14Q		344.9	-28.8	-1.45	343.4	-27.5	-1.42
8EL6PH		374.0	0.2	0.01	367.6	-3.3	-0.17
9LFRX5		382.0	8.3	0.42	382.3	11.4	0.59
A6ENKQ		379.5	5.7	0.29	379.0	8.1	0.42
AHPMDS		375.0	1.2	0.06	375.4	4.5	0.23
B7VV5X		377.3	3.5	0.18	371.5	0.6	0.03
C2QYBX		372.4	-1.4	-0.07	371.4	0.5	0.02
CA57SL	X	364.3	-9.5	-0.48	338.1	-32.8	-1.69
CV8BTD		384.5	10.7	0.54	381.8	10.9	0.56
DJFJ4B		355.2	-18.6	-0.94	356.6	-14.3	-0.74
DKEMXK		332.2	-41.6	-2.10	333.0	-37.9	-1.95
DPSSP5		381.7	7.9	0.40	377.8	6.9	0.35
DY7RFQ		351.1	-22.7	-1.14	346.9	-24.0	-1.24
E43DLN		375.2	1.4	0.07	371.2	0.3	0.02
EDKAYF		373.6	-0.2	-0.01	375.2	4.3	0.22
ESN2XL	X	186.7	-187.1	-9.44	185.3	-185.6	-9.55
F369JZ	X	371.3	-2.5	-0.13	381.5	10.6	0.55
F4VWFV		377.8	4.1	0.20	374.3	3.4	0.17
FDUPNQ		370.8	-3.0	-0.15	359.8	-11.1	-0.57

Plastics Interlaboratory Testing Program
Analysis 720
Flexural Modulus- ksi

WebCode	Data Flag	Sample J69			Sample J70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FRSGPY		384.0	10.2	0.52	380.2	9.3	0.48
FUN3E5		384.6	10.8	0.55	375.9	5.0	0.26
H5NN7C		375.1	1.3	0.07	372.6	1.7	0.08
HJQTEV		361.7	-12.1	-0.61	363.5	-7.4	-0.38
HY9XTF		379.5	5.8	0.29	373.6	2.7	0.14
KAWGT3		352.6	-21.2	-1.07	348.6	-22.3	-1.15
KY2UG6	*	412.5	38.7	1.95	402.0	31.1	1.60
L1K9B6		358.9	-14.9	-0.75	357.6	-13.3	-0.68
LFZ3S5		359.8	-14.0	-0.70	362.7	-8.2	-0.42
LHJMB8		377.0	3.2	0.16	374.1	3.2	0.17
MW89RM		359.6	-14.1	-0.71	361.0	-9.9	-0.51
QEUHBC		377.9	4.1	0.21	372.3	1.4	0.07
QQZUWS		390.7	16.9	0.85	383.2	12.3	0.63
RFZULD		406.2	32.4	1.64	401.5	30.6	1.57
RMCHV3	X	388.4	14.6	0.74	364.8	-6.1	-0.31
RNGT54	*	320.4	-53.4	-2.69	318.5	-52.4	-2.70
S8F1W2		383.2	9.4	0.48	373.6	2.7	0.14
S9JD5H	X	412.4	38.6	1.95	428.2	57.3	2.95
T62UUR		392.6	18.8	0.95	389.8	18.9	0.97
TED2NF		383.3	9.5	0.48	380.5	9.6	0.49
TGJ8PZ		365.5	-8.3	-0.42	361.7	-9.2	-0.47
TJDPH9	X	302.0	-71.8	-3.62	349.5	-21.4	-1.10
U6QBTY		396.8	23.0	1.16	394.5	23.6	1.22
UEUWQU		340.2	-33.6	-1.69	332.3	-38.6	-1.99
UVHA4M		354.6	-19.1	-0.97	359.5	-11.4	-0.59
VRXRFB		349.7	-24.0	-1.21	345.0	-25.9	-1.33
VWBYY8		364.4	-9.4	-0.47	359.9	-11.0	-0.57
W4RHXX		415.4	41.6	2.10	414.9	44.0	2.26
WA2FZZ		390.3	16.5	0.83	386.5	15.6	0.80
WSQQXL	X	352,400.0	352,026.2	17,754.76	349,600.0	349,229.1	17,965.90
XH5ZC2		368.7	-5.1	-0.26	367.5	-3.4	-0.17
Y2YQ7U		350.9	-22.9	-1.15	346.9	-24.0	-1.23

**Plastics Interlaboratory Testing Program
Analysis 720
Flexural Modulus- ksi**

WebCode	Data Flag	Sample J69			Sample J70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
Y636AP		379.7	5.9	0.30	377.7	6.8	0.35
ZD9626		381.6	7.8	0.39	378.3	7.4	0.38
ZS1C5S		393.9	20.1	1.02	394.5	23.5	1.21
ZWA8SU		390.5	16.7	0.84	384.5	13.6	0.70

Summary Statistics			
Grand Means	373.78	ksi	370.91 ksi
Std Dev Btwn Labs	19.83	ksi	19.44 ksi
Statistics based on 59 of 68 reporting participants			

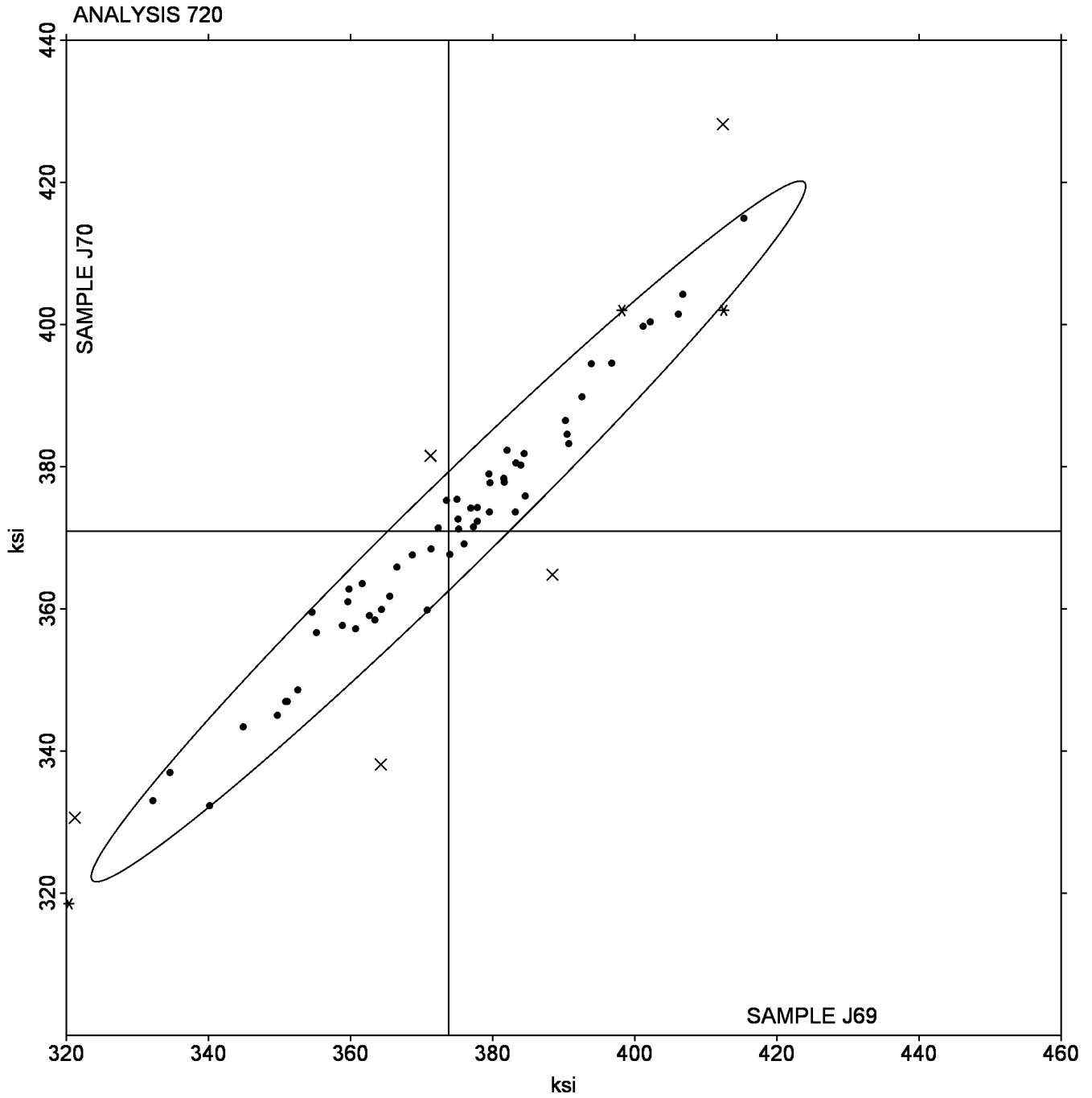
Sample J69: ABS & Sample J70: ABS

Comments on assigned Data Flags for Test #720

- 3RN9RQ (X) - Data for both samples are high. Possible Systematic Error.
- 89ELVJ (X) - Inconsistent in testing between samples and inconsistent in testing within Sample J70.
- CA57SL (X) - Inconsistent in testing between samples.
- ESN2XL (X) - Data for all samples are low.
- F369JZ (X) - Inconsistent in testing between samples.
- RMCHV3 (X) - Inconsistent in testing between samples and inconsistent in testing within Sample J69.
- S9JD5H (X) - Inconsistent in testing between samples, data for Sample J70 are high. Also inconsistent in testing within sample J70.
- TJDPH9 (X) - Inconsistent in testing between samples, data for Sample J69 are low.
- WSQQXL (X) - Extreme data. Lab indicated reporting in ksi, but data may be in psi.

Analysis 720
Flexural Modulus- ksi

Grand Mean Sample J69: 373.78 ksi Grand Mean Sample J70: 370.91 ksi



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

Analysis 721

Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J69			Sample J70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1NKDDG		10,919	-217	-0.58	10,934	-119	-0.32
299RGN		10,786	-350	-0.94	10,737	-316	-0.85
3FHW6A		11,315	179	0.48	11,193	139	0.37
3GL9ER	*	11,355	219	0.59	10,840	-213	-0.57
48GGYV		11,406	270	0.73	11,423	370	0.99
53S6QA		11,267	131	0.35	11,292	238	0.64
5YX7FL		11,010	-127	-0.34	10,931	-122	-0.33
5ZL4QZ	*	11,826	690	1.86	12,038	985	2.64
64LNNZ		11,470	334	0.90	11,363	310	0.83
6WB8ZP		11,123	-13	-0.03	11,145	91	0.24
86RTJV		10,555	-581	-1.57	10,376	-678	-1.82
8BJXBG		10,745	-391	-1.05	10,855	-198	-0.53
8RSEVF		11,400	264	0.71	11,165	111	0.30
8XDY1B		11,483	347	0.93	11,145	92	0.25
9JT7XT		11,102	-34	-0.09	11,014	-39	-0.10
9VTTJH		11,720	584	1.57	11,340	287	0.77
9ZZDCF		10,680	-456	-1.23	10,682	-371	-1.00
BDYE7F		11,418	281	0.76	11,641	588	1.58
BHZWYC		10,866	-270	-0.73	10,730	-323	-0.87
CSEBNG		11,076	-60	-0.16	11,078	24	0.07
EGW7AX		10,788	-348	-0.94	10,757	-297	-0.80
EXF529		11,639	503	1.36	11,635	582	1.56
FLUHXA		11,813	676	1.82	11,529	475	1.28
GHGE3X		11,209	73	0.20	11,012	-42	-0.11
GLETRM		10,906	-230	-0.62	10,808	-246	-0.66
HC8CV1		11,305	169	0.46	11,327	273	0.73
KKBRRF		10,900	-236	-0.64	10,937	-116	-0.31
NM29ZQ		10,928	-208	-0.56	10,822	-232	-0.62
NNX75L		10,620	-517	-1.39	10,608	-445	-1.20
NSTYG2		10,734	-402	-1.08	10,666	-387	-1.04
NU89KY		11,086	-50	-0.14	11,001	-52	-0.14
QJ16MG		10,994	-142	-0.38	10,840	-213	-0.57

Analysis 721

Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J69			Sample J70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
QXZ6F3		10,542	-594	-1.60	10,388	-666	-1.79
RDTF28		11,167	31	0.08	11,140	87	0.23
RL88DC	X	9,836	-1,300	-3.50	9,256	-1,797	-4.83
S3HBS3		11,192	56	0.15	11,097	44	0.12
SE7SJ4		11,307	171	0.46	11,213	160	0.43
TT53MF		11,320	184	0.50	10,937	-117	-0.31
UXSS9Q		11,469	333	0.90	11,462	408	1.10
V53GAV		11,169	33	0.09	11,220	167	0.45
V5J6CG		11,455	319	0.86	11,437	384	1.03
VRJU54		10,785	-351	-0.95	10,831	-222	-0.60
WN1Y3D		11,409	273	0.73	11,360	307	0.82
X75HEK	*	10,000	-1,136	-3.06	10,000	-1,053	-2.83
YHXC2F		10,842	-294	-0.79	10,707	-346	-0.93
YR5MDS		11,637	501	1.35	11,491	437	1.17
ZBPZNU		11,388	252	0.68	11,326	273	0.73
ZTAXWU		11,272	136	0.37	11,035	-18	-0.05

Summary Statistics	
Grand Means	11,136.1 psi 11,053.4 psi
Stnd Dev Btwn Labs	371.2 psi 372.4 psi
Statistics based on 47 of 48 reporting participants	

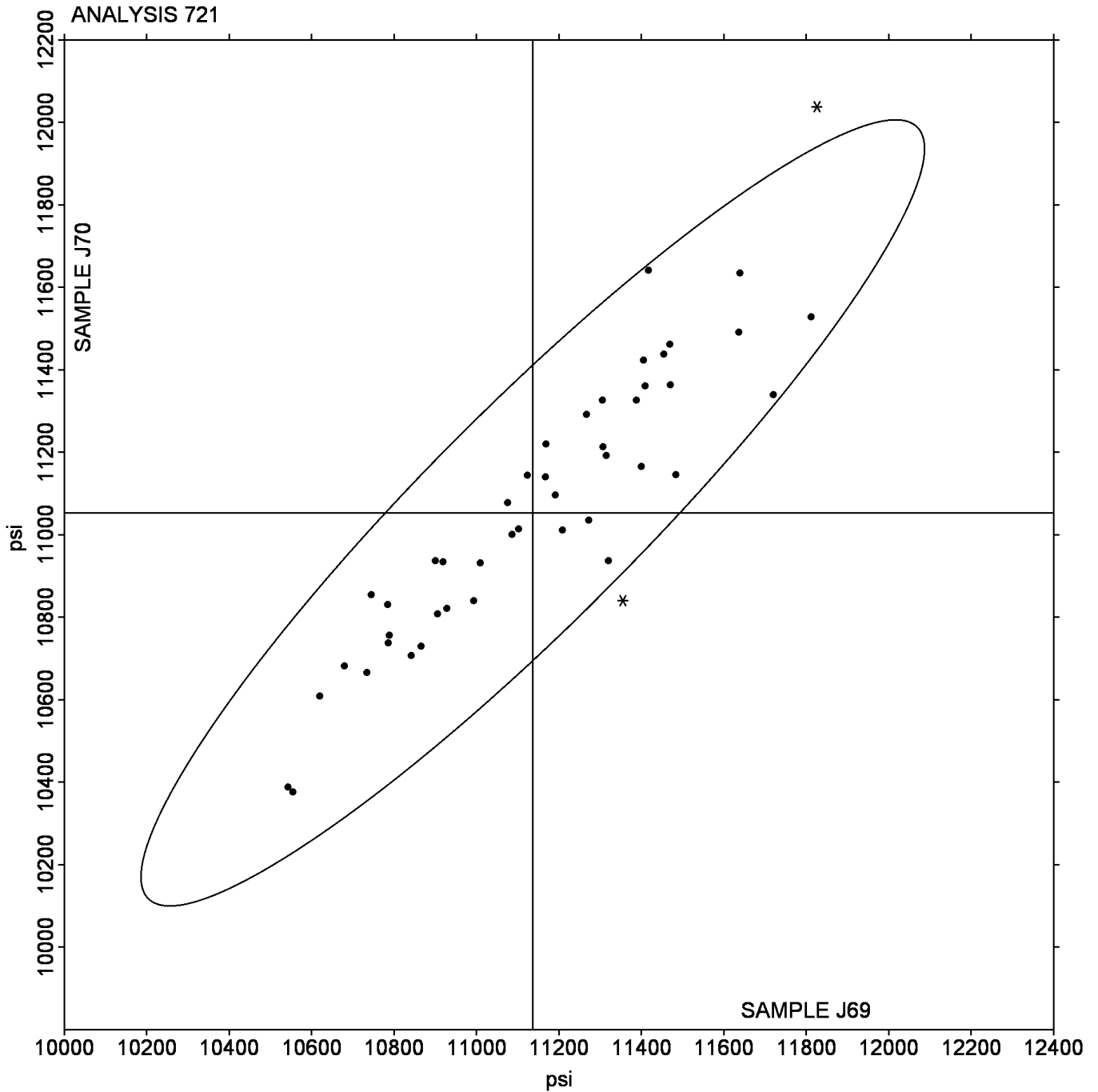
Sample J69: ABS & Sample J70: ABS

Comments on assigned Data Flags for Test #721

RL88DC (X) - Data for both samples are low. Also inconsistent in testing within both sample sets.

Analysis 721
Flexural Stress at 5% Strain - psi

Grand Mean Sample J69: 11,136.13 psi Grand Mean Sample J70: 11,053.37 psi



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

Analysis 722

Flexural Stress at Yield - psi

WebCode	Data Flag	Sample J69			Sample J70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1NEN6U		11,121	26	0.07	11,099	81	0.21
2FY6DK		10,779	-317	-0.82	10,732	-286	-0.76
2K84GD		11,297	201	0.52	11,383	365	0.97
3AYWJQ		11,034	-61	-0.16	10,960	-58	-0.15
4A588Z	X	9,834	-1,261	-3.27	9,118	-1,900	-5.03
4LL9AK		11,679	584	1.51	11,668	651	1.72
588UN8		11,022	-73	-0.19	10,847	-171	-0.45
5B5FBS		10,872	-223	-0.58	10,821	-197	-0.52
62NHJJ		10,577	-519	-1.35	10,450	-568	-1.50
69DN4F		11,519	424	1.10	11,207	189	0.50
6MZ4XQ		11,266	171	0.44	11,185	167	0.44
86RTHC		10,826	-270	-0.70	10,897	-121	-0.32
8SSUQ7		11,748	653	1.70	11,634	617	1.63
97PRTQ		11,212	117	0.30	11,183	165	0.44
9G3HTK		10,519	-576	-1.50	10,411	-607	-1.61
9GHC9F		11,551	456	1.18	11,306	289	0.76
A9H6CS		11,202	107	0.28	11,060	42	0.11
AUJ82F	*	11,530	434	1.13	11,192	174	0.46
D3R9JS		10,578	-517	-1.34	10,415	-603	-1.60
DKE5WL		10,821	-274	-0.71	10,848	-170	-0.45
DZTYDK		11,098	3	0.01	11,120	103	0.27
EGVAUV		11,430	334	0.87	11,380	362	0.96
F3RFU4		10,975	-120	-0.31	11,007	-10	-0.03
F74D7K		11,082	-13	-0.04	11,086	68	0.18
GGY5VB		11,532	437	1.13	11,434	416	1.10
GQBVZ9		10,748	-347	-0.90	10,729	-289	-0.77
H4Q5UX		11,231	136	0.35	11,056	39	0.10
JYDGV L		10,926	-169	-0.44	10,873	-145	-0.38
L31ZZQ		11,156	61	0.16	11,164	146	0.39
L5U6EZ		11,508	413	1.07	11,523	505	1.34
L9C8XS		11,315	219	0.57	11,193	175	0.46
MESB38		11,398	303	0.79	11,366	348	0.92

Plastics Interlaboratory Testing Program
Analysis 722
Flexural Stress at Yield - psi

WebCode	Data Flag	Sample J69			Sample J70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
MPDPTR		10,970	-126	-0.33	10,891	-127	-0.34
ND6CWV		11,369	274	0.71	11,415	397	1.05
NWCW5Q		11,275	180	0.47	11,242	224	0.59
P97XVL		10,652	-443	-1.15	10,703	-315	-0.83
PMW5UD		11,145	50	0.13	11,061	43	0.11
QJ2LQK		11,078	-18	-0.05	10,974	-44	-0.12
QV39F3	*	11,858	763	1.98	11,566	549	1.45
QV3DPJ		10,742	-354	-0.92	10,652	-366	-0.97
RHD9BF		11,377	281	0.73	11,337	319	0.84
S6U84K		10,841	-254	-0.66	10,821	-196	-0.52
T2FGA3		11,046	-50	-0.13	10,940	-78	-0.21
VE3KDY		11,297	202	0.52	11,053	35	0.09
WCG4SX		11,171	76	0.20	11,101	83	0.22
X357JK	*	10,000	-1,095	-2.84	10,000	-1,018	-2.70
X5GFVY		10,198	-897	-2.33	10,072	-946	-2.51
XDD98W		11,512	416	1.08	11,569	551	1.46
XGY6P2		10,542	-553	-1.44	10,376	-642	-1.70
YZKPU9		11,046	-49	-0.13	10,875	-143	-0.38
ZCR1VT	X	11,654	558	1.45	12,041	1,023	2.71

Summary Statistics	
Grand Means	11,095.3 psi 11,017.9 psi
Std Dev Btwn Labs	385.2 psi 377.4 psi
Statistics based on 49 of 51 reporting participants	

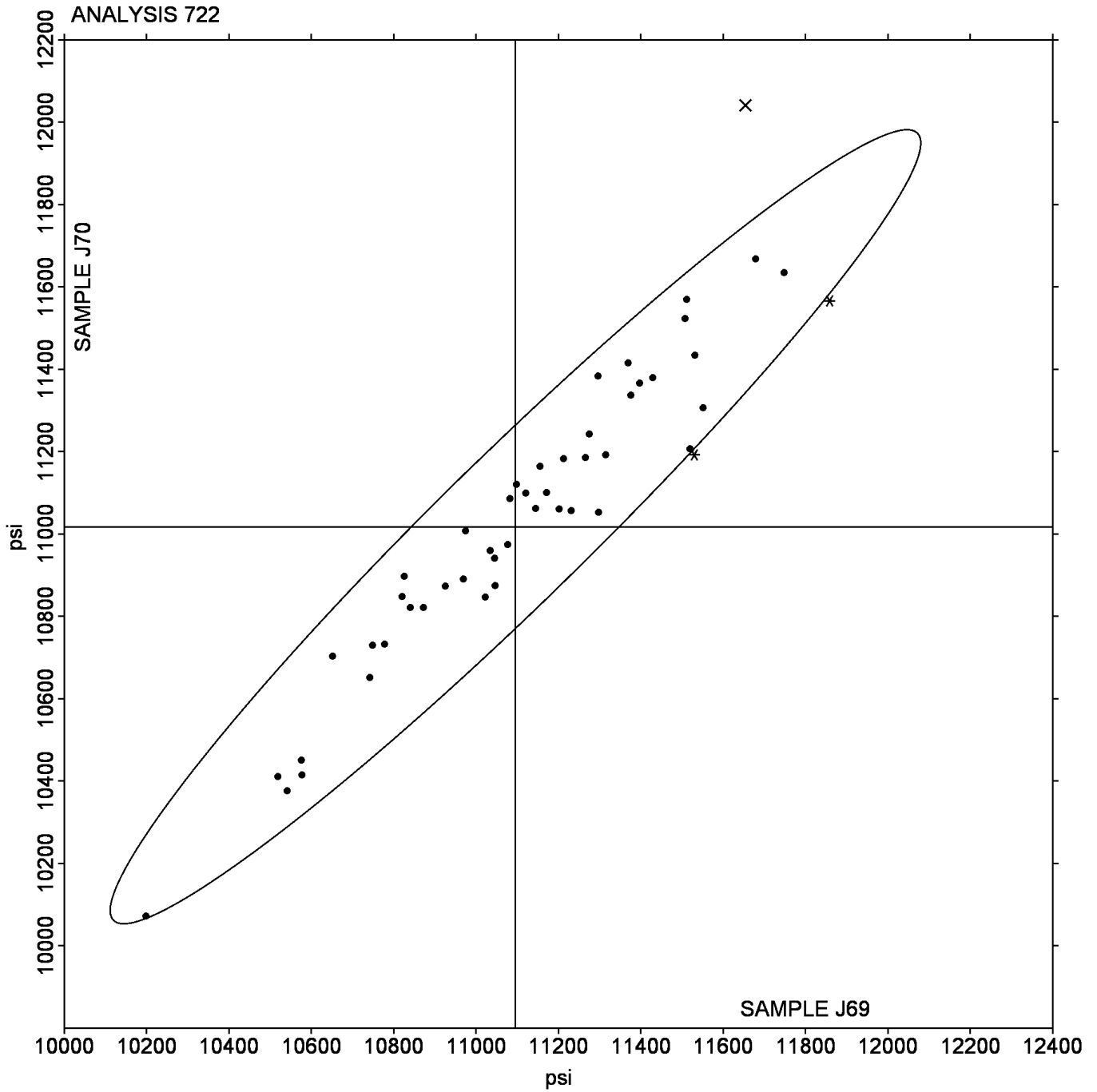
Sample J69: ABS & Sample J70: ABS

Comments on assigned Data Flags for Test #722

- 4A588Z (X) - Data for both samples are low. Also inconsistent in testing within both sample sets.
- ZCR1VT (X) - Inconsistent in testing between samples, data for Sample J70 are high.

Analysis 722
Flexural Stress at Yield - psi

Grand Mean Sample J69: 11,095.29 psi Grand Mean Sample J70: 11,017.90 psi



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

Plastics Interlaboratory Testing Program
Analysis 736
Flexural Modulus - MPa

WebCode	Data Flag	Sample K69			Sample K70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1ZGRZF		2,221	22	0.36	2,261	57	0.90
33S16X		2,278	79	1.28	2,285	81	1.26
588S3A		2,260	61	0.98	2,242	38	0.60
5FXK5W		2,234	35	0.57	2,244	40	0.63
5PTMBM		2,203	4	0.07	2,196	-7	-0.11
619L5N		2,206	7	0.12	2,232	28	0.44
62DVUR		2,218	19	0.30	2,212	8	0.13
6U28UF		2,151	-48	-0.77	2,168	-36	-0.56
6X1PYX		2,207	8	0.13	2,224	21	0.32
7WMC41		2,140	-59	-0.95	2,161	-43	-0.67
8SSGXQ		2,195	-4	-0.07	2,202	-1	-0.02
8TQDXN		2,206	7	0.11	2,190	-14	-0.21
8U1WHZ		2,202	3	0.05	2,183	-21	-0.33
919D5H	X	2,446	247	3.98	2,481	277	4.31
953YW8		2,279	80	1.29	2,281	78	1.21
AXDXSE	X	324	-1,875	-30.16	327	-1,877	-29.24
C358CA		2,115	-84	-1.35	2,103	-100	-1.56
C74BD5		2,222	23	0.38	2,231	28	0.43
CL6E1Q		2,088	-111	-1.79	2,102	-102	-1.58
EARW33	*	2,174	-25	-0.40	2,234	30	0.47
F4QYAK		2,122	-77	-1.24	2,099	-104	-1.62
FBHZ5Y		2,199	0	-0.01	2,192	-12	-0.19
FGVN39		2,168	-31	-0.51	2,160	-43	-0.68
FS9RZ7		2,108	-91	-1.46	2,129	-74	-1.16
FT62A2		2,090	-109	-1.76	2,095	-108	-1.69
FTZG2S		2,180	-19	-0.31	2,191	-13	-0.20
HLNS2C		2,174	-25	-0.40	2,157	-47	-0.73
JL5RUN		2,199	0	0.01	2,219	16	0.25
K38LAB		2,214	15	0.23	2,227	24	0.37
K6HA9F		2,220	21	0.34	2,231	28	0.43
K9F2VT		2,260	61	0.98	2,263	60	0.93
LF57TY		2,339	140	2.25	2,334	131	2.04

Plastics Interlaboratory Testing Program
Analysis 736
Flexural Modulus - MPa

WebCode	Data Flag	Sample K69			Sample K70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LF8QXP		2,257	58	0.94	2,256	53	0.82
LZ52VQ		2,296	97	1.56	2,305	101	1.58
MGM6UA		2,173	-26	-0.41	2,197	-7	-0.10
PHVQZQ		2,188	-11	-0.18	2,162	-41	-0.64
T2FEP5		2,234	35	0.56	2,222	18	0.29
TBA8NQ		2,299	100	1.61	2,290	86	1.34
UXLCKA		2,240	41	0.66	2,243	39	0.61
VELRCP		2,220	21	0.33	2,263	60	0.93
WJU8AR	*	2,129	-70	-1.12	2,083	-120	-1.87
XEP6JT		2,051	-148	-2.38	2,071	-133	-2.07

Summary Statistics

Grand Means

2,199.1 MPa

2,203.5 MPa

Std Dev Btwn Labs

62.2 MPa

64.2 MPa

Statistics based on 40 of 42 reporting participants

Sample K69: HIPS & Sample K70: HIPS

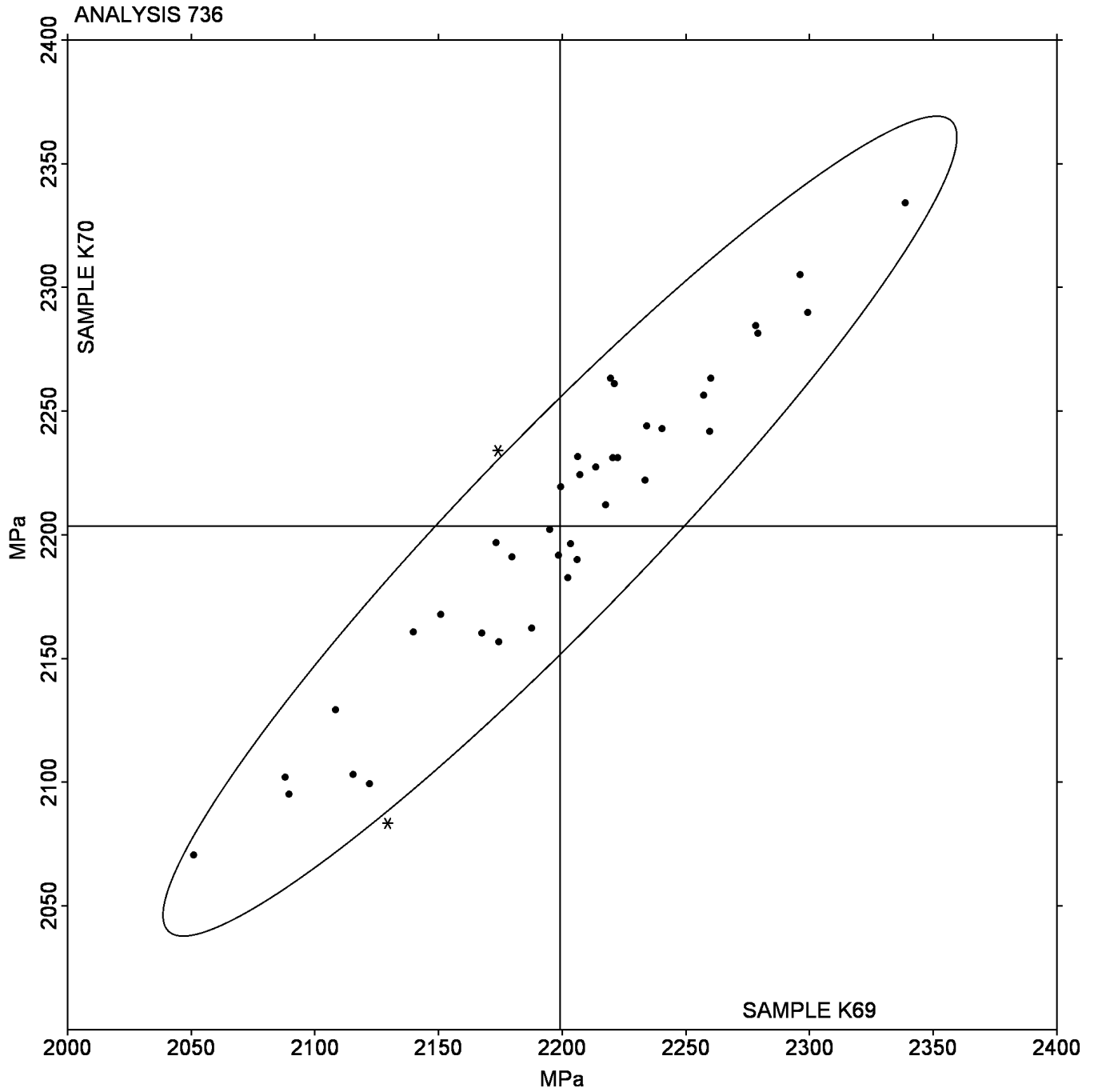
Comments on assigned Data Flags for Test #736

919D5H (X) - Data for all samples are high. Possible Systematic Data.

AXDXSE (X) - Extreme data.

Analysis 736
Flexural Modulus - MPa

Grand Mean Sample K69: 2,199.06 MPa Grand Mean Sample K70: 2,203.53 MPa



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

Analysis 737

Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K69			Sample K70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
15T28X		43.48	-0.95	-1.16	42.77	-1.70	-1.86
1FJQDJ		44.88	0.45	0.55	44.96	0.48	0.53
1JS7CM		43.86	-0.57	-0.69	44.42	-0.05	-0.06
6R2XYF		45.63	1.20	1.47	45.21	0.74	0.81
7SU44Y		45.57	1.14	1.39	45.78	1.30	1.43
83H5LM		43.60	-0.83	-1.01	43.72	-0.76	-0.83
8TQFJL		44.24	-0.19	-0.23	44.50	0.02	0.03
CAACKY2		44.26	-0.17	-0.21	44.44	-0.04	-0.04
CEJ17B		44.47	0.04	0.05	44.55	0.07	0.08
DFV5BN		44.48	0.05	0.06	43.80	-0.68	-0.74
F88MZ4		46.10	1.68	2.05	46.39	1.91	2.09
FV7QCX		44.72	0.29	0.35	45.06	0.58	0.64
FV9YK3		43.94	-0.49	-0.60	44.41	-0.07	-0.07
G3GKMY		45.59	1.16	1.42	45.41	0.94	1.02
GA6CPK		45.08	0.65	0.80	45.05	0.57	0.62
H27SMD		45.36	0.93	1.14	45.62	1.14	1.25
JBUP8M		44.57	0.14	0.17	45.13	0.65	0.71
JYYXBR		43.11	-1.32	-1.61	42.35	-2.13	-2.32
KP1B2X		44.69	0.26	0.31	44.70	0.22	0.24
LGPHSC		44.30	-0.13	-0.16	44.19	-0.28	-0.31
M1A6P7		43.37	-1.06	-1.30	44.11	-0.37	-0.40
MG1ELX		44.93	0.50	0.61	44.62	0.14	0.16
PS3HCR		44.44	0.01	0.02	44.22	-0.25	-0.28
T8BXRQ		43.07	-1.36	-1.67	42.86	-1.62	-1.77
U16FH3		44.13	-0.30	-0.36	43.59	-0.89	-0.97
WJTGDB		43.82	-0.61	-0.74	44.08	-0.40	-0.43
XVFB33		45.09	0.66	0.81	45.30	0.82	0.90
Z5WX3H		43.24	-1.19	-1.45	44.09	-0.38	-0.42

Analysis 737
Flexural Stress at 3.5% Strain - MPa

Summary Statistics

Grand Means

44.429 MPa

44.475 MPa

Std Dev Btwn Labs

0.818 MPa

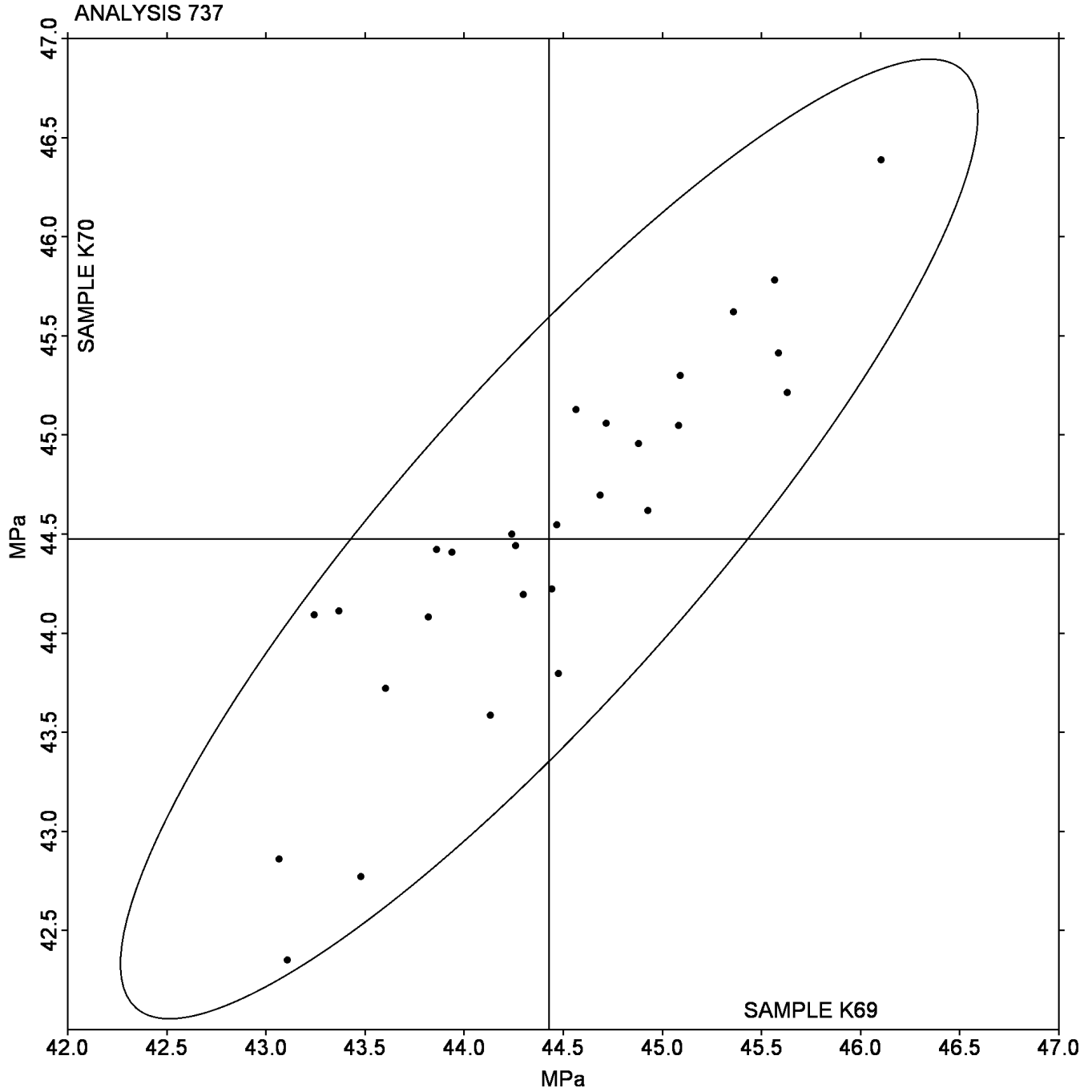
0.915 MPa

Statistics based on 28 of 28 reporting participants

Sample K69: HIPS & Sample K70: HIPS

Analysis 737
Flexural Stress at 3.5% Strain - MPa

Grand Mean Sample K69: 44.429 MPa Grand Mean Sample K70: 44.475 MPa



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

Analysis 738

Flexural Stress at Yield - MPa

WebCode	Data Flag	Sample K69			Sample K70		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2ELUA9		45.74	1.38	1.83	45.74	1.28	1.54
2L741C		43.29	-1.07	-1.41	43.06	-1.40	-1.67
6R9G3J		43.86	-0.49	-0.65	43.96	-0.50	-0.60
77MFDG		44.51	0.16	0.21	44.58	0.12	0.15
8PR4NL		44.34	-0.02	-0.02	44.58	0.12	0.14
A2N6SY		44.80	0.44	0.58	45.10	0.64	0.77
B1GV6V		45.19	0.84	1.11	45.14	0.68	0.82
CWC38W		43.99	-0.37	-0.49	43.10	-1.36	-1.63
CZ2USL		43.54	-0.82	-1.08	42.83	-1.63	-1.95
E49MSE		44.01	-0.35	-0.46	43.69	-0.77	-0.92
EZ5ZH5		44.95	0.59	0.79	45.04	0.58	0.70
JCMF3D	X	6.46	-37.90	-50.12	6.59	-37.87	-45.33
KYW6W1		44.32	-0.04	-0.05	44.54	0.08	0.10
M2HCYM		43.90	-0.46	-0.60	44.12	-0.34	-0.41
MEDELM		43.69	-0.66	-0.88	44.06	-0.40	-0.48
MLKF6V		43.99	-0.37	-0.48	44.45	-0.01	-0.02
P6L898		44.32	-0.04	-0.05	44.02	-0.44	-0.53
Q192A8		45.52	1.16	1.53	45.18	0.72	0.87
RE7BQR		44.86	0.51	0.67	44.89	0.43	0.51
S56MR8		43.52	-0.84	-1.11	43.75	-0.71	-0.85
SHWHZL		44.61	0.25	0.34	45.26	0.80	0.96
TFE6M3		45.17	0.81	1.07	45.36	0.90	1.08
TUJXG1		43.93	-0.43	-0.56	44.50	0.04	0.05
TXGJ5X	X	39.51	-4.85	-6.41	38.43	-6.03	-7.22
VLAWKZ		43.56	-0.79	-1.05	44.23	-0.23	-0.28
WKLX5R		43.34	-1.01	-1.34	44.19	-0.27	-0.32
Y3YFTN		46.07	1.71	2.27	46.51	2.05	2.46
YFXAGW		43.67	-0.68	-0.90	43.82	-0.64	-0.76
ZZNQKQ		44.92	0.56	0.75	44.69	0.23	0.28

Analysis 738

Flexural Stress at Yield - MPa

Summary Statistics

Grand Means

44.356 MPa

44.459 MPa

Std Dev Btwn Labs

0.756 MPa

0.835 MPa

Statistics based on 27 of 29 reporting participants

Sample K69: HIPS & Sample K70: HIPS

Comments on assigned Data Flags for Test #738

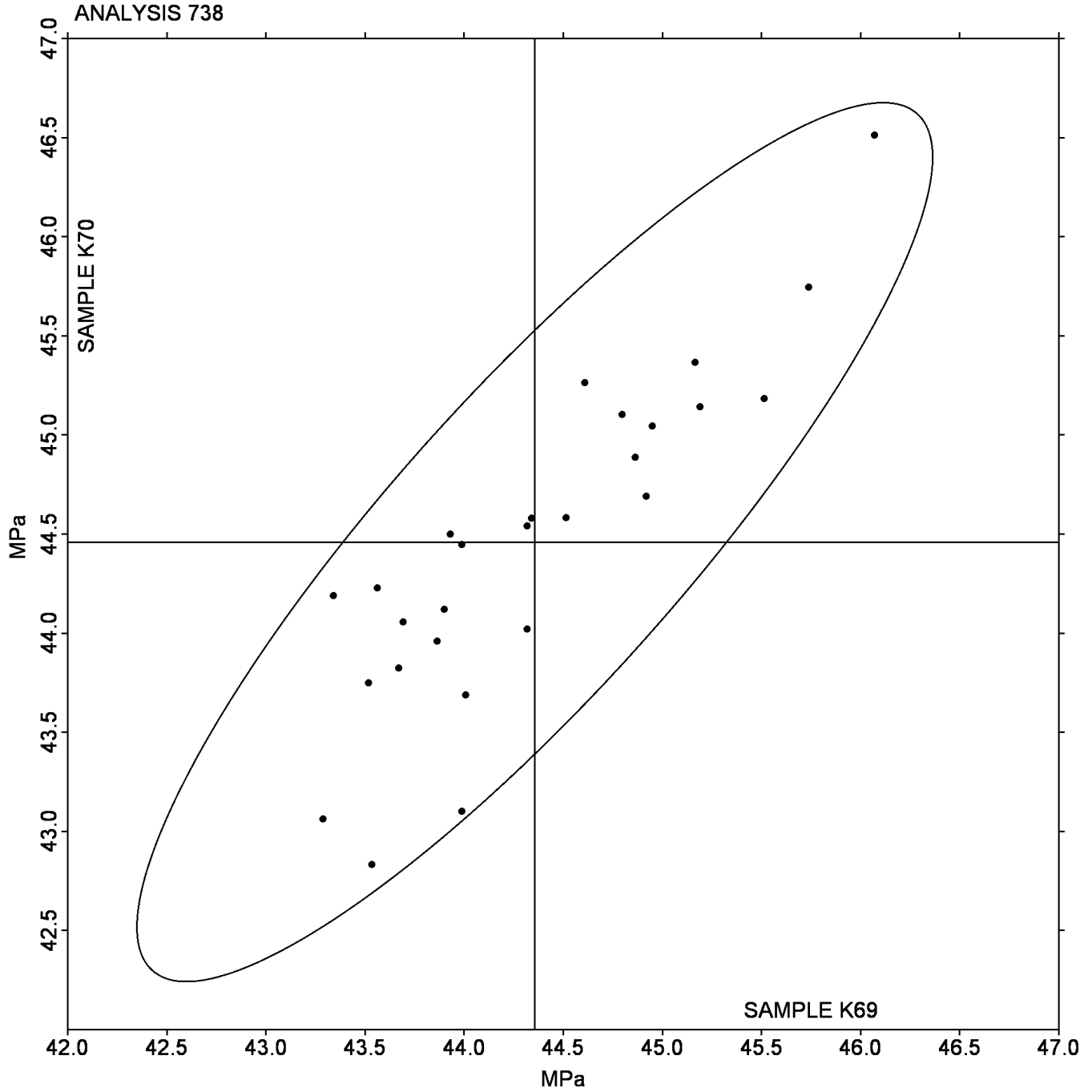
JCMF3D (X) - Extreme data.

TXGJ5X (X) - Data for both samples are low. Also inconsistent in testing within both sample sets.

Analysis 738

Flexural Stress at Yield - MPa

Grand Mean Sample K69: 44.356 MPa Grand Mean Sample K70: 44.459 MPa



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

Analysis 790

Notched Izod Impact - ft.lbf/in

WebCode	Data Flag	Sample S69			Sample S70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1EH1YH		4.10	-0.14	-0.71	6.81	0.20	0.45	TO
1U74ZC		4.41	0.17	0.89	6.49	-0.13	-0.29	XX
31XW1Y	*	4.71	0.47	2.42	6.71	0.09	0.21	BA
3FSGJ5		4.05	-0.19	-0.96	7.07	0.45	1.04	TO
56XGY7		4.03	-0.20	-1.05	6.57	-0.04	-0.09	TM
5GEL33		4.16	-0.08	-0.40	6.32	-0.30	-0.68	TO
5KP2YM		4.20	-0.04	-0.20	6.98	0.37	0.84	TO
5V9RY8		4.11	-0.13	-0.66	6.81	0.20	0.46	CE
6B5UHW		4.61	0.37	1.92	6.77	0.16	0.36	TO
6E4TE2		4.46	0.22	1.12	6.50	-0.11	-0.26	BA
6F2B1H		4.08	-0.16	-0.81	6.63	0.02	0.04	TM
7PMNBF		4.10	-0.13	-0.69	5.81	-0.81	-1.85	XX
81P5ZN		4.33	0.10	0.49	6.63	0.01	0.03	TM
899HQ7		4.37	0.13	0.68	6.98	0.36	0.83	CE
8EVZUT		4.12	-0.12	-0.62	6.56	-0.05	-0.13	TO
8GA96A		4.15	-0.08	-0.43	6.40	-0.22	-0.50	TM
8Z2PGN		4.18	-0.05	-0.28	6.26	-0.36	-0.81	CE
9AEUXJ	X	0.47	-3.76	-19.27	0.69	-5.92	-13.55	TO
A119ZZ		4.41	0.17	0.89	7.07	0.46	1.05	XX
A1PKV2	*	3.98	-0.26	-1.31	5.37	-1.24	-2.84	TM
AUZHN2		4.04	-0.20	-1.03	6.16	-0.46	-1.04	WY
CKNLT3		3.99	-0.25	-1.30	6.05	-0.57	-1.30	TM
CM3YWQ		4.39	0.15	0.79	6.28	-0.34	-0.77	WZ
D4GNNG		4.20	-0.04	-0.21	6.51	-0.11	-0.24	TO
DD7732		4.26	0.02	0.09	6.85	0.24	0.55	TO
DTMTKU	X	5.77	1.53	7.83	3.94	-2.67	-6.11	TM
E2TBGB		4.04	-0.20	-1.01	6.57	-0.04	-0.10	TO
E5SQ51		4.34	0.10	0.53	6.93	0.32	0.73	TO
EXBRDQ		4.31	0.07	0.35	5.72	-0.89	-2.05	TO
G1QQJ3		4.51	0.27	1.38	6.90	0.29	0.66	TM
G6CE58		4.44	0.20	1.03	6.85	0.24	0.54	TM
GLUQ3Z		4.31	0.07	0.36	6.70	0.09	0.20	CE

Plastics Interlaboratory Testing Program

Analysis 790

Notched Izod Impact - ft.lbf/in

WebCode	Data Flag	Sample S69			Sample S70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
GMT9ZW		4.23	-0.01	-0.06	6.86	0.25	0.57	TY
H99H7C		4.07	-0.17	-0.85	5.62	-1.00	-2.28	TO
HGH25P		4.23	0.00	-0.02	6.85	0.23	0.53	TO
HTD3Q5		4.50	0.26	1.32	7.13	0.51	1.17	TM
HUXB9E	X	2.21	-2.03	-10.40	3.59	-3.02	-6.91	XX
HZP59V		4.31	0.07	0.37	6.83	0.22	0.50	TO
JDBGTG		4.40	0.16	0.83	7.56	0.95	2.16	XX
K8VE5X		4.21	-0.03	-0.16	6.80	0.19	0.43	TM
L5GRAY		4.18	-0.06	-0.31	7.00	0.39	0.89	TO
L5PJQG		4.04	-0.20	-1.03	6.66	0.05	0.11	TM
L6VD5C		4.28	0.04	0.19	7.38	0.76	1.74	CE
L7B3PT		4.31	0.07	0.35	6.38	-0.24	-0.54	TO
M1XV78		4.18	-0.06	-0.31	6.56	-0.06	-0.13	CE
MZKBBH		4.47	0.23	1.19	7.43	0.82	1.87	TO
N98DJ5		4.24	0.01	0.03	6.50	-0.11	-0.26	CS
NBEXCL		4.07	-0.17	-0.85	6.53	-0.09	-0.20	TO
NCLW67		4.00	-0.24	-1.24	6.48	-0.14	-0.31	TO
NRPN15	*	4.64	0.40	2.05	7.72	1.10	2.52	TM
NSPXLV		4.04	-0.20	-1.00	6.90	0.28	0.64	CE
PLLXF6		4.12	-0.12	-0.62	6.68	0.07	0.16	TM
QC4983		4.37	0.13	0.67	6.64	0.03	0.06	TM
QM54GM	X	5.33	1.10	5.61	9.67	3.05	6.98	TO
R38FWJ		4.12	-0.12	-0.61	6.71	0.10	0.22	TM
R4F7S1		4.22	-0.02	-0.10	6.38	-0.24	-0.54	TM
RCTR24		4.34	0.10	0.53	7.18	0.56	1.28	TO
RSQS6P		4.26	0.02	0.10	5.97	-0.65	-1.48	XX
S16N4W		4.23	0.00	-0.02	5.68	-0.93	-2.14	CE
SSALR1		4.65	0.41	2.11	6.83	0.21	0.49	TO
T7HZNM		4.05	-0.19	-0.95	6.77	0.15	0.34	CE
TF3GMN	*	3.64	-0.60	-3.06	6.18	-0.44	-1.00	SA
U2NMWJ		3.85	-0.39	-1.99	6.07	-0.54	-1.25	TO
U8UMKE		4.59	0.35	1.81	6.30	-0.31	-0.72	TO

Analysis 790

Notched Izod Impact - ft.lbf/in

WebCode	Data Flag	Sample S69			Sample S70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
UM91D8		4.41	0.17	0.88	6.67	0.06	0.13	TM
V34XW4		4.22	-0.02	-0.11	6.82	0.21	0.48	TM
VZ26EP		4.39	0.15	0.75	6.68	0.06	0.14	TM
W24YX8		4.20	-0.04	-0.20	6.85	0.24	0.54	TM
WBDRK5		4.06	-0.18	-0.93	7.12	0.50	1.15	TM
WPVH6Y		4.46	0.22	1.12	6.52	-0.09	-0.21	TO
WUZ5HV		4.11	-0.13	-0.68	6.69	0.07	0.16	TM
X74FTM		4.30	0.06	0.33	6.49	-0.12	-0.28	TM
XCTBDR		4.53	0.29	1.49	6.87	0.26	0.59	CS
XZ59WY	X	8.77	4.54	23.22	13.78	7.16	16.39	AT
Y4HKV1		4.26	0.02	0.10	6.49	-0.13	-0.29	CE
YGXQ1H	X	9.08	4.84	24.77	10.37	3.75	8.58	CS
YRZJ9F		4.12	-0.11	-0.58	5.69	-0.92	-2.11	CE
ZJZBBS		4.03	-0.21	-1.05	6.81	0.20	0.46	TM
ZQ6CW1		4.11	-0.13	-0.68	6.35	-0.26	-0.60	TO
ZZ7QT2		4.23	-0.01	-0.06	6.62	0.01	0.01	TM

Summary Statistics	
Grand Means	4.239 ft.lbf/in 6.615 ft.lbf/in
Stnd Dev Btw Labs	0.195 ft.lbf/in 0.437 ft.lbf/in
Statistics based on 74 of 80 reporting participants	

Sample S69: ABS & Sample S70: ABS

Comments on assigned Data Flags for Test #790

- 9AEUXJ (X) - Extreme data. Data appear to be off by a factor of 10.
- DTMTKU (X) - Data for both samples are low.
- HUXB9E (X) - Extreme data.
- QM54GM (X) - Data for both samples are high.
- XZ59WY (X) - Inconsistent in testing between samples. Data may have been transposed between data sets.
- YGXQ1H (X) - Data for both samples are high.

Analysis 790

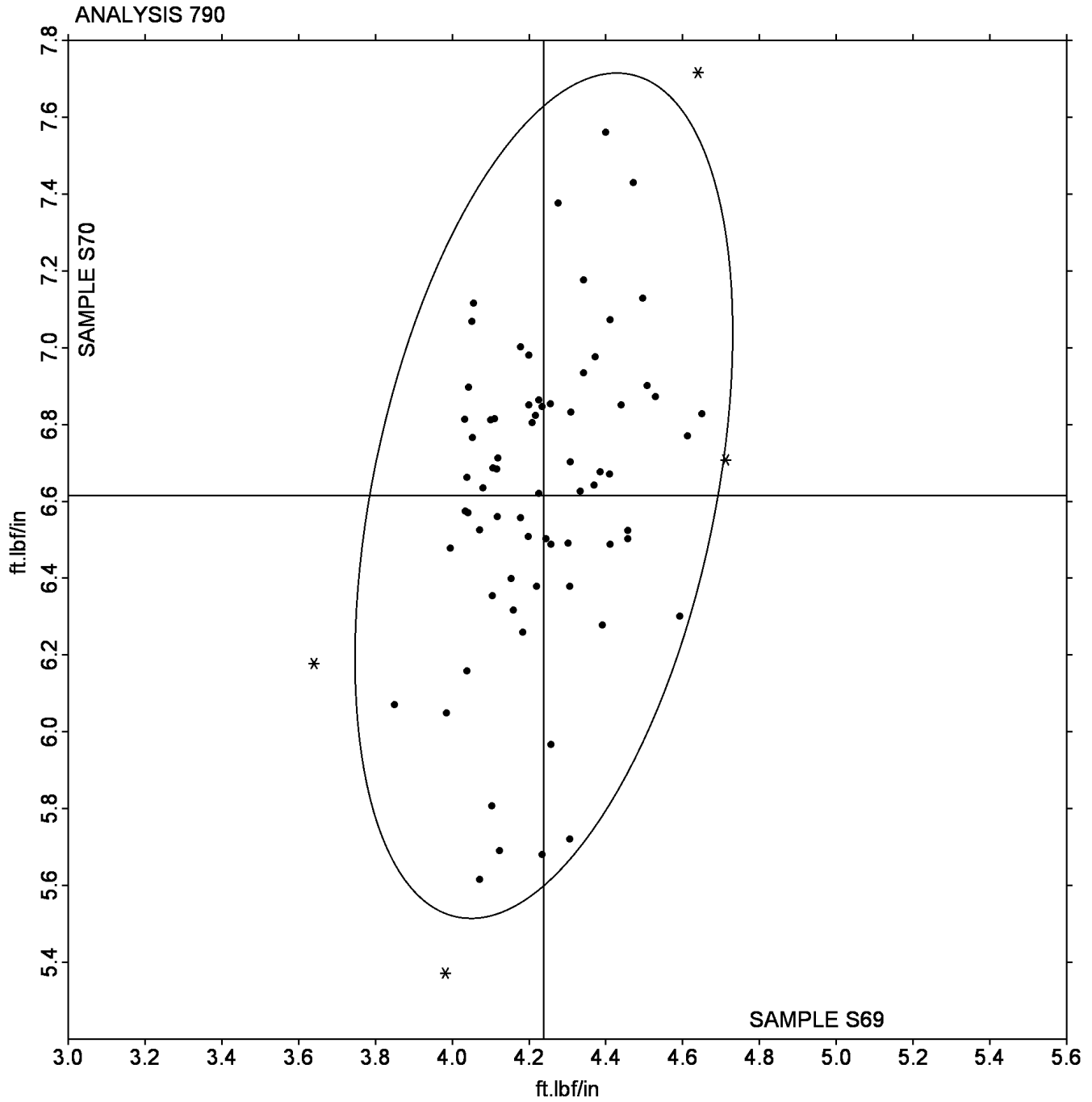
Notched Izod Impact - ft.lbf/in

Instrument Code List as Reported by the Labs

(AT) - Atlas	(BA) - Baldwin
(CE) - Ceast	(CS) - CSI
(SA) - Satec	(TM) - TMI
(TO) - Tinius Olsen	(TY) - Toyoseiki
(WY) - Yasuda Seiki	(WZ) - Zwick
(XX) - Instrument manufacturer not specified by lab	

Plastics Interlaboratory Testing Program
Analysis 790
Notched Izod Impact - ft.lbf/in

Grand Mean Sample S69: 4.2386 ft.lbf/in Grand Mean Sample S70: 6.6147 ft.lbf/in



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

Analysis 792

Notched Charpy Impact - kJ/m²

WebCode	Data Flag	Sample M69			Sample M70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3AWP66		30.43	0.69	0.33	33.24	0.48	0.22	WZ
3UMG12		29.82	0.07	0.04	32.27	-0.49	-0.22	XX
45TYRH		28.06	-1.68	-0.81	32.24	-0.52	-0.23	XX
4J2F9Y		27.59	-2.15	-1.04	31.03	-1.73	-0.78	CE
5TZABE		31.66	1.92	0.92	34.90	2.14	0.97	TO
6J7HGU		30.94	1.20	0.58	33.66	0.90	0.41	XX
71XJA7		29.99	0.25	0.12	32.36	-0.39	-0.18	CE
7UAYYB		27.49	-2.25	-1.08	32.32	-0.43	-0.19	TM
7UJNSK		29.07	-0.68	-0.33	30.90	-1.86	-0.84	TM
AWEUP6		29.93	0.19	0.09	33.31	0.55	0.25	KF
AYKH6G		33.78	4.04	1.94	36.52	3.76	1.70	XX
B7R4PW		25.89	-3.85	-1.86	27.51	-5.25	-2.37	TO
CKPJZQ		31.34	1.60	0.77	33.59	0.84	0.38	TM
D1GA26		29.02	-0.73	-0.35	33.13	0.37	0.17	TY
D6SPI3		27.72	-2.03	-0.98	31.57	-1.18	-0.53	XX
E5KFF3		29.76	0.02	0.01	32.60	-0.16	-0.07	TO
FNLXQC		30.80	1.06	0.51	34.18	1.42	0.64	CE
GQJV15		27.90	-1.85	-0.89	32.71	-0.05	-0.02	TO
JP6863		32.43	2.69	1.30	33.39	0.64	0.29	PO
KGHT1		31.36	1.62	0.78	34.12	1.36	0.62	SA
LMC5MH		30.26	0.52	0.25	32.64	-0.11	-0.05	CE
NC19EB		31.37	1.63	0.79	33.95	1.20	0.54	CE
NFU9F1		29.85	0.11	0.05	31.95	-0.81	-0.36	TO
PTA6RQ		26.44	-3.30	-1.59	28.42	-4.34	-1.96	XX
Q2Q8X3		33.44	3.70	1.78	34.32	1.57	0.71	TM
QMMJAW		31.82	2.08	1.00	35.02	2.26	1.02	WZ
QZPDJC		28.16	-1.58	-0.76	31.06	-1.70	-0.77	TO
RUC99J		29.69	-0.05	-0.02	34.80	2.04	0.92	XX
SD3CQQ		28.02	-1.72	-0.83	29.88	-2.88	-1.30	TO
SNZJUV		29.32	-0.42	-0.20	29.86	-2.90	-1.31	TO
T91ZZ7		29.27	-0.48	-0.23	32.86	0.10	0.05	CE
TCGSZD		33.93	4.19	2.02	37.85	5.10	2.30	TM

Analysis 792

Notched Charpy Impact - kJ/m²

WebCode	Data Flag	Sample M69			Sample M70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
TP3B51		31.66	1.92	0.93	35.32	2.56	1.16	CE
TT7Q71	*	23.54	-6.20	-2.98	26.27	-6.49	-2.93	TM
TUT7U8		28.68	-1.06	-0.51	33.31	0.56	0.25	CE
UL4FB2		28.54	-1.20	-0.58	30.77	-1.99	-0.90	WZ
WY4N28		30.94	1.20	0.58	33.17	0.41	0.19	TM
XFGNDW	X	12.69	-17.05	-8.21	13.72	-19.04	-8.60	TM
XNU98Y		29.81	0.07	0.03	32.69	-0.06	-0.03	TM
YSJXJC		31.24	1.50	0.72	34.76	2.01	0.91	TM
YU8UYA		29.88	0.13	0.06	33.39	0.63	0.29	TM
ZC6VPU		28.38	-1.36	-0.66	33.32	0.56	0.26	TO
ZRFDT9		29.91	0.17	0.08	34.55	1.80	0.81	CE

Summary Statistics

Grand Means

29.741 kJ/m²32.755 kJ/m²

Std Dev Btwn Labs

2.077 kJ/m²2.213 kJ/m²

Statistics based on 42 of 43 reporting participants

Sample M69: ABS/PC & Sample M70: ABS/PC

Comments on assigned Data Flags for Test #792

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

Instrument Code List as Reported by the Labs

(CE) - Ceast

(KF) - Karl Frank GmbH

(PO) - POE

(SA) - Satec

(TM) - TMI

(TO) - Tinius Olsen

(TY) - Toyoseiki

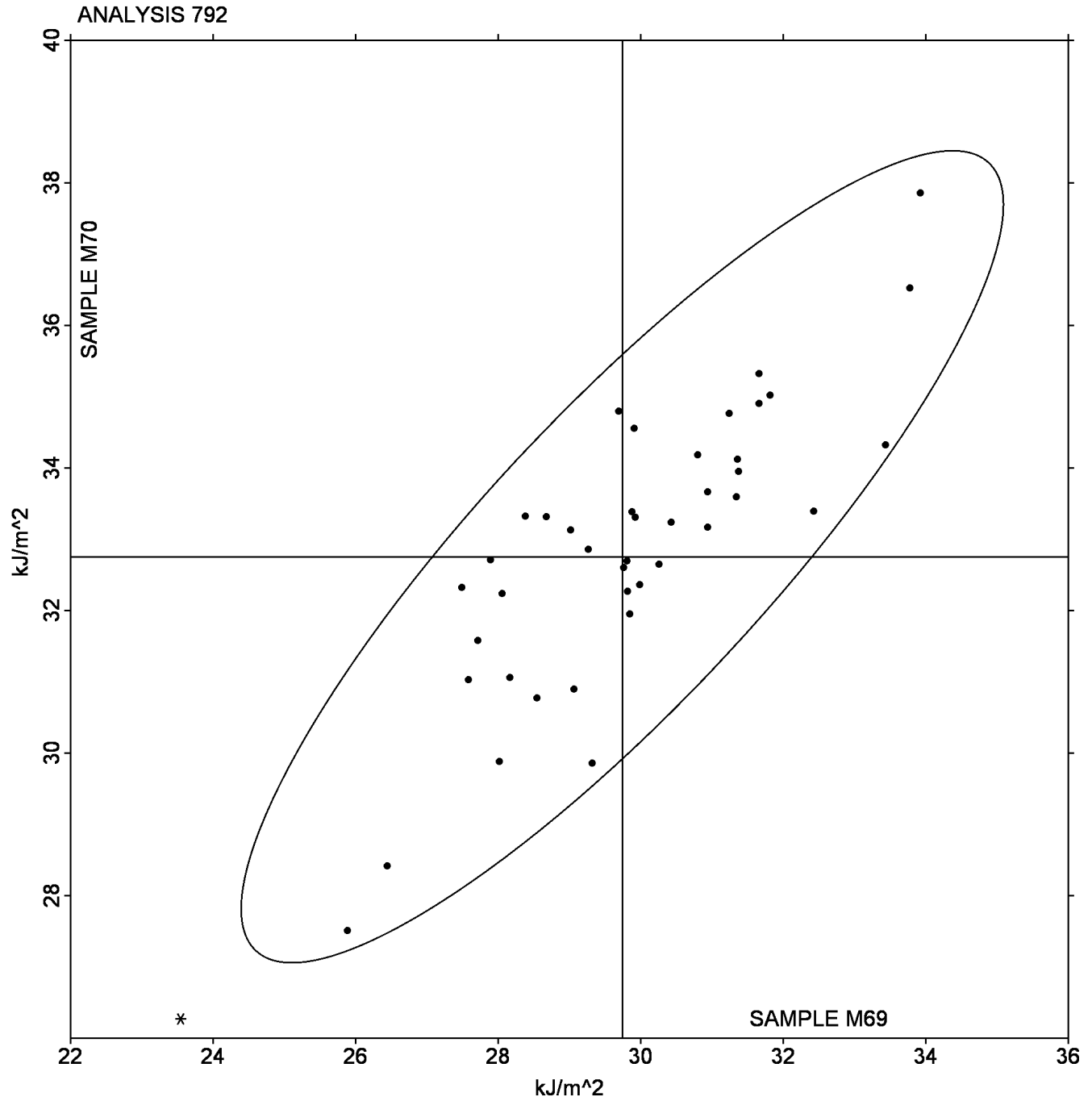
(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

Analysis 792

Notched Charpy Impact - kJ/m²

Grand Mean Sample M69: 29.741 kJ/m² Grand Mean Sample M70: 32.755 kJ/m²



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

Plastics Interlaboratory Testing Program
Analysis 710
Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

WebCode	Data Flag	Sample E69			Sample E70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
148KS3		81.50	-0.68	-0.48	82.78	-0.19	-0.13	XX
148SS9		81.28	-0.91	-0.64	82.00	-0.96	-0.69	AT
1B5YHP		83.70	1.52	1.06	84.08	1.11	0.80	CE
1CJVU2		81.08	-1.11	-0.78	81.70	-1.26	-0.90	RO
3CCQNB		83.33	1.14	0.80	84.78	1.81	1.30	AT
3X9K2T		83.55	1.37	0.96	83.93	0.96	0.69	TO
4163HC		82.23	0.04	0.03	82.43	-0.54	-0.38	AT
4XUBXY		81.65	-0.53	-0.38	82.75	-0.21	-0.15	TY
51ZBSF		80.73	-1.46	-1.02	80.70	-2.26	-1.62	DN
64TT6T		81.93	-0.26	-0.18	82.98	0.01	0.01	TO
6H1ZP7		82.33	0.14	0.10	83.58	0.61	0.44	TO
C8GWAL		84.85	2.67	1.87	85.70	2.74	1.96	AT
DAEGDP		82.73	0.54	0.38	83.60	0.64	0.46	CE
DECV1E		80.25	-1.93	-1.36	81.10	-1.86	-1.33	CE
FXKFHL		78.95	-3.23	-2.27	79.83	-3.14	-2.25	XX
GAFPSZ		81.28	-0.91	-0.64	81.93	-1.04	-0.74	CE
GBZN8P		83.10	0.92	0.64	82.93	-0.04	-0.03	AT
GD8DC6		78.70	-3.48	-2.45	79.63	-3.34	-2.39	CE
H19HKY		82.20	0.02	0.01	83.05	0.09	0.06	TO
HS91A9		84.10	1.92	1.34	84.08	1.11	0.80	XX
J4LH13		82.38	0.19	0.13	82.68	-0.29	-0.21	AT
K8FMD9		81.53	-0.66	-0.46	82.10	-0.86	-0.62	TO
KEU2NX		83.08	0.89	0.63	84.13	1.16	0.83	CE
KK7SCR		85.30	3.12	2.19	85.98	3.01	2.16	CE
KY4H2R		83.78	1.59	1.12	84.88	1.91	1.37	AT
P13S3F		81.65	-0.53	-0.38	83.05	0.09	0.06	TO
PVEK31		83.45	1.27	0.89	84.55	1.59	1.14	TO
PVFAB4		81.43	-0.76	-0.53	81.93	-1.04	-0.74	DN
QDV2VL		83.00	0.82	0.57	83.78	0.81	0.58	CE
QJ236A		80.68	-1.51	-1.06	81.93	-1.04	-0.74	EM
REG329	*	83.88	1.69	1.19	83.33	0.36	0.26	EM
RSYY2D		81.90	-0.28	-0.20	82.55	-0.41	-0.30	TO

Plastics Interlaboratory Testing Program
Analysis 710
Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

WebCode	Data Flag	Sample E69			Sample E70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
S52MQ2		82.30	0.12	0.08	82.83	-0.14	-0.10	CS
TNM4KT		82.20	0.02	0.01	83.05	0.09	0.06	XX
TSVLHV	X	91.83	9.64	6.77	86.70	3.74	2.68	EM
UG11DG		82.95	0.77	0.54	83.63	0.66	0.48	EM
W1SZ1D		80.38	-1.81	-1.27	81.70	-1.26	-0.90	XX
WZ2S4W		81.08	-1.11	-0.78	82.05	-0.91	-0.65	CE
XL233F		82.90	0.72	0.50	84.03	1.06	0.76	XA
Y4YUHP		81.95	-0.23	-0.16	83.88	0.91	0.65	TO

Summary Statistics			
Grand Means	82.185	Degrees C	82.962
			Degrees C
Std Dev Btwn Labs	1.424	Degrees C	1.395
			Degrees C
Statistics based on 39 of 40 reporting participants			

Sample E69: ABS & Sample E70: ABS

Comments on assigned Data Flags for Test #710

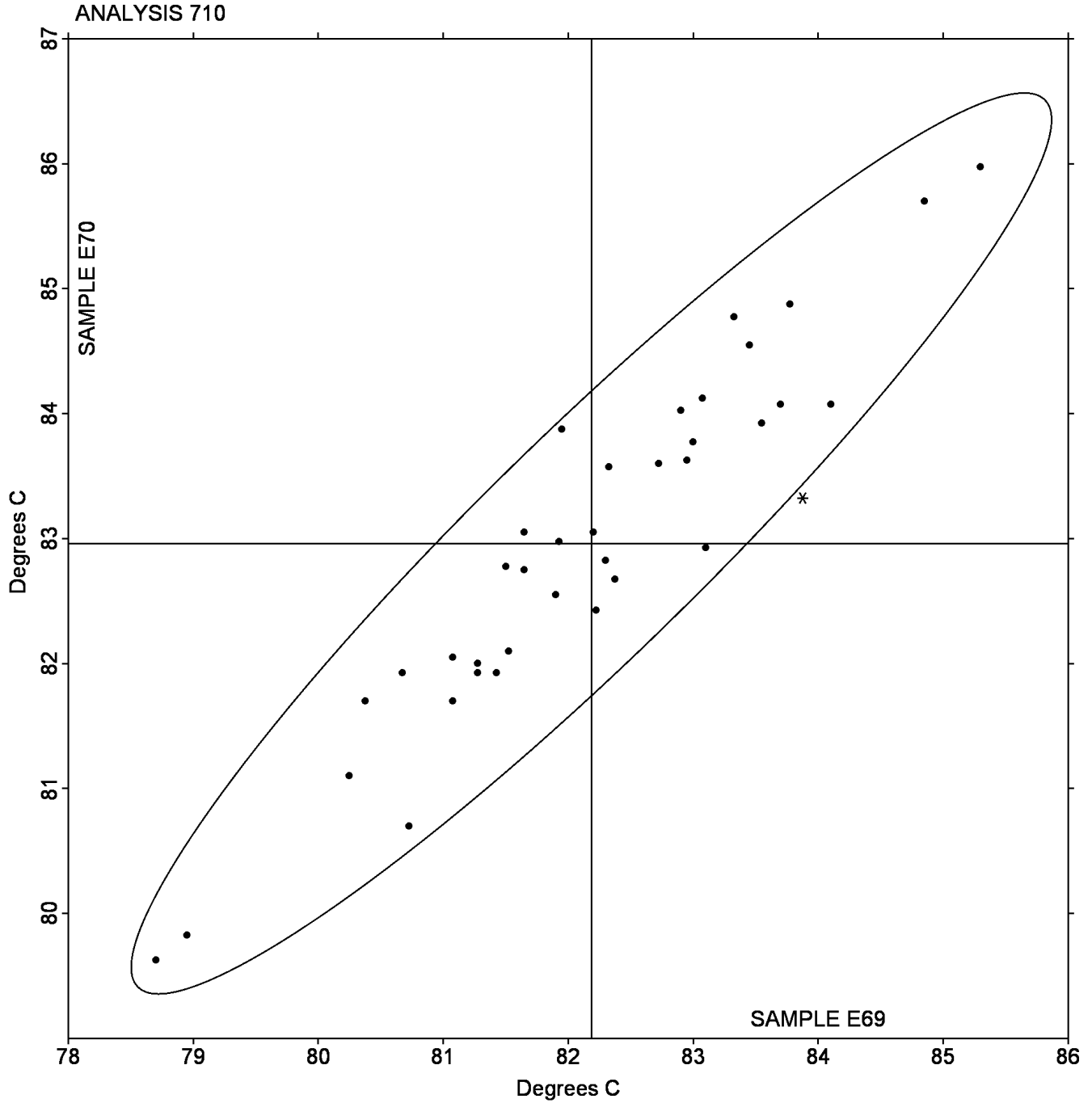
TSVLHV (X) - Inconsistent in testing between samples, data for Sample E69 are high.

Instrument Code List as Reported by the Labs

- | | |
|------------------------------------|---|
| (AT) - Atlas | (CE) - Ceast |
| (CS) - CSI | (DN) - DYNISCO |
| (EM) - Empire-Vortex | (RO) - Rosand |
| (TO) - Tinius Olsen | (TY) - Toyoseiki |
| (XA) - Special In-House Instrument | (XX) - Instrument manufacturer not specified by lab |

Plastics Interlaboratory Testing Program
Analysis 710
Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

Grand Mean Sample E69: 82.185 Degrees C Grand Mean Sample E70: 82.962 Degrees C



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

Plastics Interlaboratory Testing Program
Analysis 711
Deflection Temp. Under Flexural Load (0.455 MPa) - Degrees C

WebCode	Data Flag	Sample G69			Sample G70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
38QXXV		116.8	1.6	0.57	98.3	1.5	0.49	XX
3MD9V7		114.8	-0.4	-0.14	96.7	0.0	-0.01	XX
4FUZ37		117.5	2.3	0.84	98.9	2.1	0.70	XX
8U9KSR		117.3	2.1	0.75	99.4	2.6	0.86	AT
92XGCK		113.7	-1.5	-0.53	93.9	-2.9	-0.95	TO
98CWL2		113.3	-2.0	-0.70	93.8	-2.9	-0.97	CE
9JBMEV		113.0	-2.2	-0.80	92.8	-4.0	-1.30	TO
ASVD5T	X	98.4	-16.9	-6.06	117.2	20.4	6.74	CE
DTW3VD		113.9	-1.4	-0.49	95.2	-1.6	-0.52	CE
EA1Q4S		116.3	1.0	0.38	98.6	1.9	0.62	TO
HVLZ8T	*	108.2	-7.0	-2.53	92.3	-4.5	-1.49	AT
KCZZDH		115.0	-0.2	-0.06	94.3	-2.5	-0.83	CE
LFAJNA		116.9	1.7	0.62	100.9	4.1	1.35	TO
MK1B65		110.9	-4.3	-1.55	92.8	-4.0	-1.31	TO
NEE6AM		120.2	5.0	1.79	102.2	5.4	1.78	EM
NU56V9		115.4	0.2	0.07	96.5	-0.2	-0.08	EM
S14RML		116.0	0.8	0.30	96.5	-0.3	-0.10	CE
VFZJLT		117.1	1.9	0.68	98.5	1.7	0.57	TO
ZGGMEG		117.5	2.2	0.81	100.3	3.6	1.18	CE

Summary Statistics			
Grand Means	115.20	Degrees C	96.75 Degrees C
Std Dev Btwn Labs	2.78	Degrees C	3.03 Degrees C
Statistics based on 18 of 19 reporting participants			

Sample G69: PP & Sample G70: PP

Comments on assigned Data Flags for Test #711

ASVD5T (X) - Inconsistent in testing between samples. Lab may have transposed data between sample sets.

Plastics Interlaboratory Testing Program
Analysis 711
Deflection Temp. Under Flexural Load (0.455 MPa) - Degrees C

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

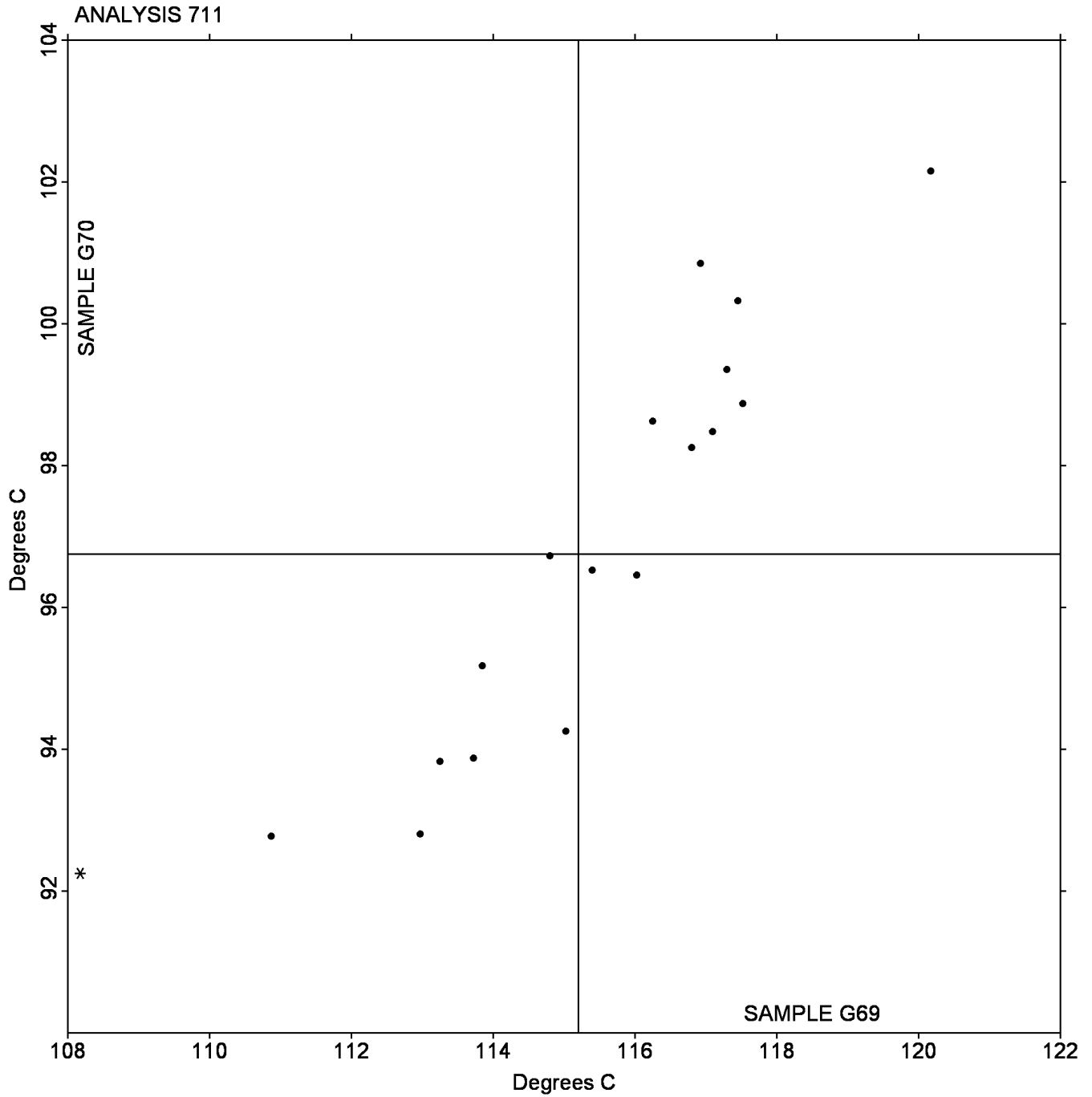
(EM) - Empire-Vortex

(TO) - Tinius Olsen

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 711
Deflection Temp. Under Flexural Load (0.455 MPa) - Degrees C

Grand Mean Sample G69: 115.20 Degrees C Grand Mean Sample G70: 96.753 Degrees C



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

Analysis 712

Temp. of Deflection Under Flexural Load (1.80 MPa) - Degrees C

WebCode	Data Flag	Sample N69			Sample N70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
152KNU		79.73	-0.68	-0.48	79.93	-0.46	-0.30	TO
3DUTK9		81.60	1.19	0.83	81.78	1.40	0.93	AT
463K3J		81.30	0.89	0.62	80.58	0.20	0.13	CE
55EQPM		79.00	-1.41	-0.98	78.95	-1.43	-0.95	CE
5ASDNY		80.73	0.32	0.22	80.75	0.37	0.25	XX
7EA4HD		81.23	0.82	0.57	81.28	0.90	0.60	XX
ASD8WU		78.78	-1.63	-1.14	79.30	-1.08	-0.72	CE
BA1JLF		80.43	0.02	0.01	80.55	0.17	0.11	AT
BRHK46		80.13	-0.28	-0.20	79.98	-0.41	-0.27	AT
C66A7D		79.10	-1.31	-0.91	78.28	-2.11	-1.40	XX
CBGP5X		80.48	0.07	0.05	80.25	-0.13	-0.09	CE
D14WH3		79.30	-1.11	-0.77	79.33	-1.06	-0.70	CE
D8P8ZV		80.00	-0.41	-0.28	80.65	0.27	0.18	CE
EX1RSE		82.18	1.77	1.23	82.63	2.25	1.49	EM
GTXNYJ		80.03	-0.38	-0.27	80.08	-0.31	-0.20	TO
J5S3BY	*	84.85	4.44	3.10	84.98	4.60	3.06	XX
JC3VEV		80.63	0.22	0.15	81.58	1.20	0.79	CE
JRCTWN		80.78	0.37	0.26	80.53	0.15	0.10	XX
Q1NZCR		81.08	0.67	0.47	80.28	-0.11	-0.07	RO
QBRK35		81.05	0.64	0.45	79.98	-0.41	-0.27	AT
SBYP8E		80.95	0.54	0.38	81.08	0.70	0.46	AT
SU9JYZ	*	75.63	-4.78	-3.33	75.48	-4.91	-3.26	CE
SW79F6		80.13	-0.28	-0.20	80.43	0.05	0.03	CE
V8L22D		81.05	0.64	0.45	81.03	0.65	0.43	TY
VNKHBR		80.20	-0.21	-0.14	80.33	-0.06	-0.04	AT
WRWE77		80.55	0.14	0.10	80.30	-0.08	-0.05	AT
X7AD55		80.63	0.22	0.15	80.48	0.10	0.06	XX
X8VPR4		79.95	-0.46	-0.32	80.30	-0.08	-0.05	DN
Y4PUZC		79.95	-0.46	-0.32	79.70	-0.68	-0.45	XX
ZBZVLS		80.83	0.42	0.29	80.70	0.32	0.21	AT

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

Summary Statistics

Grand Means

80.407 Degrees C

80.380 Degrees C

Std Dev Btwn Labs

1.435 Degrees C

1.504 Degrees C

Statistics based on 30 of 30 reporting participants

Sample N69: HIPS & Sample N70: HIPS

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(DN) - DYNISCO

(EM) - Empire-Vortex

(RO) - Rosand

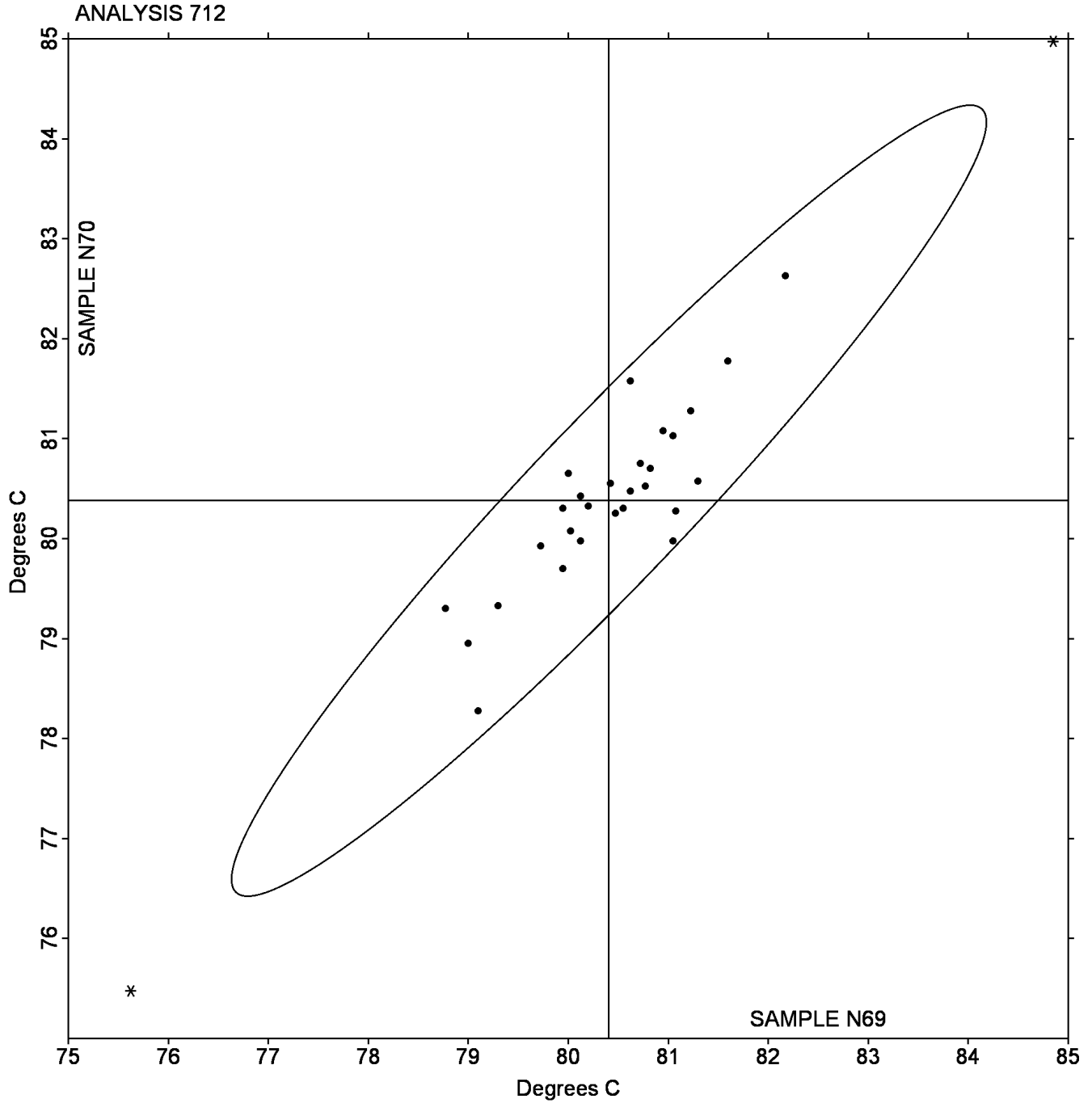
(TO) - Tinius Olsen

(TY) - Toyoseiki

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample N69: 80.407 Degrees C Grand Mean Sample N70: 80.380 Degrees C



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

Plastics Interlaboratory Testing Program
Analysis 715
Vicat Softening Temperature (Rate A)

WebCode	Data Flag	Sample H69			Sample H70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2214YK		104.72	0.57	0.60	104.47	0.43	0.44	CE
3EWDX5		103.67	-0.48	-0.51	103.40	-0.64	-0.64	XX
51NRPT		103.90	-0.25	-0.26	103.75	-0.29	-0.29	CE
5LEHXU		103.35	-0.80	-0.84	103.10	-0.94	-0.95	XX
68VU23		103.80	-0.35	-0.37	102.85	-1.19	-1.20	CE
6JFGCC		103.15	-1.00	-1.05	103.38	-0.65	-0.66	AT
73TS5A		102.83	-1.31	-1.39	102.87	-1.17	-1.19	CE
7PBL3M		104.53	0.39	0.41	104.45	0.41	0.42	DN
9XBJHH		104.77	0.62	0.66	104.63	0.60	0.61	CS
EW5M4V		103.37	-0.78	-0.82	103.33	-0.70	-0.71	TY
F8TQYB	*	104.62	0.47	0.50	105.48	1.45	1.47	TO
FTLMLX	X	97.33	-6.81	-7.21	97.58	-6.45	-6.54	CE
GQ3JHZ		102.77	-1.38	-1.46	102.58	-1.45	-1.47	CE
GY4TGQ		103.95	-0.20	-0.21	104.00	-0.04	-0.04	AT
KR5K7F		104.53	0.39	0.41	104.40	0.36	0.37	XX
M39FHH		102.93	-1.21	-1.28	103.00	-1.04	-1.05	CE
MZCVR6		106.30	2.15	2.28	106.43	2.39	2.42	CF
QZQZ4C		103.72	-0.43	-0.45	103.40	-0.64	-0.64	RO
S9PN1M		103.85	-0.30	-0.31	103.90	-0.14	-0.14	XX
SVV266		105.37	1.22	1.29	104.48	0.45	0.45	XX
VA6J4B		105.17	1.02	1.08	105.00	0.96	0.98	CE
YP56MH		104.95	0.80	0.85	104.85	0.81	0.83	XX
YUPP5X		105.62	1.47	1.56	105.48	1.45	1.47	EM
Z5ZDPV	X	107.13	2.99	3.16	102.87	-1.17	-1.19	AT
Z79DRG		103.52	-0.63	-0.67	103.58	-0.45	-0.46	CE

Plastics Interlaboratory Testing Program
Analysis 715
Vicat Softening Temperature (Rate A)

Summary Statistics			
Grand Means	104.146	Degrees C	104.036 Degrees C
Stnd Dev Btwn Labs	0.945	Degrees C	0.986 Degrees C
Statistics based on 23 of 25 reporting participants			

Sample H69: ABS & Sample H70: ABS

Comments on assigned Data Flags for Test #715

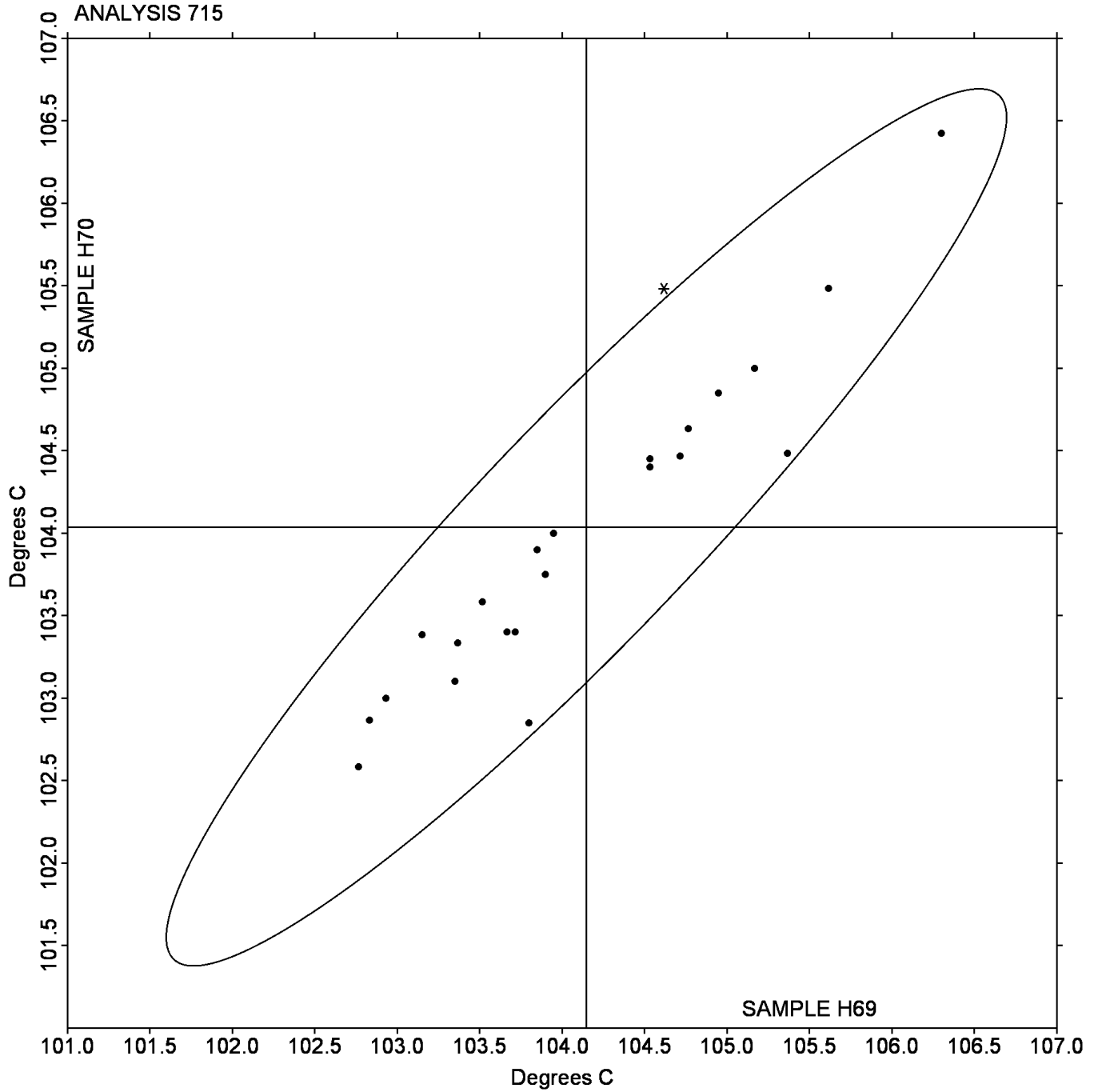
FTLMLX (X) - Data for both samples are low.

Z5ZDPV (X) - Inconsistent in testing between samples, data for Sample H69 are high.

Instrument Code List as Reported by the Labs	
(AT) - Atlas	(CE) - Ceast
(CF) - Coesfeld	(CS) - CSI
(DN) - DYNISCO	(EM) - Empire-Vortex
(RO) - Rosand	(TO) - Tinius Olsen
(TY) - Toyoseiki	(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 715
Vicat Softening Temperature (Rate A)

Grand Mean Sample H69: 104.15 Degrees C Grand Mean Sample H70: 104.04 Degrees C



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

Plastics Interlaboratory Testing Program
Analysis 716
Vicat Softening Temperature (Rate B)

WebCode	Data Flag	Sample R69			Sample R70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1BJVJH		105.28	-0.44	-0.47	105.50	-0.22	-0.23	AT
1KUPXT		105.94	0.21	0.22	106.67	0.95	1.03	CF
2AMP5W		107.68	1.96	2.07	107.50	1.78	1.92	EM
47LAMN		105.95	0.22	0.24	106.60	0.88	0.95	TO
6ENYCM		106.55	0.82	0.87	106.55	0.83	0.90	CS
7GUP31		106.22	0.49	0.52	106.28	0.57	0.61	AT
92LQQN		105.37	-0.36	-0.38	105.37	-0.35	-0.38	CE
964UTA		105.90	0.17	0.18	106.02	0.30	0.32	XX
FBK5QC		105.32	-0.41	-0.43	105.23	-0.48	-0.52	XX
H778QG		104.82	-0.91	-0.96	104.37	-1.35	-1.46	CE
HDLYSG		104.48	-1.24	-1.32	104.67	-1.05	-1.13	XX
KSSDAH		105.35	-0.38	-0.40	104.92	-0.80	-0.86	RO
L75294		106.90	1.17	1.24	106.50	0.78	0.84	DN
LMBMSQ		105.62	-0.11	-0.12	105.52	-0.20	-0.22	XX
LQKN11		105.97	0.24	0.25	105.97	0.25	0.27	CE
M52ZFT		105.73	0.01	0.01	105.98	0.27	0.29	XX
MFCFU2		104.30	-1.43	-1.51	104.40	-1.32	-1.42	EM
NCAAWS		106.78	1.06	1.12	106.58	0.87	0.93	XX
NEE15T		105.03	-0.69	-0.73	105.22	-0.50	-0.54	CE
NG4AAL		106.87	1.14	1.20	106.93	1.22	1.31	CE
NS6KYD		104.27	-1.46	-1.54	104.37	-1.35	-1.46	CE
Q4MB9A		105.67	-0.06	-0.06	105.45	-0.27	-0.29	XX
QAP2EF		105.53	-0.19	-0.21	105.42	-0.30	-0.32	TY
R6KEZB		105.93	0.21	0.22	106.10	0.38	0.41	XX
UCHYYC		106.83	1.11	1.17	106.17	0.45	0.48	CE
WLDCR4		106.75	1.02	1.08	106.52	0.80	0.86	XX
Y1A4UH		103.60	-2.13	-2.25	103.60	-2.12	-2.28	TO

Plastics Interlaboratory Testing Program
Analysis 716
Vicat Softening Temperature (Rate B)

Summary Statistics

Grand Means

105.727 Degrees C

105.718 Degrees C

Std Dev Btwn Labs

0.946 Degrees C

0.928 Degrees C

Statistics based on 27 of 27 reporting participants

Sample R69: ABS & Sample R70: ABS

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(CF) - Coesfeld

(CS) - CSI

(DN) - DYNISCO

(EM) - Empire-Vortex

(RO) - Rosand

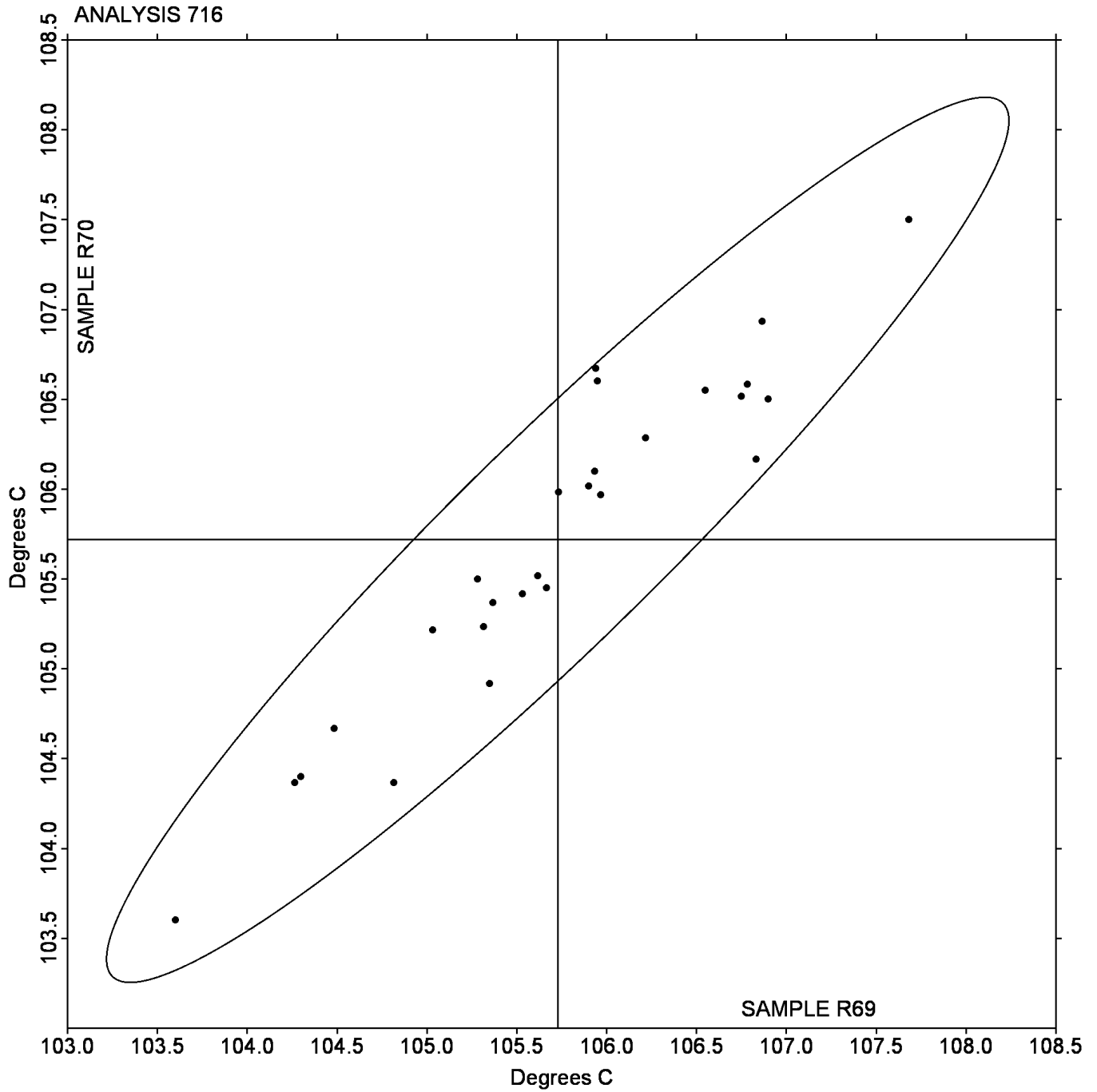
(TO) - Tinius Olsen

(TY) - Toyoseiki

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 716
Vicat Softening Temperature (Rate B)

Grand Mean Sample R69: 105.73 Degrees C Grand Mean Sample R70: 105.72 Degrees C



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

Analysis 750

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - G/10 mins

WebCode	Data Flag	Sample X69			Sample X70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
11UZTV		7.75	-0.61	-1.43	12.75	-0.60	-0.93	TO
14R2NS		8.95	0.59	1.37	14.65	1.30	2.03	XX
1BJMBS		7.75	-0.61	-1.43	12.75	-0.60	-0.94	GO
1CCJMT	X	3.90	-4.46	-10.39	6.00	-7.35	-11.45	TO
1H28FW		8.55	0.19	0.43	13.45	0.10	0.16	TO
1J6ME4		8.78	0.42	0.97	13.25	-0.10	-0.15	TO
1SW9BZ		8.05	-0.31	-0.73	12.85	-0.50	-0.78	TO
1URAEQ		8.35	-0.01	-0.03	13.05	-0.30	-0.46	TO
1UV8X1		8.60	0.24	0.55	13.35	0.00	0.00	TO
2AMJE9		8.05	-0.31	-0.73	13.17	-0.18	-0.29	XX
2GQDK3	*	8.50	0.14	0.32	14.80	1.45	2.26	AT
2S7WYV		8.50	0.14	0.32	14.60	1.25	1.95	TO
2YSKTQ		8.83	0.46	1.07	13.92	0.57	0.88	XX
2ZGEAM		8.52	0.15	0.35	13.43	0.08	0.12	TO
3PMCQG		8.40	0.04	0.08	13.75	0.40	0.63	KA
4EJ16C		8.20	-0.16	-0.38	13.00	-0.35	-0.54	TO
4THZZ2	*	8.97	0.61	1.41	12.90	-0.45	-0.70	TO
5JZ93P		8.47	0.11	0.25	13.10	-0.25	-0.39	HA
6HCA2K		7.82	-0.54	-1.26	13.44	0.09	0.14	TO
6JR6YP	X	11.91	3.55	8.25	17.60	4.25	6.62	QT
6R3QY9		8.15	-0.21	-0.50	13.70	0.35	0.55	TO
6VAFYW		7.45	-0.92	-2.14	12.32	-1.03	-1.61	CS
7AM3XS	X	7.43	-0.94	-2.18	11.20	-2.15	-3.35	TO
7FAZBE		8.40	0.04	0.08	13.05	-0.30	-0.46	TO
7GYFGJ		9.00	0.64	1.48	13.85	0.50	0.78	DY
7HMFZE		8.54	0.17	0.40	13.47	0.12	0.19	KA
8GBK3M		8.35	-0.02	-0.04	13.08	-0.27	-0.43	GO
8NZGA3		8.40	0.04	0.08	13.50	0.15	0.24	TY
92D5LK		8.10	-0.26	-0.61	12.50	-0.85	-1.32	TO
93Z2M7		8.25	-0.11	-0.26	13.00	-0.35	-0.54	GO
99BBK1		8.89	0.53	1.23	13.40	0.05	0.08	TO
99BD6Y		8.60	0.24	0.55	13.45	0.10	0.16	TO

Analysis 750

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - G/10 mins

WebCode	Data Flag	Sample X69			Sample X70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
9A27JN		8.04	-0.32	-0.75	12.95	-0.40	-0.63	KA
9JPB9A		8.43	0.06	0.14	13.20	-0.15	-0.23	WZ
9LCN8F	X	6.88	-1.49	-3.46	13.34	-0.01	-0.01	KA
9MZTEK		8.20	-0.16	-0.38	12.75	-0.60	-0.93	TO
9ZG2JW	*	7.93	-0.44	-1.02	14.05	0.70	1.09	TO
AR5JRK		7.90	-0.46	-1.08	12.75	-0.60	-0.93	XX
ASGKAX		8.76	0.39	0.91	12.97	-0.38	-0.60	KA
AXB2DA		8.30	-0.06	-0.15	12.85	-0.50	-0.78	TO
BH3HJH		8.15	-0.21	-0.50	12.65	-0.70	-1.09	TO
BXHJAV		8.28	-0.09	-0.20	13.84	0.49	0.76	GO
C92LZJ		9.37	1.01	2.34	14.08	0.73	1.13	TO
CC8F2F		8.75	0.39	0.90	13.90	0.55	0.86	TO
CDN812	*	7.75	-0.61	-1.43	13.85	0.50	0.78	TA
CEPU45		8.38	0.01	0.03	13.52	0.17	0.26	DY
CRSJF1		7.88	-0.48	-1.13	13.01	-0.34	-0.53	TO
CVVVTXN		8.02	-0.34	-0.80	12.98	-0.37	-0.57	WZ
CZJKLH		8.15	-0.21	-0.50	13.50	0.15	0.24	TO
D2SW9Z		8.64	0.28	0.64	14.39	1.04	1.62	TO
E92M8W		8.00	-0.36	-0.85	12.65	-0.70	-1.09	CS
EB43BK	X	11.13	2.77	6.44	17.43	4.08	6.35	GO
ENKGH1		8.15	-0.21	-0.50	12.67	-0.68	-1.06	CE
F2WW13		8.36	-0.01	-0.02	13.95	0.60	0.94	TO
FBP33J		8.20	-0.16	-0.38	12.55	-0.80	-1.24	AT
FBSKHT		8.60	0.24	0.55	13.45	0.10	0.16	TO
FDZSS2		8.10	-0.26	-0.61	12.90	-0.45	-0.70	DY
GG8KY6		8.43	0.06	0.14	13.04	-0.31	-0.49	TO
GN5NH2		8.65	0.29	0.67	13.35	0.00	0.00	TO
GRYP5R		8.52	0.16	0.36	13.29	-0.06	-0.10	TO
HM2FFA		7.95	-0.41	-0.96	12.75	-0.60	-0.93	GO
JLMP71	X	22.25	13.89	32.32	34.55	21.20	33.04	TO
JXCQEU	X	10.80	2.44	5.67	13.75	0.40	0.63	TO
KWBPSE		7.80	-0.56	-1.31	12.27	-1.08	-1.69	TO

Analysis 750

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - G/10 mins

WebCode	Data Flag	Sample X69			Sample X70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
L4ZEG9		7.90	-0.46	-1.08	12.85	-0.50	-0.78	GO
L69J6J		9.20	0.84	1.95	14.10	0.75	1.17	TO
LAGNHL	X	7.85	-0.51	-1.20	14.65	1.30	2.03	DY
LJCURH		7.55	-0.81	-1.89	12.52	-0.83	-1.29	DY
LJYVMF		8.30	-0.06	-0.15	13.20	-0.15	-0.23	TO
LR2UJQ	X	10.07	1.71	3.97	13.73	0.38	0.59	TO
M3YZQU		8.40	0.04	0.08	13.25	-0.10	-0.15	WZ
MEYMVY	*	8.06	-0.30	-0.70	14.46	1.11	1.73	WZ
MLFYXD		8.59	0.22	0.52	14.59	1.24	1.93	TO
NPR5GB	*	9.39	1.03	2.39	15.01	1.66	2.58	TO
NRXA8C		8.30	-0.06	-0.15	13.78	0.43	0.67	XX
PUZ3RW	*	9.67	1.31	3.04	14.90	1.55	2.42	TO
Q87BH5		8.15	-0.21	-0.50	12.70	-0.65	-1.01	KA
QGWEPP		8.31	-0.06	-0.14	13.05	-0.30	-0.46	HA
QKZQQP		8.15	-0.21	-0.50	13.05	-0.30	-0.46	GO
QZU38P		8.35	-0.01	-0.03	13.11	-0.24	-0.38	DY
R3654F	X	0.87	-7.49	-17.44	1.37	-11.98	-18.67	TO
RL4TN5		8.21	-0.15	-0.36	13.44	0.09	0.14	CS
RLJQZH		8.45	0.09	0.20	13.20	-0.15	-0.23	TO
S17Q5G		8.80	0.44	1.02	12.80	-0.55	-0.85	TO
T74413		8.50	0.14	0.32	13.60	0.25	0.39	TO
TAGFS4		8.25	-0.11	-0.26	13.45	0.10	0.16	DY
TH2DML		8.60	0.24	0.55	14.40	1.05	1.64	TO
U55STT		8.65	0.29	0.67	12.95	-0.40	-0.62	TO
UF6EJ6	X	8.93	0.57	1.32	6.74	-6.61	-10.30	CE
UQ7RTE		9.04	0.67	1.57	14.95	1.60	2.49	KA
URDQN4		8.29	-0.08	-0.18	13.08	-0.27	-0.42	XX
URTA2L		8.55	0.18	0.42	13.12	-0.23	-0.36	TO
UWU78R		7.88	-0.49	-1.14	12.52	-0.83	-1.30	KA
WDPU2D		8.20	-0.16	-0.38	13.40	0.05	0.08	TO
WFQ4BW		7.57	-0.79	-1.85	12.89	-0.46	-0.71	TO

Analysis 750

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - G/10 mins

WebCode	Data Flag	Sample X69			Sample X70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
WSE4QS		7.99	-0.38	-0.88	12.47	-0.88	-1.37	KA
X5JTBK		7.98	-0.38	-0.88	12.26	-1.09	-1.70	CE
XG29DS	X	3.82	-4.54	-10.58	5.75	-7.60	-11.84	TO
XY98T8		8.91	0.54	1.26	13.90	0.55	0.85	KA
XZATAA		8.06	-0.31	-0.72	13.39	0.04	0.06	KA
Y2V2T8		7.90	-0.47	-1.09	12.89	-0.46	-0.71	TO
Y5Z5UQ		8.35	-0.01	-0.03	13.22	-0.13	-0.21	TO
Y81L9L		8.82	0.45	1.05	13.51	0.16	0.24	TO
YAA8MC		9.20	0.84	1.95	14.20	0.85	1.33	TO
YTNV8L		8.10	-0.26	-0.61	13.08	-0.27	-0.42	KA
YU9TWS		7.50	-0.86	-2.01	12.60	-0.75	-1.17	TO
YXRWZP		8.92	0.55	1.28	14.16	0.81	1.26	KA
Z79WQH		9.05	0.69	1.60	14.20	0.85	1.33	TO
ZUU5BX		8.42	0.05	0.12	13.03	-0.32	-0.50	TO

Summary Statistics			
Grand Means	8.363	grams/10 mins	13.348
			grams/10 mins
Std Dev Btwn Labs	0.430	grams/10 mins	0.642
			grams/10 mins
Statistics based on 97 of 109 reporting participants			

Sample X69: PP & Sample X70: PP

Plastics Interlaboratory Testing Program
Analysis 750
Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - G/10 mins

Comments on assigned Data Flags for Test #750

1CCJMT (X) - Data for both samples are low.

6JR6YP (X) - Data for both samples are high.

7AM3XS (X) - Low data for Sample X70 .

9LCN8F (X) - Low data for Sample X69 .

EB43BK (X) - Data for both samples are high.

JLMP71 (X) - Data for both samples are high.

JXCQEU (X) - High data for Sample X69.

LAGNHL (X) - Inconsistent in testing between samples.

LR2UJQ (X) - Inconsistent in testing between samples, data for Sample X69 are high. Also inconsistent in testing within Sample X69.

R3654F (X) - Extreme data. Data may be off by a factor of 10.

UF6EJ6 (X) - Low data for Sample X70 .

XG29DS (X) - Data for both samples are low.

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(CS) - CSI

(DY) - Dynisco

(GO) - Gottfert

(HA) - Haake

(KA) - Kayeness

(QT) - Qualitest

(TA) - Takara

(TO) - Tinius Olsen

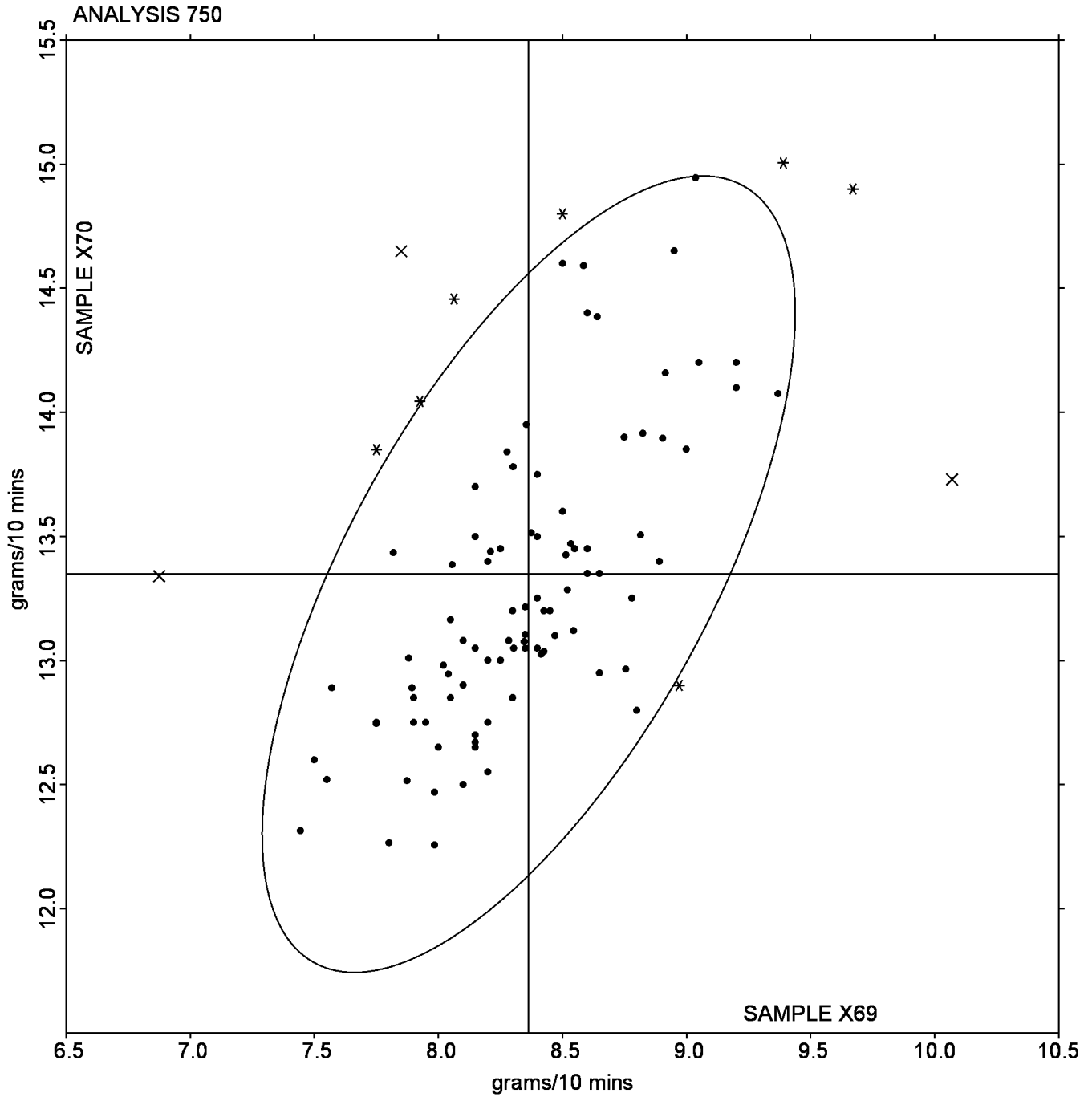
(TY) - Toyoseiki Seisakusho

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

Analysis 750
Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - G/10 mins

Grand Mean Sample X69: 8.3635 grams/10 mins Grand Mean Sample X70: 13.348 grams/10 mins



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

Plastics Interlaboratory Testing Program

Analysis 718

Specific Gravity - sp gr 23/23 C

WebCode	Data Flag	Sample T69			Sample T70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1JXWRE		1.04357	-0.00095	-0.50	1.04403	-0.00187	-1.10	XX
1MABQX		1.04387	-0.00065	-0.34	1.04530	-0.00061	-0.36	XX
26A17L		1.04653	0.00201	1.06	1.04663	0.00073	0.43	XX
2GXNRM		1.04110	-0.00342	-1.81	1.04377	-0.00214	-1.26	XX
2K82WF		1.04763	0.00311	1.65	1.04763	0.00173	1.01	XX
2MWMFR		1.04233	-0.00219	-1.16	1.04397	-0.00194	-1.14	XX
2YCSZE	X	1.04000	-0.00452	-2.39	1.04450	-0.00141	-0.83	XX
3G7WT1		1.04473	0.00021	0.11	1.04687	0.00096	0.56	XX
3GVF32		1.04240	-0.00212	-1.12	1.04473	-0.00117	-0.69	XX
3SZTT8		1.04253	-0.00199	-1.05	1.04327	-0.00264	-1.55	XX
3ZGM24	X	1.05060	0.00608	3.21	1.04780	0.00189	1.11	XX
4AL5F6		1.04473	0.00021	0.11	1.04597	0.00006	0.03	XX
4BVP77	X	1.04770	0.00318	1.68	1.04547	-0.00044	-0.26	XX
4CLHMK		1.04297	-0.00155	-0.82	1.04457	-0.00134	-0.79	XX
4T9PNY		1.04697	0.00245	1.29	1.04733	0.00143	0.84	XX
4XCYAQ		1.04660	0.00208	1.10	1.04807	0.00216	1.27	XX
4YZM71		1.04540	0.00088	0.47	1.04700	0.00109	0.64	XX
57RKCZ		1.04467	0.00015	0.08	1.04577	-0.00014	-0.08	XX
5S8P5P		1.04620	0.00168	0.89	1.04723	0.00133	0.78	XX
675PHL		1.04490	0.00038	0.20	1.04430	-0.00161	-0.94	XX
6KNZTT		1.04630	0.00178	0.94	1.04730	0.00139	0.82	XX
6SDQV4		1.04310	-0.00142	-0.75	1.04477	-0.00114	-0.67	XX
6XFHSZ		1.04547	0.00095	0.50	1.04503	-0.00087	-0.51	XX
7BXMKN		1.04367	-0.00085	-0.45	1.04487	-0.00104	-0.61	XX
7CMNC9		1.04397	-0.00055	-0.29	1.04497	-0.00094	-0.55	XX
7HQBCJ		1.04597	0.00145	0.77	1.04647	0.00056	0.33	XX
7U3SLW		1.04503	0.00051	0.27	1.04693	0.00103	0.60	XX
7UCCYS		1.04767	0.00315	1.66	1.04920	0.00329	1.93	XX
824TQ3		1.04343	-0.00109	-0.57	1.04420	-0.00171	-1.00	XX
84KD6X		1.04210	-0.00242	-1.28	1.04390	-0.00201	-1.18	XX
8RGXAU		1.04257	-0.00195	-1.03	1.04363	-0.00227	-1.34	XX
8UMRP2		1.04316	-0.00136	-0.72	1.04440	-0.00151	-0.89	XX

Analysis 718

Specific Gravity - sp gr 23/23 C

WebCode	Data Flag	Sample T69			Sample T70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
99YAMJ		1.04397	-0.00055	-0.29	1.04500	-0.00091	-0.53	XX
9F1Z94	*	1.04023	-0.00429	-2.27	1.04113	-0.00477	-2.80	XX
9M1AB3		1.04507	0.00055	0.29	1.04653	0.00063	0.37	XX
ADG65G		1.04410	-0.00042	-0.22	1.04520	-0.00071	-0.42	XX
AXTQKR		1.04533	0.00081	0.43	1.04600	0.00009	0.05	XX
AZQ3H3		1.04573	0.00121	0.64	1.04707	0.00116	0.68	XX
BA96PG		1.04380	-0.00072	-0.38	1.04587	-0.00004	-0.02	XX
C3ABGN		1.04707	0.00256	1.35	1.04794	0.00204	1.20	XX
CXDHTF		1.04273	-0.00179	-0.94	1.04450	-0.00141	-0.83	XX
CZQ5R9	*	1.04307	-0.00145	-0.77	1.04690	0.00099	0.58	XX
D1V3EV		1.04593	0.00141	0.75	1.04670	0.00079	0.47	XX
D2PSVX		1.04263	-0.00189	-1.00	1.04460	-0.00131	-0.77	XX
D58TQJ	X	1.04000	-0.00452	-2.39	1.04000	-0.00591	-3.47	XX
DXV8MC		1.04537	0.00085	0.45	1.04713	0.00123	0.72	XX
EC4LL9		1.04583	0.00131	0.69	1.04670	0.00079	0.47	XX
EUHPPH		1.04373	-0.00079	-0.42	1.04477	-0.00114	-0.67	XX
EUNATV		1.04033	-0.00419	-2.21	1.04333	-0.00257	-1.51	XX
FUFNPM		1.04217	-0.00235	-1.24	1.04447	-0.00144	-0.85	XX
GPUDBR	*	1.04100	-0.00352	-1.86	1.04133	-0.00457	-2.69	XX
GUQZK5		1.04600	0.00148	0.78	1.04700	0.00109	0.64	XX
H34MCR		1.04183	-0.00269	-1.42	1.04430	-0.00161	-0.94	XX
HNLZ17		1.04633	0.00181	0.96	1.04733	0.00143	0.84	XX
J79UZ8	X	1.05240	0.00788	4.17	1.05240	0.00649	3.81	XX
JK7JE4		1.04617	0.00165	0.87	1.04643	0.00053	0.31	XX
JZPCAY		1.04667	0.00215	1.14	1.04783	0.00193	1.13	XX
K6SQWN		1.04540	0.00088	0.47	1.04723	0.00133	0.78	XX
KUHJ4G		1.04407	-0.00045	-0.24	1.04467	-0.00124	-0.73	XX
KWDHG1		1.04180	-0.00272	-1.44	1.04433	-0.00157	-0.92	XX
L4KL76		1.04623	0.00171	0.91	1.04857	0.00266	1.56	XX
LCLS7T		1.04700	0.00248	1.31	1.04800	0.00209	1.23	XX
LERUWP		1.04570	0.00118	0.62	1.04607	0.00016	0.09	XX
LJYDN5		1.04563	0.00111	0.59	1.04780	0.00189	1.11	XX

Plastics Interlaboratory Testing Program

Analysis 718

Specific Gravity - sp gr 23/23 C

WebCode	Data Flag	Sample T69			Sample T70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
LLGLPZ		1.04533	0.00081	0.43	1.04770	0.00179	1.05	XX
LM68ND		1.04569	0.00117	0.62	1.04733	0.00142	0.84	XX
LPMK7S	X	1.05273	0.00821	4.34	1.05223	0.00633	3.72	XX
LZKCJX		1.04387	-0.00065	-0.34	1.04390	-0.00201	-1.18	XX
MA1SWR	X	1.04067	-0.00385	-2.04	1.04547	-0.00044	-0.26	XX
MCP4VW		1.04820	0.00368	1.95	1.04860	0.00269	1.58	XX
MH1HN7		1.04640	0.00188	0.99	1.04760	0.00169	0.99	XX
MYAB8V		1.04667	0.00215	1.14	1.04750	0.00159	0.94	XX
NQH8Z8		1.04643	0.00191	1.01	1.04717	0.00126	0.74	XX
PRMEBK		1.04230	-0.00222	-1.17	1.04347	-0.00244	-1.43	XX
Q14ELM		1.04460	0.00008	0.04	1.04657	0.00066	0.39	XX
QKQYD6	*	1.04003	-0.00449	-2.37	1.04143	-0.00447	-2.63	XX
QX6R9J		1.04490	0.00038	0.20	1.04657	0.00066	0.39	XX
R8SLAS		1.04167	-0.00285	-1.51	1.04400	-0.00191	-1.12	XX
RSLF5N		1.04453	0.00001	0.01	1.04583	-0.00007	-0.04	XX
SCN4DH		1.04623	0.00171	0.91	1.04747	0.00156	0.92	XX
SGRPPV		1.04297	-0.00155	-0.82	1.04560	-0.00031	-0.18	XX
SGV3J9	*	1.04567	0.00115	0.61	1.04443	-0.00147	-0.87	XX
SM9S7C		1.04533	0.00081	0.43	1.04543	-0.00047	-0.28	XX
SYKE2V		1.04550	0.00098	0.52	1.04640	0.00049	0.29	XX
T5NXFV		1.04167	-0.00285	-1.51	1.04467	-0.00124	-0.73	XX
T6M194		1.04537	0.00085	0.45	1.04730	0.00139	0.82	XX
UD4B8V		1.04420	-0.00032	-0.17	1.04670	0.00079	0.47	XX
UM2SAM		1.04600	0.00148	0.78	1.04743	0.00153	0.90	XX
V3HZL4		1.04227	-0.00225	-1.19	1.04593	0.00003	0.02	XX
VHKU7L		1.04200	-0.00252	-1.33	1.04500	-0.00091	-0.53	XX
WBG4QD		1.04547	0.00095	0.50	1.04673	0.00083	0.49	XX
WQPA2J	X	1.04900	0.00448	2.37	1.04133	-0.00457	-2.69	XX
XADGDL		1.04530	0.00078	0.41	1.04683	0.00093	0.54	XX
XPT59W		1.04550	0.00098	0.52	1.04763	0.00173	1.01	XX
XQHL84		1.04820	0.00368	1.95	1.04880	0.00289	1.70	XX

Analysis 718
Specific Gravity - sp gr 23/23 C

WebCode	Data Flag	Sample T69			Sample T70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
YJ8CWM	*	1.04427	-0.00025	-0.13	1.04790	0.00199	1.17	XX
YSUGS1		1.04513	0.00061	0.32	1.04697	0.00106	0.62	XX
YWVWL5	X	1.03927	-0.00525	-2.78	1.03753	-0.00837	-4.92	XX

Summary Statistics			
Grand Means	1.044519	sp gr 23/23 C	1.045907 sp gr 23/23 C
Std Dev Btwn Labs	0.001892	sp gr 23/23 C	0.001702 sp gr 23/23 C
Statistics based on 89 of 98 reporting participants			

Sample T69: ABS & Sample T70: ABS

Comments on assigned Data Flags for Test #718

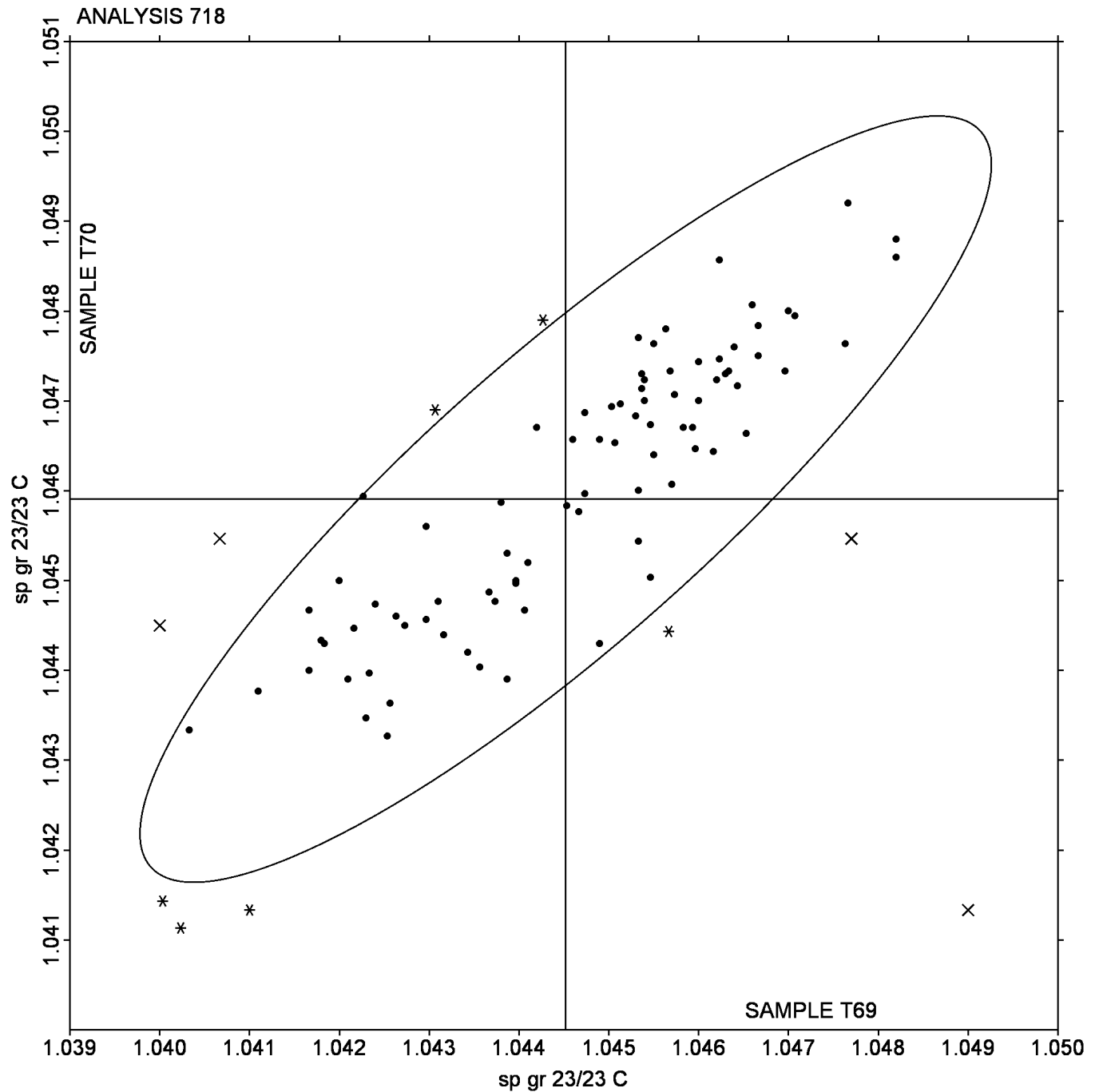
- 2YCSZE (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.
- 3ZGM24 (X) - Inconsistent in testing between samples, data for Sample T69 are high.
- 4BVP77 (X) - Inconsistent in testing between samples.
- D58TQJ (X) - Inconsistent in testing between samples, data for Sample T70 are low.
- J79UZ8 (X) - Data for both samples are high.
- LPMK7S (X) - Data for both samples are high. Also inconsistent in testing within both sample sets.
- MA1SWR (X) - Inconsistent in testing between samples.
- WQPA2J (X) - Inconsistent in testing between samples.
- YWVWL5 (X) - Data for all samples are low.

Instrument Code List as Reported by the Labs

(XX) - Instrument Codes not used by CTS at this time

Analysis 718
Specific Gravity - sp gr 23/23 C

Grand Mean Sample T69: 1.0445 sp gr 23/23 C Grand Mean Sample T70: 1.0459 sp gr 23/23 C



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

Plastics Interlaboratory Testing Program
Analysis 755
Moisture Content of Plastics

WebCode	Data Flag	Sample Y69			Sample Y70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1SSE48		0.14923	-0.00636	-0.26	0.17497	0.00556	0.22	MK
4WRW3J		0.16637	0.01077	0.44	0.18260	0.01319	0.52	MJ
5UT471		0.15467	-0.00093	-0.04	0.17600	0.00659	0.26	AZ
5VAMFJ		0.14800	-0.00760	-0.31	0.17333	0.00393	0.15	MQ
6DNL5D	*	0.09067	-0.06493	-2.66	0.09000	-0.07941	-3.13	CB
6FCDBV	*	0.17903	0.02344	0.96	0.16003	-0.00937	-0.37	MD
6X6S39		0.15433	-0.00126	-0.05	0.16767	-0.00174	-0.07	XX
6ZP1X3		0.16647	0.01087	0.45	0.17567	0.00626	0.25	MK
91PAGV		0.16933	0.01374	0.56	0.18467	0.01526	0.60	ML
97XPAU		0.12200	-0.03360	-1.38	0.14200	-0.02741	-1.08	XX
9E7PEH		0.17550	0.01990	0.82	0.18600	0.01659	0.65	ML
DS3S1R		0.16300	0.00740	0.30	0.17600	0.00659	0.26	MK
DWPW78		0.18500	0.02940	1.21	0.16833	-0.00107	-0.04	MI
EXM9Y2		0.13500	-0.02060	-0.84	0.14183	-0.02757	-1.09	ML
FSM7R6		0.15200	-0.00360	-0.15	0.17400	0.00459	0.18	MB
FYCPVR		0.16703	0.01144	0.47	0.17820	0.00879	0.35	MR
JSXN9N		0.16833	0.01274	0.52	0.18133	0.01193	0.47	MJ
LZGUE7		0.16000	0.00440	0.18	0.19000	0.02059	0.81	MU
M4JYBB		0.16357	0.00797	0.33	0.18523	0.01583	0.62	MR
MSA4BM		0.14650	-0.00910	-0.37	0.15700	-0.01241	-0.49	BA
N5TV9A		0.10667	-0.04893	-2.01	0.14533	-0.02407	-0.95	XX
NHY2ZE		0.16374	0.00814	0.33	0.17711	0.00770	0.30	MR
PAYXMN		0.16540	0.00980	0.40	0.17570	0.00629	0.25	XX
QJ754W		0.16000	0.00440	0.18	0.17333	0.00393	0.15	MK
QLQXPQ		0.17367	0.01807	0.74	0.17167	0.00226	0.09	MC
QTSYBY		0.19333	0.03774	1.55	0.22333	0.05393	2.12	XX
R7UYQD		0.16233	0.00674	0.28	0.18033	0.01093	0.43	ML
STV3HF		0.11733	-0.03826	-1.57	0.11800	-0.05141	-2.02	CB
T7H4W4		0.17107	0.01547	0.63	0.18663	0.01723	0.68	XX
UF1GDW		0.18433	0.02874	1.18	0.19933	0.02993	1.18	MD
VTDUS2		0.14833	-0.00726	-0.30	0.15500	-0.01441	-0.57	MK
W6Z17V	X	0.05700	-0.09860	-4.04	0.08400	-0.08541	-3.36	MB

Plastics Interlaboratory Testing Program
Analysis 755
Moisture Content of Plastics

WebCode	Data Flag	Sample Y69			Sample Y70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
WAA231		0.14667	-0.00893	-0.37	0.18667	0.01726	0.68	XX
XSZJ3W		0.18277	0.02717	1.11	0.18813	0.01873	0.74	XX
ZN9JPQ		0.09867	-0.05693	-2.33	0.11433	-0.05507	-2.17	XX

Summary Statistics

Grand Means

0.155598 Percent

0.169405 Percent

Std Dev Btwn Labs

0.024397 Percent

0.025396 Percent

Statistics based on 34 of 35 reporting participants

Sample Y69: ABS & Sample Y70: ABS

Comments on assigned Data Flags for Test #755

W6Z17V (X) - Data for both samples are low.

Instrument Code List as Reported by the Labs

(AZ) - Arizona Instruments Moisture Analyzer

(BA) - Brabender Aquatrac

(CB) - Computrac Max 2000 Moisture Analyzer

(MB) - Omnimark Mark 3

(MC) - Mettler Toledo DL32

(MD) - Mettler Toledo DL37

(MI) - Mitsubishi MCI Series

(MJ) - Mitsubishi KF Analyzer Series

(MK) - Mitsubishi KF Analyzer CA 100

(ML) - Metrohm Coulometer

(MQ) - Metrohm Coulometer 737 KF

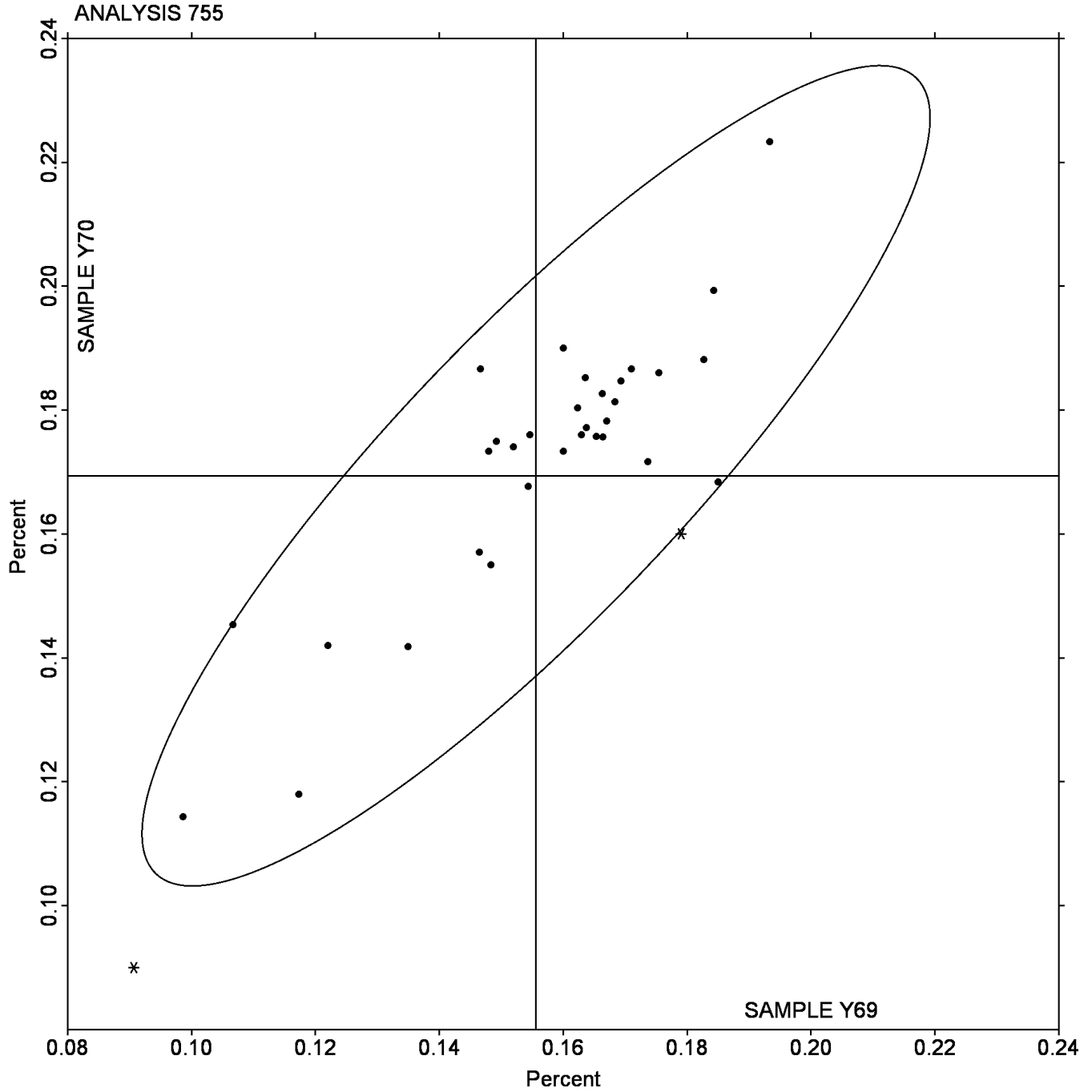
(MR) - Metrohm Coulometer 756 KF

(MU) - Mettler

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 755
Moisture Content of Plastics

Grand Mean Sample Y69: 0.15560 Percent Grand Mean Sample Y70: 0.16941 Percent



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

Plastics Interlaboratory Testing Program
Analysis 757
Ash Content in Thermoplastics - Percent

WebCode	Data Flag	Sample L69			Sample L70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1PL441		31.375	0.007	0.03	39.955	0.194	0.88	XX
25KNWD		31.250	-0.118	-0.47	39.945	0.184	0.84	XX
3E22MG	*	31.450	0.082	0.33	39.100	-0.661	-3.00	XX
3TSEWJ		31.080	-0.288	-1.16	39.720	-0.041	-0.19	XX
5ZWSNZ		31.245	-0.123	-0.49	39.710	-0.051	-0.23	XX
8UZZB8		31.470	0.101	0.41	39.443	-0.318	-1.45	XX
94XCDU	X	31.510	0.142	0.57	38.135	-1.626	-7.39	XX
9EYUB9		31.220	-0.148	-0.59	39.885	0.124	0.57	XX
A1FPVL		31.500	0.132	0.53	40.070	0.309	1.41	XX
A536Y7		31.300	-0.068	-0.27	39.605	-0.156	-0.71	XX
C9XMJB		31.580	0.212	0.85	39.650	-0.111	-0.50	XX
DH6JZ2		31.515	0.147	0.59	39.750	-0.011	-0.05	XX
DMN8TK	*	32.075	0.707	2.84	39.815	0.054	0.25	XX
DX42WY		31.135	-0.233	-0.94	39.920	0.159	0.72	XX
E1E1LR		31.265	-0.103	-0.41	39.590	-0.171	-0.78	XX
EFD1JM		31.381	0.013	0.05	39.831	0.071	0.32	XX
EMVHR4		31.607	0.239	0.96	39.493	-0.268	-1.22	XX
F7QR7J		31.135	-0.233	-0.94	39.825	0.064	0.29	XX
GV2YEF	X	2.268	-29.100	-116.79	2.612	-37.149	-168.89	XX
HCWWZV		31.305	-0.063	-0.25	39.690	-0.071	-0.32	XX
HET328		31.520	0.152	0.61	39.625	-0.136	-0.62	XX
J1YGPP		31.290	-0.078	-0.31	39.930	0.169	0.77	XX
J2SU1W		31.330	-0.038	-0.15	39.735	-0.026	-0.12	XX
JBHTXF	*	30.740	-0.628	-2.52	39.420	-0.341	-1.55	XX
JMVPRD		31.460	0.092	0.37	40.245	0.484	2.20	XX
KEKLT3		30.860	-0.508	-2.04	39.745	-0.016	-0.07	XX
KKW9RE		31.440	0.072	0.29	39.665	-0.096	-0.44	XX
KSMVK8		31.450	0.082	0.33	39.525	-0.236	-1.07	XX
KSXGEU		31.565	0.197	0.79	39.930	0.169	0.77	XX
KYGV66		31.140	-0.228	-0.92	39.655	-0.106	-0.48	XX
LER7P6		31.235	-0.133	-0.53	39.905	0.144	0.66	XX
MAAPZE		31.285	-0.083	-0.33	39.815	0.054	0.25	XX

Plastics Interlaboratory Testing Program
Analysis 757
Ash Content in Thermoplastics - Percent

WebCode	Data Flag	Sample L69			Sample L70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
MMVYR7		31.830	0.462	1.85	40.035	0.274	1.25	XX
NMQCUL		31.266	-0.102	-0.41	39.708	-0.053	-0.24	XX
Q5WYCB		31.615	0.247	0.99	39.800	0.039	0.18	XX
QEDAEV		31.000	-0.368	-1.48	40.000	0.239	1.09	XX
QRQVWC	*	31.700	0.332	1.33	40.340	0.579	2.63	XX
QRYRWQ		31.348	-0.021	-0.08	39.942	0.181	0.82	XX
QZDK69		31.515	0.147	0.59	39.900	0.139	0.63	XX
RV43R1		31.112	-0.256	-1.03	39.568	-0.193	-0.88	XX
RYX75E		31.355	-0.014	-0.05	39.664	-0.097	-0.44	XX
SNKPJ8		31.235	-0.133	-0.53	39.540	-0.221	-1.00	XX
TN1NAK		31.370	0.002	0.01	39.980	0.219	1.00	XX
UFCYVV		31.335	-0.033	-0.13	40.040	0.279	1.27	XX
UKJ2GH		31.493	0.125	0.50	39.609	-0.152	-0.69	XX
VA5NM1		31.290	-0.078	-0.31	39.670	-0.091	-0.41	XX
VFAU4Z		31.252	-0.116	-0.47	39.845	0.084	0.38	XX
WGGC9E	*	32.100	0.732	2.94	39.600	-0.161	-0.73	XX
X74ZVA		31.340	-0.028	-0.11	39.875	0.114	0.52	XX
XUWFUV		31.570	0.202	0.81	39.385	-0.376	-1.71	XX
YC4BZ1		31.290	-0.078	-0.31	39.620	-0.141	-0.64	XX
Z5S6RM		31.060	-0.308	-1.24	39.780	0.019	0.09	XX
ZBLU31		31.490	0.122	0.49	39.705	-0.056	-0.25	XX

Summary Statistics

Grand Means

31.3680 Percent

39.7607 Percent

Std Dev Btwn Labs

0.2492 Percent

0.2200 Percent

Statistics based on 51 of 53 reporting participants

Sample L69: PP & Sample L70: PP

Comments on assigned Data Flags for Test #757

94XCDU (X) - Low data for Sample C70 .

GV2YEF (X) - Extreme data.

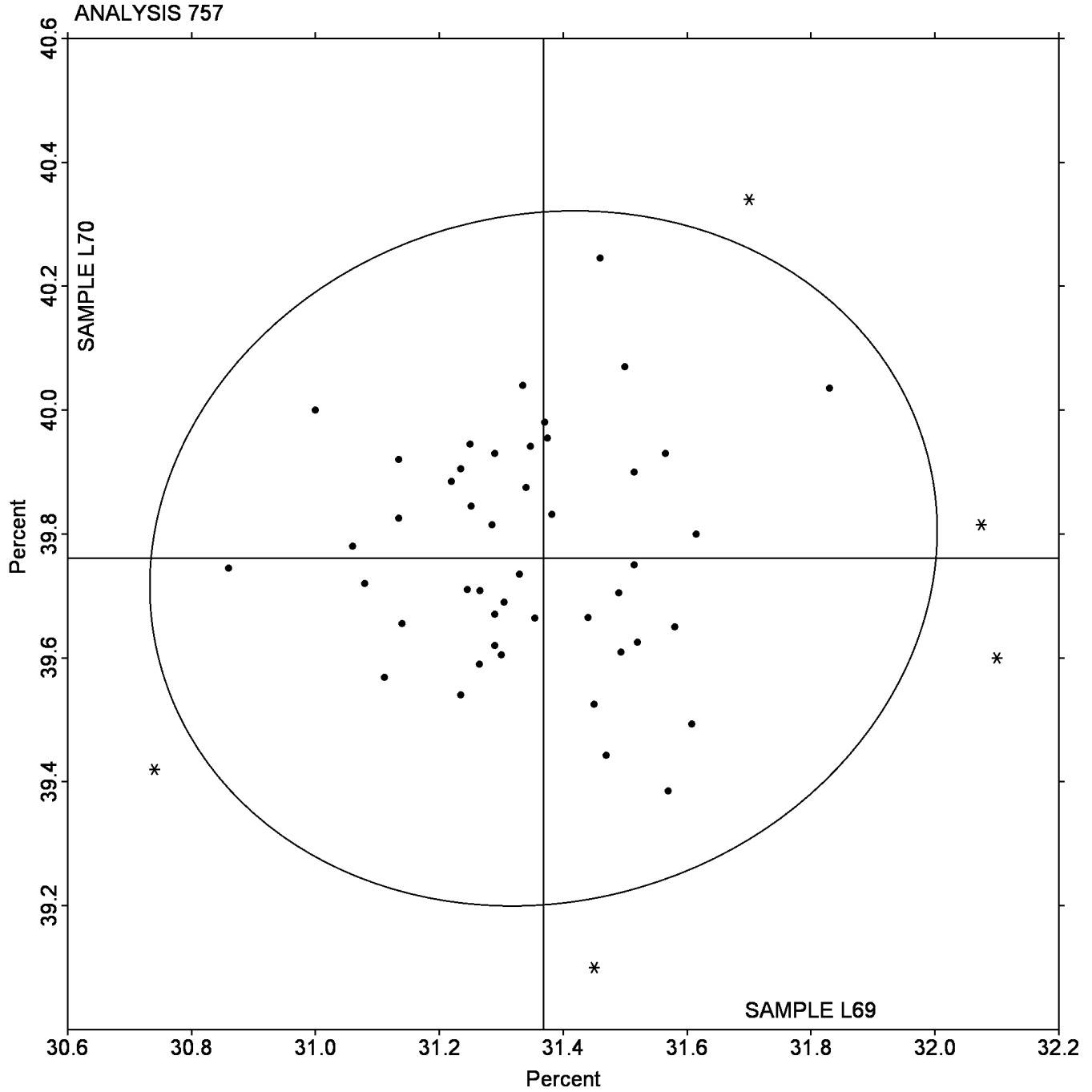
Plastics Interlaboratory Testing Program
Analysis 757
Ash Content in Thermoplastics - Percent

Instrument Code List as Reported by the Labs

(XX) - Instrument Codes not used by CTS at this time

Plastics Interlaboratory Testing Program
Analysis 757
Ash Content in Thermoplastics - Percent

Grand Mean Sample L69: 31.368 Percent Grand Mean Sample L70: 39.761 Percent



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

Plastics Interlaboratory Testing Program
Analysis 770
Tensile Stress at Yield, Film Samples - psi

WebCode	Data Flag	Sample B69			Sample B70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2KYETE		1,451	-602	-1.68	1,473	-608	-1.67	IN
5AHB4W		2,251	198	0.55	2,254	173	0.47	IN
8HC84Y		1,719	-333	-0.93	1,698	-383	-1.05	IM
A7C3JP		2,197	144	0.40	2,277	196	0.54	IN
BDU1KE		2,105	53	0.15	2,131	50	0.14	IN
F55DPM		2,183	131	0.36	2,233	152	0.42	TY
GCSLJJ		2,190	137	0.38	2,245	164	0.45	IN
HK22CJ		1,175	-878	-2.45	1,207	-874	-2.40	XX
J8E5CZ		2,235	183	0.51	2,318	237	0.65	TH
K1W3N9		2,279	226	0.63	2,308	227	0.62	IN
L3RABR		2,246	193	0.54	2,321	240	0.66	IM
S52PAZ		2,191	139	0.39	2,185	104	0.29	IN
UPNQ9C		2,314	262	0.73	2,297	216	0.59	IN
Y7R7SR		2,314	262	0.73	2,362	281	0.77	IN
YCZKLJ		1,606	-447	-1.25	1,622	-459	-1.26	IN
ZKMFQL		2,385	333	0.93	2,365	284	0.78	TH

Summary Statistics	
Grand Means	2,052.6 psi 2,080.9 psi
Stnd Dev Btwn Labs	358.8 psi 364.7 psi
Statistics based on 16 of 16 reporting participants	

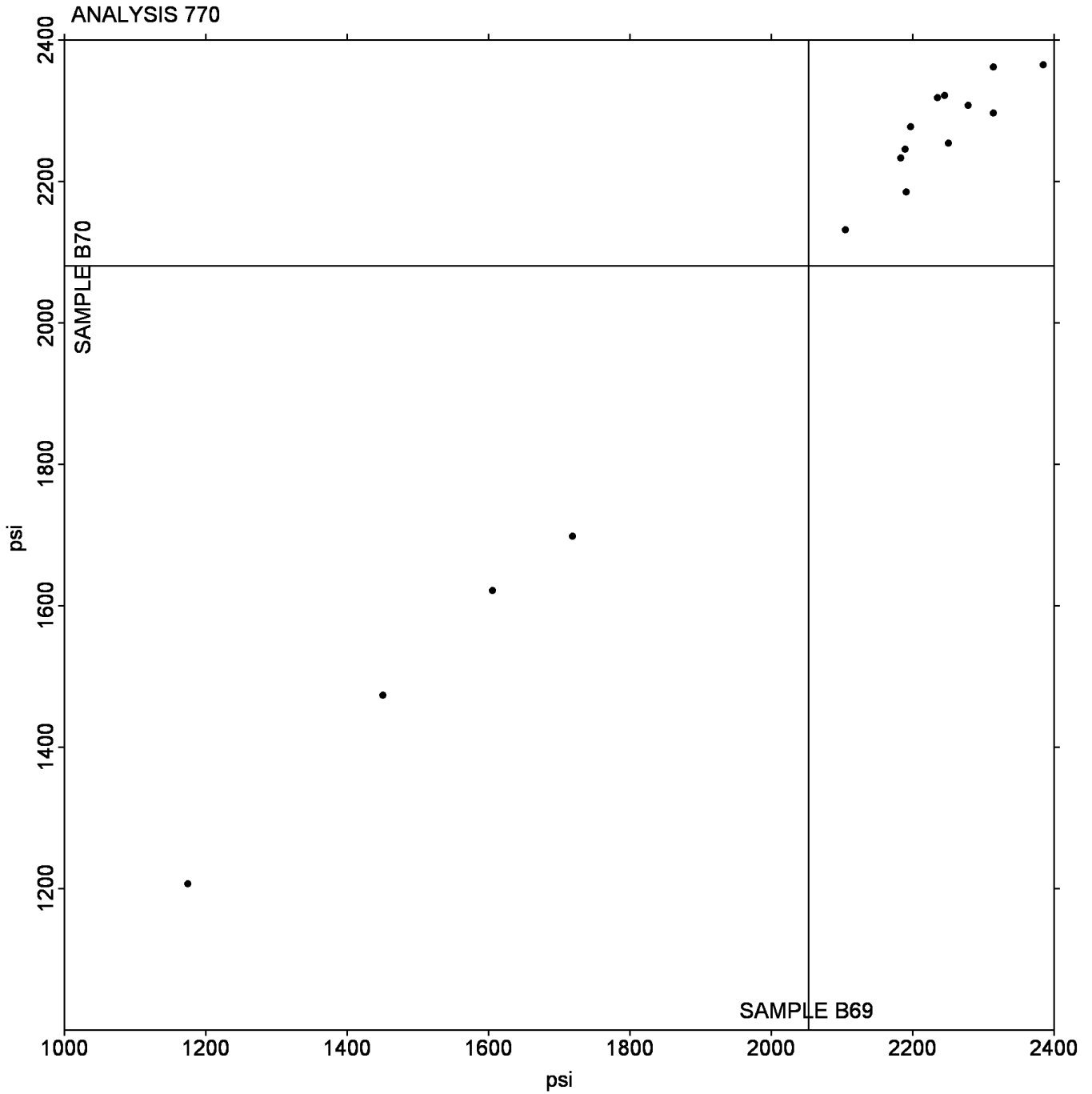
Sample B69: LDPE & Sample B70: LDPE

Instrument Code List as Reported by the Labs

- (IM) - Instru-Met Instruments
- (IN) - Instron
- (TH) - Thwing Albert
- (TY) - Toyoseiki
- (XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 770
Tensile Stress at Yield, Film Samples - psi

Grand Mean Sample B69: 2,052.57 psi Grand Mean Sample B70: 2,080.87 psi



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

**Plastics Interlaboratory Testing Program
Analysis 771
Tensile Stress at Break, Film Samples - psi**

WebCode	Data Flag	Sample B69			Sample B70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
4YWGS4		3,827	82	0.23	3,837	110	0.32	IN
8EDW8Y		3,721	-25	-0.07	3,268	-459	-1.34	IM
BPBNLX		4,007	261	0.75	4,131	404	1.18	TH
DE76C3		3,499	-247	-0.70	3,491	-235	-0.69	IN
DJZBUN		3,456	-289	-0.83	3,793	67	0.20	IN
ERUCQC		4,250	504	1.44	3,813	86	0.25	TH
G1J5NZ		3,775	30	0.09	3,810	84	0.24	IN
HWDXHN		3,704	-42	-0.12	3,810	83	0.24	IN
HXNG9P		3,849	104	0.30	3,668	-58	-0.17	IN
JRR91P		4,092	346	0.99	4,037	311	0.91	IN
MDDJU4		3,175	-571	-1.63	3,200	-526	-1.53	IN
MX1LJ6		3,885	139	0.40	3,754	27	0.08	IN
N6AURU		3,635	-110	-0.32	3,713	-13	-0.04	IN
QEE42G		3,583	-163	-0.46	3,453	-273	-0.80	SH
RYKLL5		4,115	369	1.05	4,090	363	1.06	HO
S4W316		4,028	283	0.81	4,113	387	1.13	TY
SYDJMK		3,719	-26	-0.07	3,902	175	0.51	IM
V1FLXY		4,053	307	0.88	4,070	343	1.00	IN
XXKSU1	*	2,792	-953	-2.72	2,850	-876	-2.55	XX

Summary Statistics			
Grand Means	3,745.4	psi	3,726.5
Std Dev Btwn Labs	350.6	psi	343.1
Statistics based on 19 of 19 reporting participants			

Sample B69: LDPE & Sample B70: LDPE

Plastics Interlaboratory Testing Program
Analysis 771
Tensile Stress at Break, Film Samples - psi

Instrument Code List as Reported by the Labs

(HO) - Hounsfield Instruments

(IM) - Instru-Met Instruments

(IN) - Instron

(SH) - Shimadzu

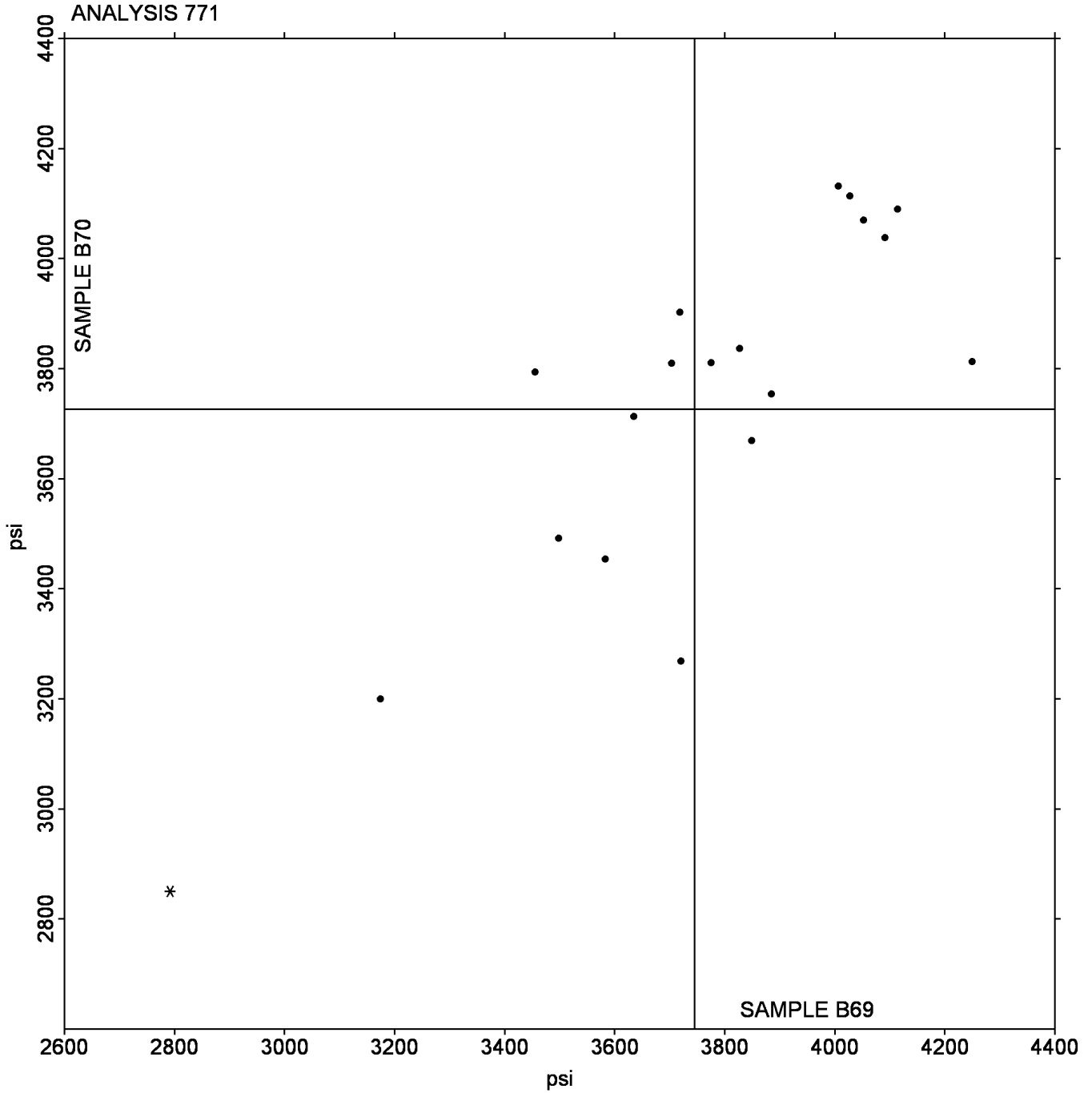
(TH) - Thwing Albert

(TY) - Toyoseiki

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 771
Tensile Stress at Break, Film Samples - psi

Grand Mean Sample B69: 3,745.45 psi Grand Mean Sample B70: 3,726.48 psi



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

Plastics Interlaboratory Testing Program
Analysis 772
Percent Elongation at Yield, Films

WebCode	Data Flag	Sample B69			Sample B70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
4MV9FT		3.42	-67.82	-1.53	4.63	-65.72	-1.52	XX
7K74Z1		81.25	10.01	0.23	81.29	10.93	0.25	IN
BHGV12		89.32	18.08	0.41	93.24	22.89	0.53	IM
CUT2EU		104.97	33.73	0.76	109.08	38.73	0.90	IN
DE11YN		93.01	21.77	0.49	84.13	13.78	0.32	IN
DKF5RU		91.33	20.09	0.45	92.33	21.98	0.51	IN
GQ4ZQB		99.99	28.75	0.65	96.18	25.83	0.60	IN
GQUEN1		7.97	-63.27	-1.43	8.09	-62.26	-1.44	IN
QVBHV3		108.63	37.39	0.85	107.92	37.57	0.87	IN
W2MDEB		76.83	5.59	0.13	75.07	4.72	0.11	IN
WC2TCR		11.70	-59.54	-1.35	11.70	-58.65	-1.36	IN
YGDLYX		135.91	64.67	1.46	129.46	59.11	1.37	IN
ZSS249		21.77	-49.47	-1.12	21.46	-48.89	-1.13	IM

Summary Statistics			
Grand Means	71.238	Percent	70.352
			Percent
Stnd Dev Btwn Labs	44.230	Percent	43.241
			Percent
Statistics based on 13 of 13 reporting participants			

Sample B69: LDPE & Sample B70: LDPE

Instrument Code List as Reported by the Labs

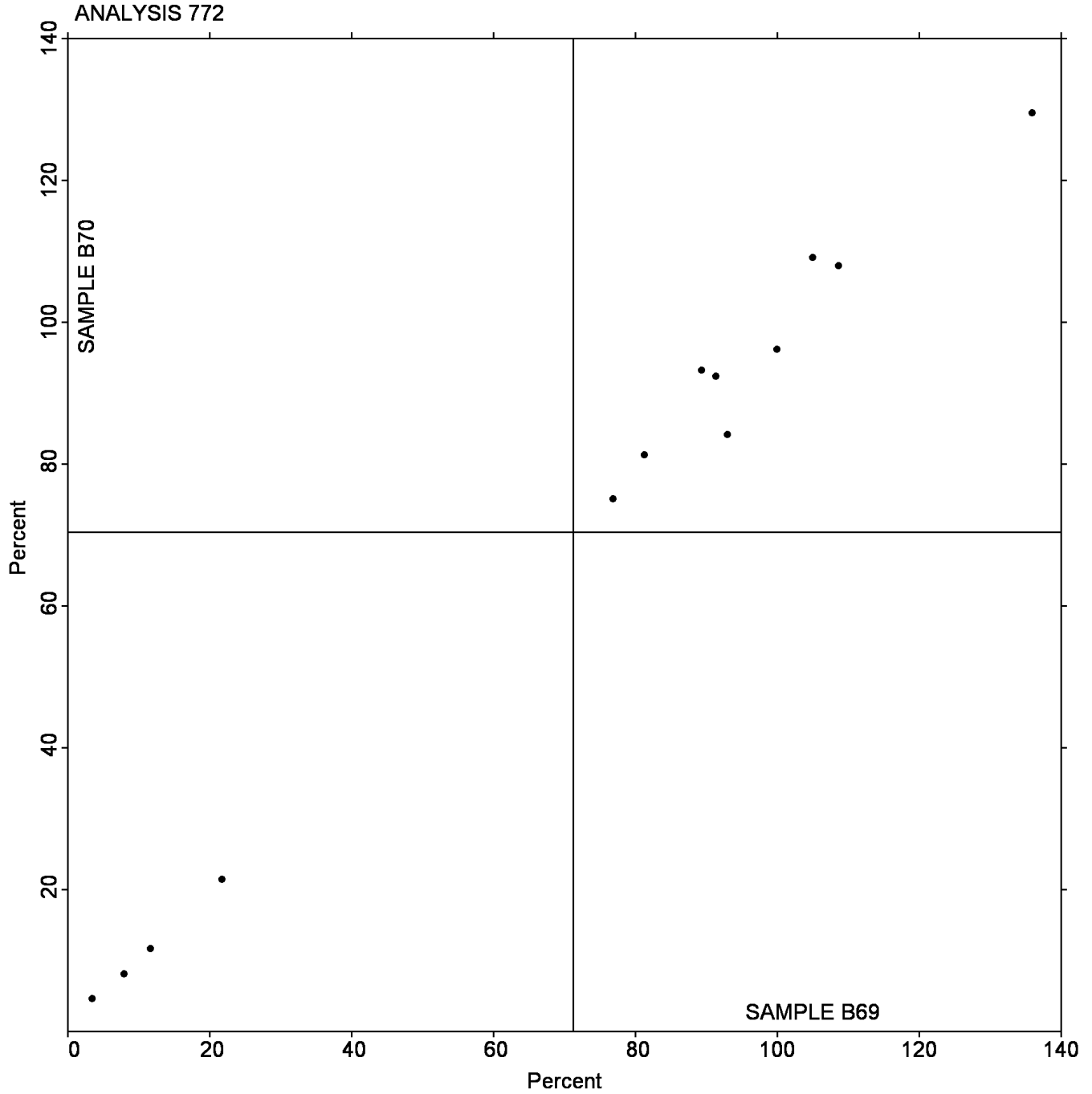
(IM) - Instru-Met Instruments

(IN) - Instron

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 772
Percent Elongation at Yield, Films

Grand Mean Sample B69: 71.238 Percent Grand Mean Sample B70: 70.352 Percent



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

Plastics Interlaboratory Testing Program
Analysis 773
Percent Elongation at Break, Film Samples

WebCode	Data Flag	Sample B69			Sample B70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1LBP87		831.2	106.9	0.90	877.6	156.7	1.02	IN
43CAYK		908.2	183.9	1.55	888.0	167.1	1.09	IN
BD5143		571.7	-152.6	-1.29	587.5	-133.4	-0.87	IN
EHHM4D		700.0	-24.3	-0.21	702.7	-18.2	-0.12	IN
GMV4S1		625.1	-99.3	-0.84	607.1	-113.8	-0.74	IN
HYG95A		628.5	-95.8	-0.81	588.4	-132.5	-0.86	TH
MNMYST		702.8	-21.5	-0.18	705.0	-15.9	-0.10	TH
MQKNSL		730.7	6.4	0.05	636.2	-84.7	-0.55	IM
MTW78A		702.3	-22.0	-0.19	556.4	-164.6	-1.07	IN
N5JP77		1,009.0	284.7	2.40	1,041.0	320.1	2.08	IN
NU3FQM		617.6	-106.8	-0.90	606.2	-114.7	-0.75	IN
RDXR6S		545.9	-178.4	-1.51	559.6	-161.3	-1.05	IN
TM21GF		789.1	64.8	0.55	827.2	106.3	0.69	SH
UA2DP4	*	847.3	123.0	1.04	1,034.2	313.3	2.04	XX
V1QPCG		705.2	-19.1	-0.16	724.3	3.4	0.02	IM
X9V8UB		688.3	-36.0	-0.30	652.2	-68.8	-0.45	XX
YR1612		762.8	38.5	0.32	760.0	39.1	0.25	IN
Z99AWW		672.4	-51.9	-0.44	623.4	-97.6	-0.63	HO

Summary Statistics

Grand Means

724.35 Percent

720.94 Percent

Std Dev Btw Labs

118.46 Percent

153.87 Percent

Statistics based on 18 of 18 reporting participants

Sample B69: LDPE & Sample B70: LDPE

Instrument Code List as Reported by the Labs

(HO) - Hounsfield Instruments

(IM) - Instru-Met Instruments

(IN) - Instron

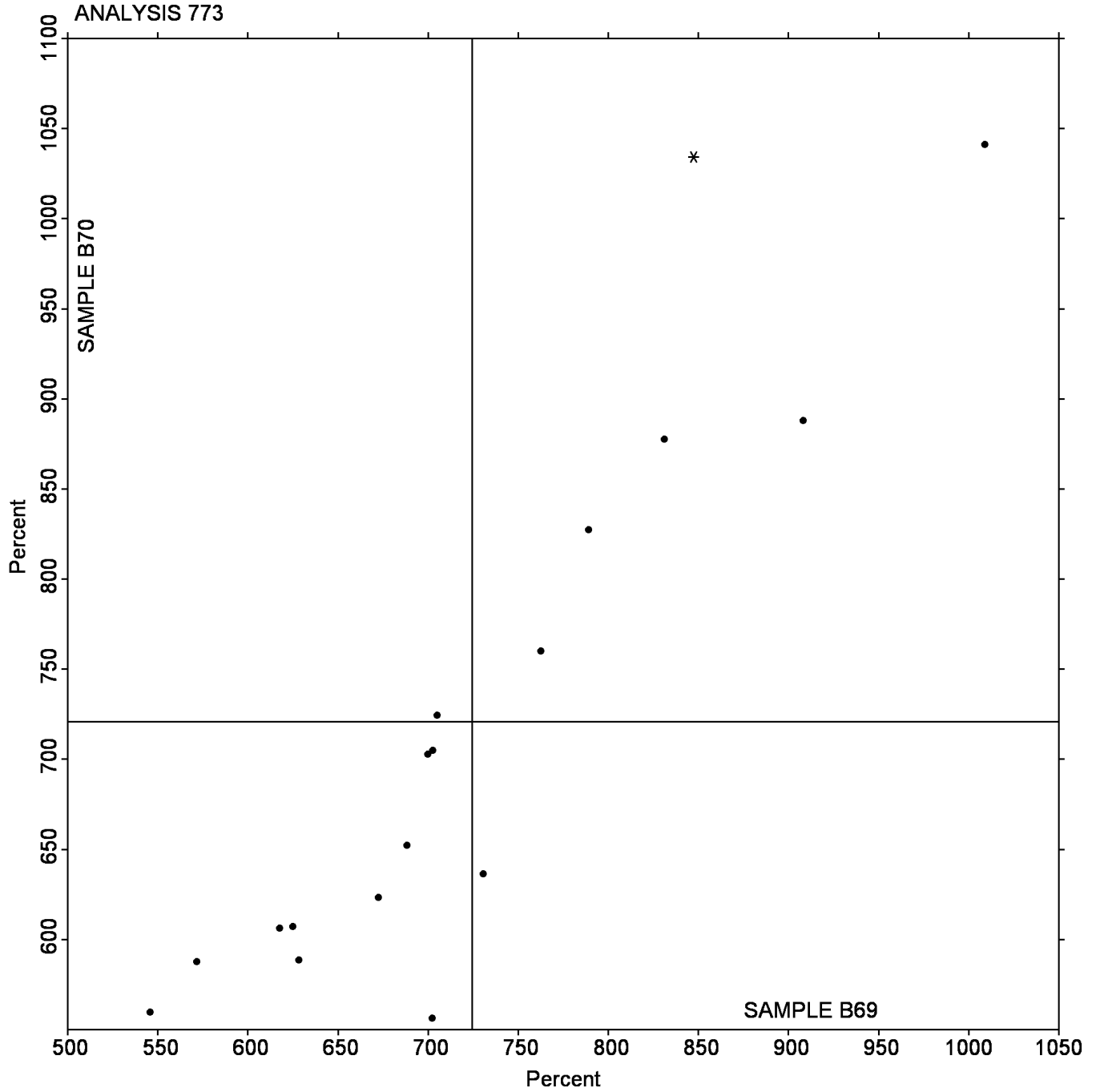
(SH) - Shimadzu

(TH) - Thwing Albert

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 773
Percent Elongation at Break, Film Samples

Grand Mean Sample B69: 724.35 Percent Grand Mean Sample B70: 720.94 Percent



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

Analysis 774

Thickness of Film Tensile Samples - mils

WebCode	Data Flag	Sample B69			Sample B70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1768RY		2.9094	0.0101	0.16	2.9134	0.0325	0.41	XX
2QCGAQ		2.8111	-0.0883	-1.38	2.7638	-0.1170	-1.46	XX
2ZY5ZC	X	2.7126	-0.1868	-2.92	2.9961	0.1152	1.44	XX
52YVZW	X	0.0029	-2.8965	-45.22	0.0028	-2.8780	-36.02	XX
67QB5A		2.9000	0.0006	0.01	2.8700	-0.0108	-0.14	XX
67VWBH		2.8000	-0.0994	-1.55	2.7450	-0.1358	-1.70	XX
6E48U2		2.9720	0.0726	1.13	3.0170	0.1362	1.70	XX
96Z815		2.8000	-0.0994	-1.55	2.8100	-0.0708	-0.89	XX
ARPSXM	X	2.9700	0.0706	1.10	2.7600	-0.1208	-1.51	XX
C8MR85		2.8800	-0.0194	-0.30	2.9100	0.0292	0.36	XX
FKVGSJ		2.8860	-0.0134	-0.21	2.8340	-0.0468	-0.59	XX
FXESVT		3.0050	0.1056	1.65	2.9900	0.1092	1.37	XX
HLHRPQ		2.9000	0.0006	0.01	2.8700	-0.0108	-0.14	XX
J4GHRV		2.8890	-0.0104	-0.16	2.8920	0.0112	0.14	XX
JQ9BAH		2.8630	-0.0364	-0.57	2.8190	-0.0618	-0.77	XX
KTR9AE		2.9300	0.0306	0.48	2.8600	-0.0208	-0.26	XX
LM4XXY		2.8920	-0.0074	-0.12	2.8690	-0.0118	-0.15	XX
LMTW95		2.8700	-0.0294	-0.46	2.8350	-0.0458	-0.57	XX
M1PK32		3.0650	0.1656	2.59	3.0650	0.1842	2.30	XX
NZE865		2.8650	-0.0344	-0.54	2.8400	-0.0408	-0.51	XX
WDDLXR		2.9160	0.0166	0.26	2.8490	-0.0318	-0.40	XX
YWB77R		2.9331	0.0337	0.53	2.9528	0.0720	0.90	XX
ZPB799		2.9011	0.0017	0.03	2.9119	0.0311	0.39	XX

Summary Statistics

Grand Means

2.89939 mils

2.88085 mils

Std Dev Btwn Labs

0.06405 mils

0.07991 mils

Statistics based on 20 of 23 reporting participants

Sample B69: LDPE & Sample B70: LDPE

Plastics Interlaboratory Testing Program
Analysis 774
Thickness of Film Tensile Samples - mils

Comments on assigned Data Flags for Test #774

2ZY5ZC (X) - Inconsistent in testing between samples, data for Sample B69 are low.

52YVZW (X) - Extreme data. Lab indicated reporting in mils, but data may be in inches.

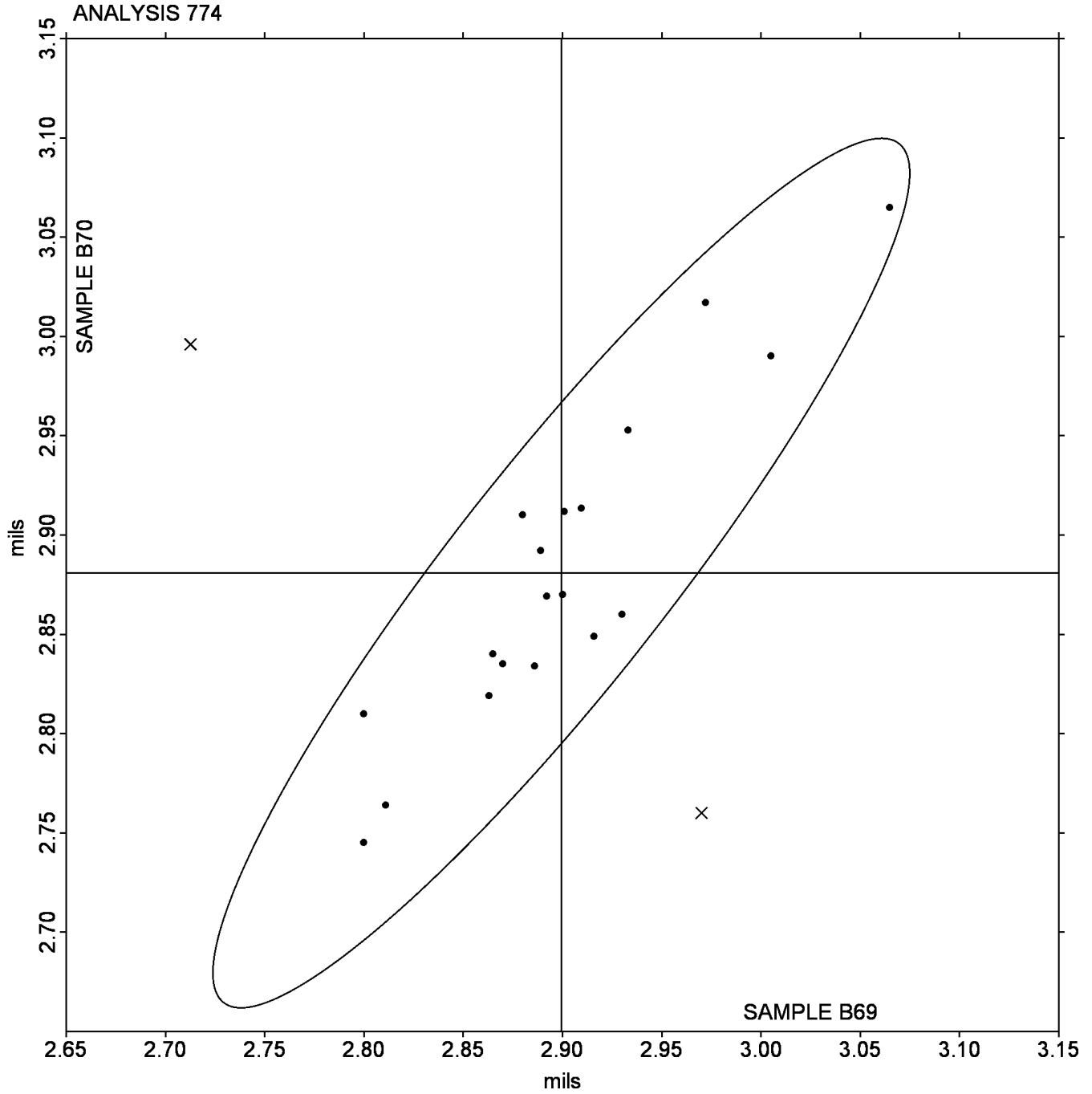
ARPSXM (X) - Inconsistent in testing between samples.

Instrument Code List as Reported by the Labs

(XX) - Instrument Codes not used by CTS at this time

Plastics Interlaboratory Testing Program
Analysis 774
Thickness of Film Tensile Samples - mils

Grand Mean Sample B69: 2.8994 mils Grand Mean Sample B70: 2.8808 mils



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

Analysis 775
Secant Modulus at 1% Strain - psi

WebCode	Data Flag	Sample B69			Sample B70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
4H94DC		33,570	1,821	0.31	34,196	2,490	0.40	IN
5NTA6Y		32,823	1,074	0.18	32,936	1,230	0.20	IN
5P3UXZ		40,694	8,945	1.50	40,921	9,215	1.46	IN
C27WKN		33,874	2,125	0.36	28,534	-3,172	-0.50	IN
DYJWQZ		32,547	798	0.13	32,464	758	0.12	IN
EA6239		36,163	4,415	0.74	36,326	4,620	0.73	TH
HRVWUJ		31,699	-50	-0.01	32,306	600	0.10	IN
NQMJ4R		32,278	529	0.09	30,820	-886	-0.14	IN
P6VVC9		29,120	-2,629	-0.44	31,888	182	0.03	IN
T74NTR		34,307	2,558	0.43	34,134	2,428	0.39	IM
UELSJA		27,897	-3,851	-0.65	30,993	-713	-0.11	IN
V6S9V9		32,942	1,193	0.20	33,406	1,700	0.27	IM
XHPA42		14,822	-16,927	-2.84	13,255	-18,451	-2.93	XX

Summary Statistics	
Grand Means	31,748.7 psi 31,706.2 psi
Stnd Dev Btwn Labs	5,955.8 psi 6,295.0 psi
Statistics based on 13 of 13 reporting participants	

Sample B69: LDPE & Sample B70: LDPE

Instrument Code List as Reported by the Labs

(IM) - Instru-Met Instruments

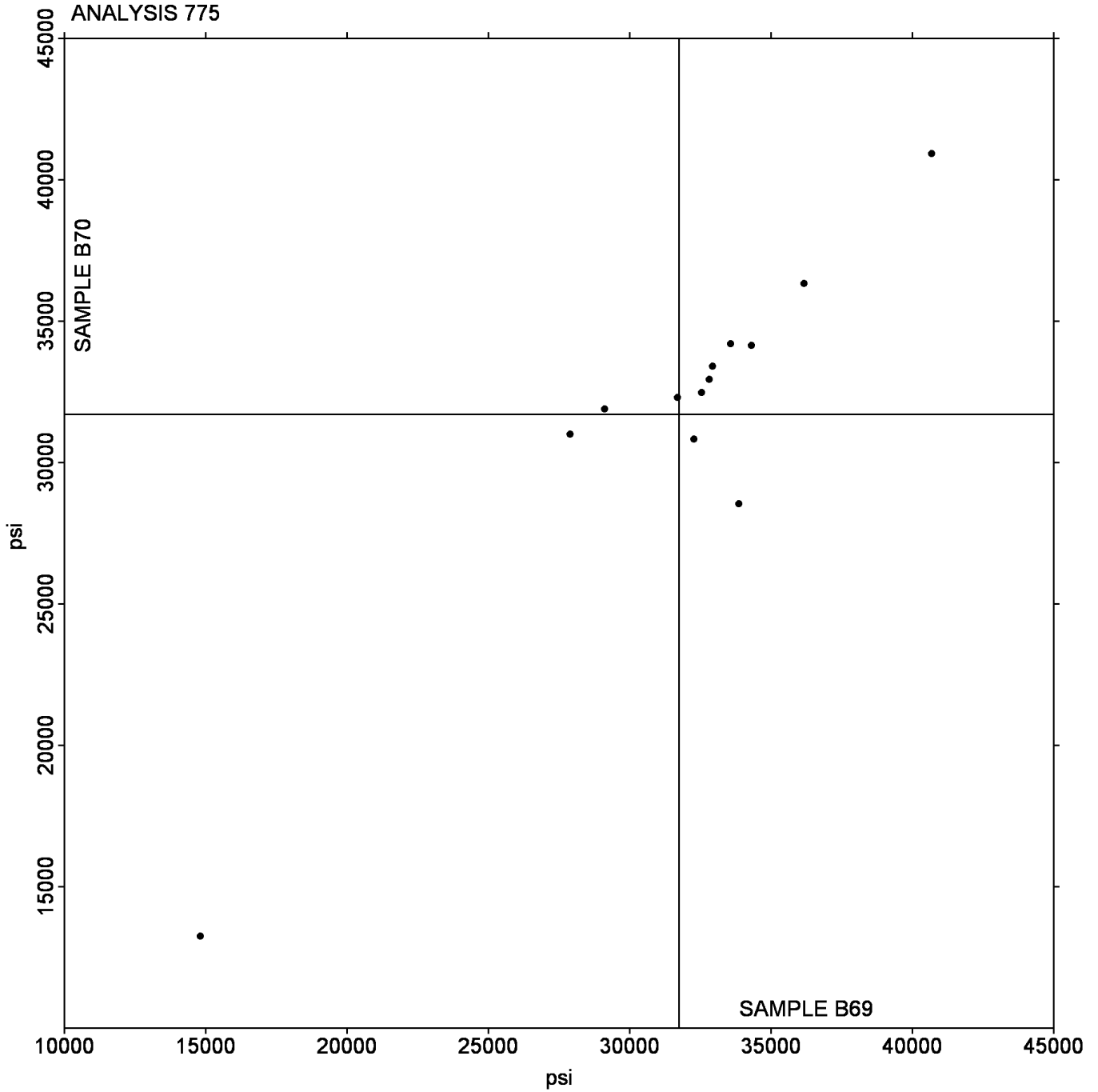
(IN) - Instron

(TH) - Thwing Albert

(XX) - Instrument manufacturer not specified by lab

Analysis 775
Secant Modulus at 1% Strain - psi

Grand Mean Sample B69: 31,748.74 psi Grand Mean Sample B70: 31,706.18 psi



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

Analysis 776

Secant Modulus at 2% Strain - psi

WebCode	Data Flag	Sample B69			Sample B70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
25SLKD		27,962	1,330	0.26	27,844	1,036	0.21	IN
2V4RH3		27,566	933	0.18	27,971	1,163	0.23	IM
BEDBJT		31,165	4,533	0.90	31,266	4,458	0.89	IN
HXU5WH		28,472	1,840	0.36	26,300	-508	-0.10	IN
KWF63K		27,573	941	0.19	28,964	2,156	0.43	IN
MW7DEF		27,648	1,016	0.20	28,033	1,225	0.24	IN
T34CXR		28,837	2,205	0.44	28,906	2,098	0.42	IM
T3P3WC		12,738	-13,894	-2.75	12,946	-13,862	-2.76	XX
XM3FRG		28,238	1,606	0.32	27,895	1,087	0.22	IN
Z6ECMX		26,123	-509	-0.10	27,955	1,147	0.23	IN

Summary Statistics

Grand Means

26,632.1 psi

26,808.0 psi

Std Dev Btwn Labs

5,046.9 psi

5,030.5 psi

Statistics based on 10 of 10 reporting participants

Sample B69: LDPE & Sample B70: LDPE

Instrument Code List as Reported by the Labs

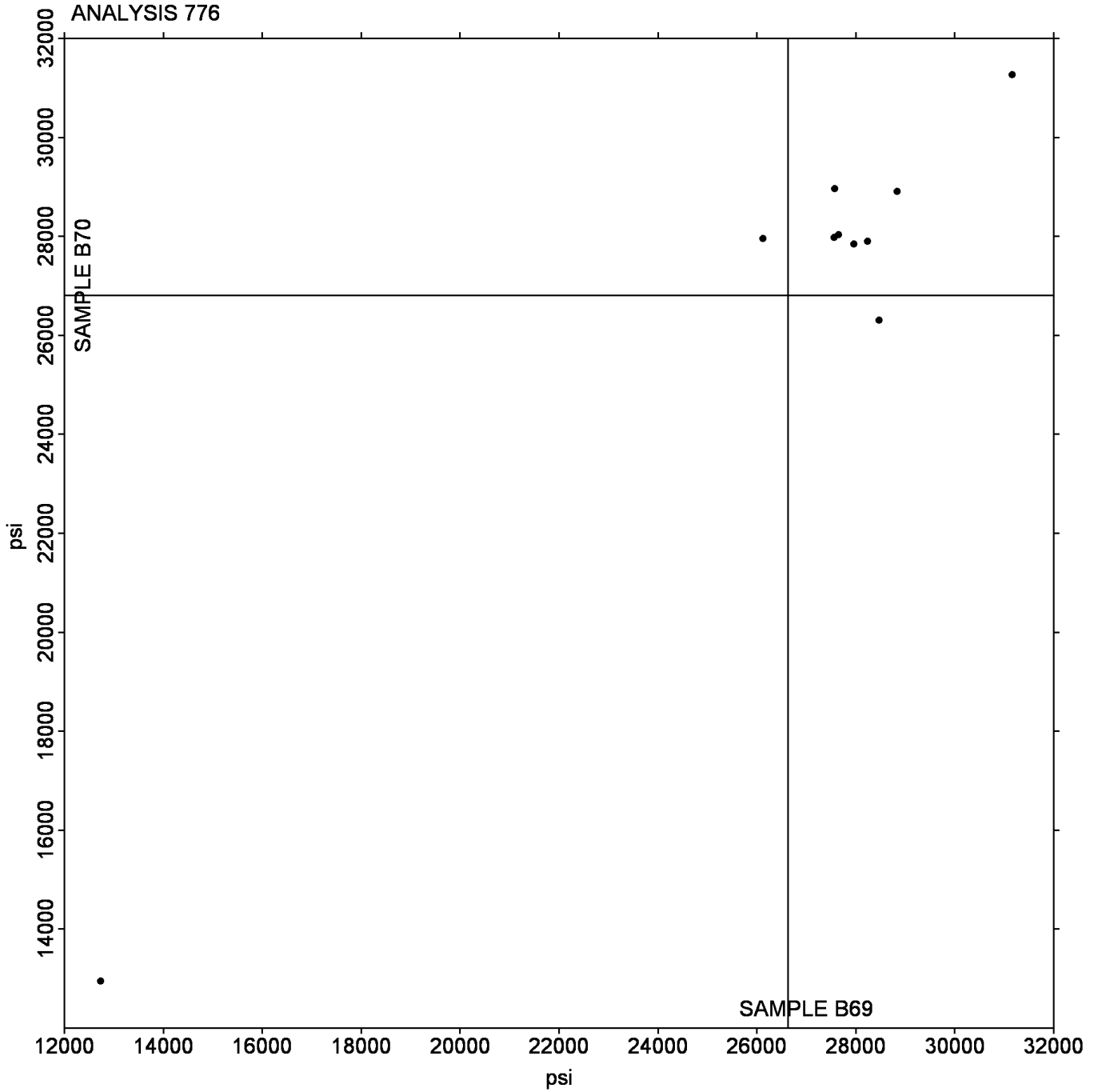
(IM) - Instru-Met Instruments

(IN) - Instron

(XX) - Instrument manufacturer not specified by lab

Analysis 776
Secant Modulus at 2% Strain - psi

Grand Mean Sample B69: 26,632.10 psi Grand Mean Sample B70: 26,808.04 psi



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

**Plastics Interlaboratory Testing Program
Analysis 780
Coefficient of Static Friction**

WebCode	Data Flag	Sample P69			Sample P70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
4D9GEB		0.1620	-0.0317	-0.65	0.1470	-0.0620	-0.75	TN
5NPZ2E		0.1616	-0.0321	-0.66	0.1430	-0.0660	-0.80	IP
5QWMTL		0.1716	-0.0221	-0.45	0.1754	-0.0336	-0.41	TH
6YBZTA		0.1642	-0.0295	-0.60	0.1486	-0.0604	-0.73	SA
B8MZZEY		0.1868	-0.0069	-0.14	0.1948	-0.0142	-0.17	TN
C5C4U3		0.2278	0.0341	0.70	0.2452	0.0362	0.44	TM
ET78RP		0.2316	0.0379	0.77	0.2258	0.0168	0.20	TN
HFCFWX	*	0.3022	0.1085	2.21	0.4658	0.2568	3.10	XX
KMVA9K		0.2720	0.0783	1.60	0.2882	0.0792	0.96	IQ
LN1MJL		0.1062	-0.0875	-1.79	0.1250	-0.0840	-1.01	TM
LWRG83		0.1978	0.0041	0.08	0.1834	-0.0256	-0.31	TH
M9WC6J		0.1738	-0.0199	-0.41	0.1988	-0.0102	-0.12	TH
PQD37N		0.1760	-0.0177	-0.36	0.2080	-0.0010	-0.01	TH
UWLU83		0.2100	0.0163	0.33	0.2142	0.0052	0.06	IS
XAGHAE		0.1622	-0.0315	-0.64	0.1718	-0.0372	-0.45	DY

Summary Statistics	
Grand Means	
0.19372 COF	0.20900 COF
Std Dev Btwn Labs	
0.04898 COF	0.08290 COF
Statistics based on 15 of 15 reporting participants	

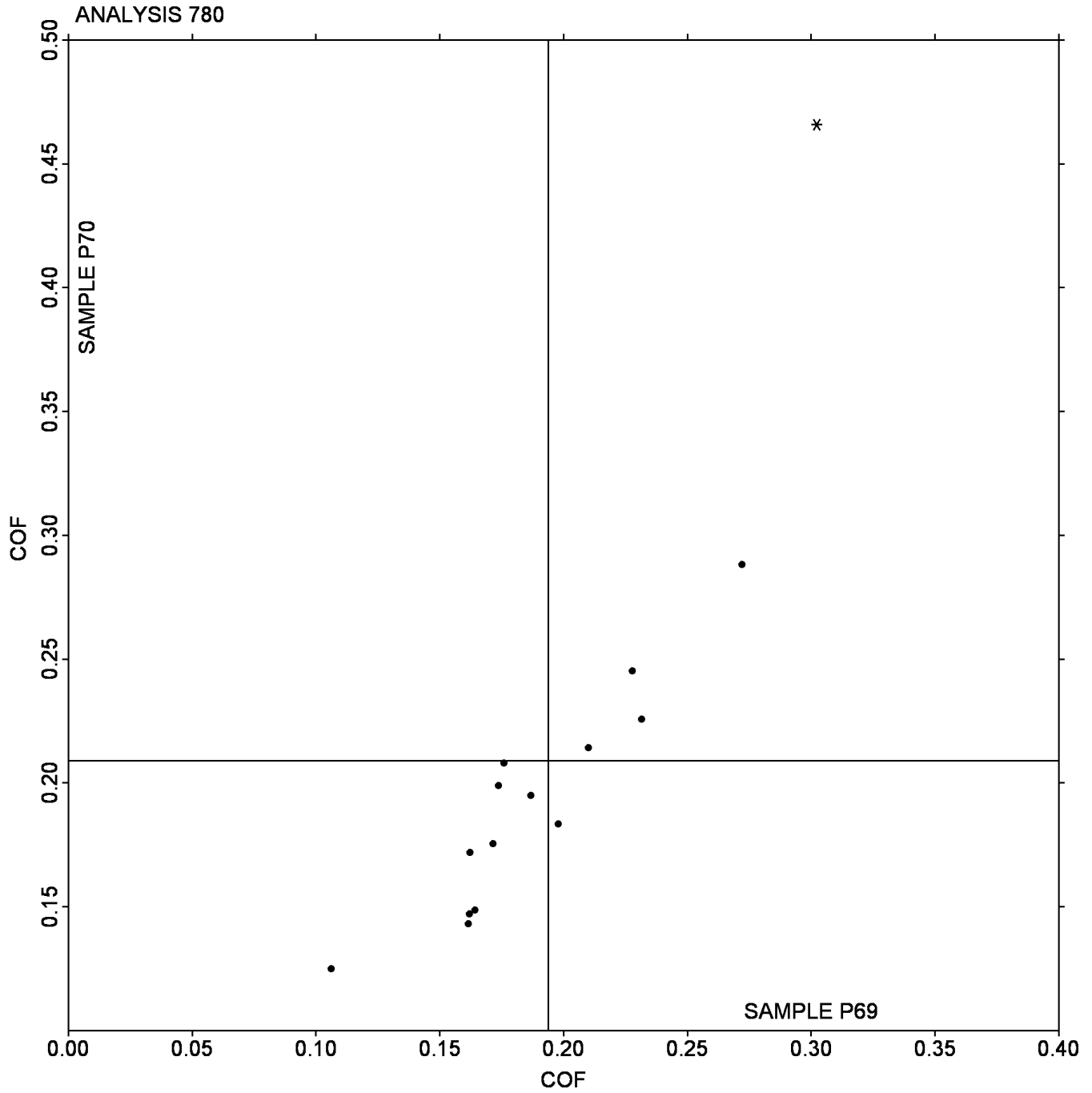
Sample P69: LDPE & Sample P70: LDPE

Instrument Code List as Reported by the Labs

- | | |
|---|---|
| (DY) - Dynisco Model D1055 | (IP) - Instron 4400 Series |
| (IQ) - Instron 4500 series | (IS) - Instron Model 5565 |
| (SA) - Shimadzu Autograph AG 2000 A | (TH) - Thwing Albert Friction/Peel Tester Model 225-1 |
| (TM) - TMI Slip and Friction Tester Model 98 | (TN) - TMI #32-06 |
| (XX) - Instrument make/model not specified by lab | |

Plastics Interlaboratory Testing Program
Analysis 780
Coefficient of Static Friction

Grand Mean Sample P69: 0.19372 COF Grand Mean Sample P70: 0.20900 COF



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

Plastics Interlaboratory Testing Program
Analysis 781
Coefficient of Kinetic Friction

WebCode	Data Flag	Sample P69			Sample P70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3MJLS2		0.1634	0.0275	0.59	0.1528	0.0094	0.13	TN
7J8DY5		0.1022	-0.0337	-0.72	0.1032	-0.0402	-0.56	TH
7VENW3		0.1648	0.0289	0.62	0.1762	0.0328	0.46	TN
8ZUTMF		0.1268	-0.0091	-0.20	0.1068	-0.0366	-0.51	TH
9A1EJU		0.1914	0.0555	1.19	0.1910	0.0476	0.67	IQ
A3KY24		0.1158	-0.0201	-0.43	0.1126	-0.0308	-0.43	TN
BF74ED		0.0898	-0.0461	-0.99	0.0962	-0.0472	-0.66	TH
CNMGE4		0.0972	-0.0387	-0.83	0.0972	-0.0462	-0.65	SA
DETNKH		0.1452	0.0093	0.20	0.1400	-0.0034	-0.05	IS
G2YSCP		0.1094	-0.0265	-0.57	0.1118	-0.0316	-0.44	TH
NGJATW		0.1310	-0.0049	-0.11	0.1218	-0.0216	-0.30	IP
TX5PTL		0.1220	-0.0139	-0.30	0.1284	-0.0150	-0.21	DY
XVJHBK	*	0.2686	0.1327	2.84	0.3814	0.2380	3.33	XX
YJ1EDZ		0.1152	-0.0207	-0.44	0.1200	-0.0234	-0.33	TM
Z7MWN7		0.0960	-0.0399	-0.85	0.1120	-0.0314	-0.44	TM

Summary Statistics

Grand Means

0.13592 COF

0.14343 COF

Std Dev Btwn Labs

0.04672 COF

0.07150 COF

Statistics based on 15 of 15 reporting participants

Sample P69: LDPE & Sample P70: LDPE

Instrument Code List as Reported by the Labs

(DY) - Dynisco Model D1055

(IP) - Instron 4400 Series

(IQ) - Instron 4500 series

(IS) - Instron Model 5565

(SA) - Shimadzu Autograph AG 2000 A

(TH) - Thwing Albert Friction/Peel Tester Model 225-1

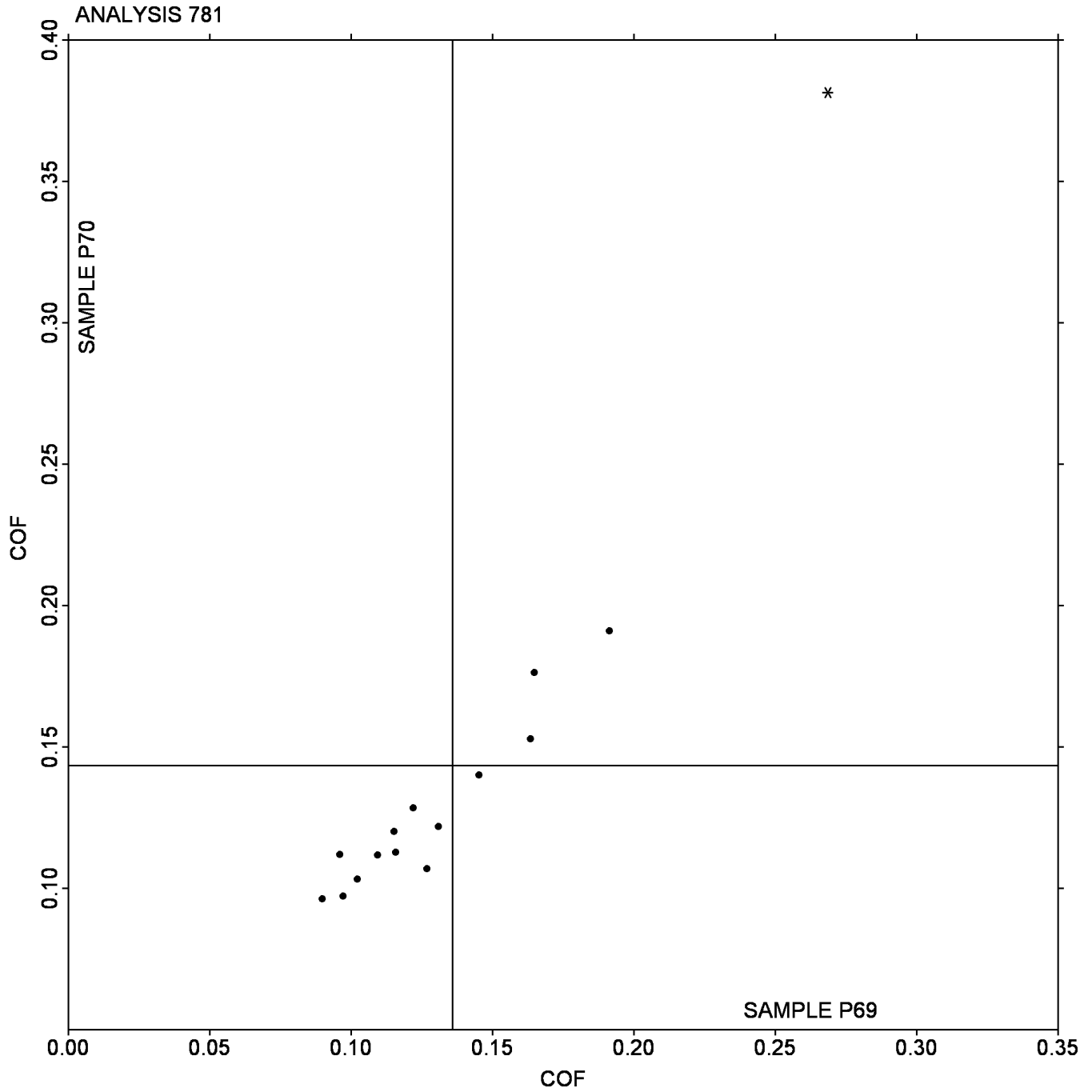
(TM) - TMI Slip and Friction Tester Model 98

(TN) - TMI #32-06

(XX) - Instrument make/model not specified by lab

Analysis 781
Coefficient of Kinetic Friction

Grand Mean Sample P69: 0.13592 COF Grand Mean Sample P70: 0.14343 COF



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

Plastics Interlaboratory Testing Program
Analysis 782
Tear Resistance of Films

WebCode	Data Flag	Sample Q69			Sample Q70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2XBGSJ		211.9	55.8	1.93	207.7	56.7	1.82	AL
58XTGZ		124.2	-31.9	-1.10	124.3	-26.7	-0.86	TM
8AXBC4		151.7	-4.4	-0.15	174.4	23.4	0.75	TE
CLJMXL		195.0	38.9	1.34	213.5	62.5	2.01	TE
DGVHB8		112.2	-43.9	-1.51	135.6	-15.4	-0.50	XX
F2W4GW		137.5	-18.6	-0.64	142.4	-8.7	-0.28	LO
GW8KSU		177.4	21.3	0.74	111.0	-40.0	-1.29	TE
N66JMA		142.7	-13.4	-0.46	152.0	1.0	0.03	TN
NNWBTF		142.0	-14.1	-0.49	141.8	-9.2	-0.30	CE
PKWB9Q		132.0	-24.1	-0.83	121.6	-29.4	-0.94	TE
WMBXQG		176.6	20.6	0.71	134.1	-16.9	-0.54	TF
XT6X79		152.8	-3.3	-0.11	145.6	-5.4	-0.17	EM
ZTRB46		173.0	16.9	0.58	159.2	8.2	0.26	EM

Summary Statistics

Grand Means

156.07 grams-force

151.01 grams-force

Std Dev Btwn Labs

28.97 grams-force

31.13 grams-force

Statistics based on 13 of 13 reporting participants

Sample Q69: LDPE & Sample Q70: LDPE

Instrument Code List as Reported by the Labs

(AL) - Adamel Lhomargy ED20

(CE) - Ceast (model not specified)

(EM) - Elmendorf Tear Tester

(LO) - Lorentzen & Wettre Model II

(TE) - Thwing-Albert Pro Tear

(TF) - Thwing-Albert Model 60-1500

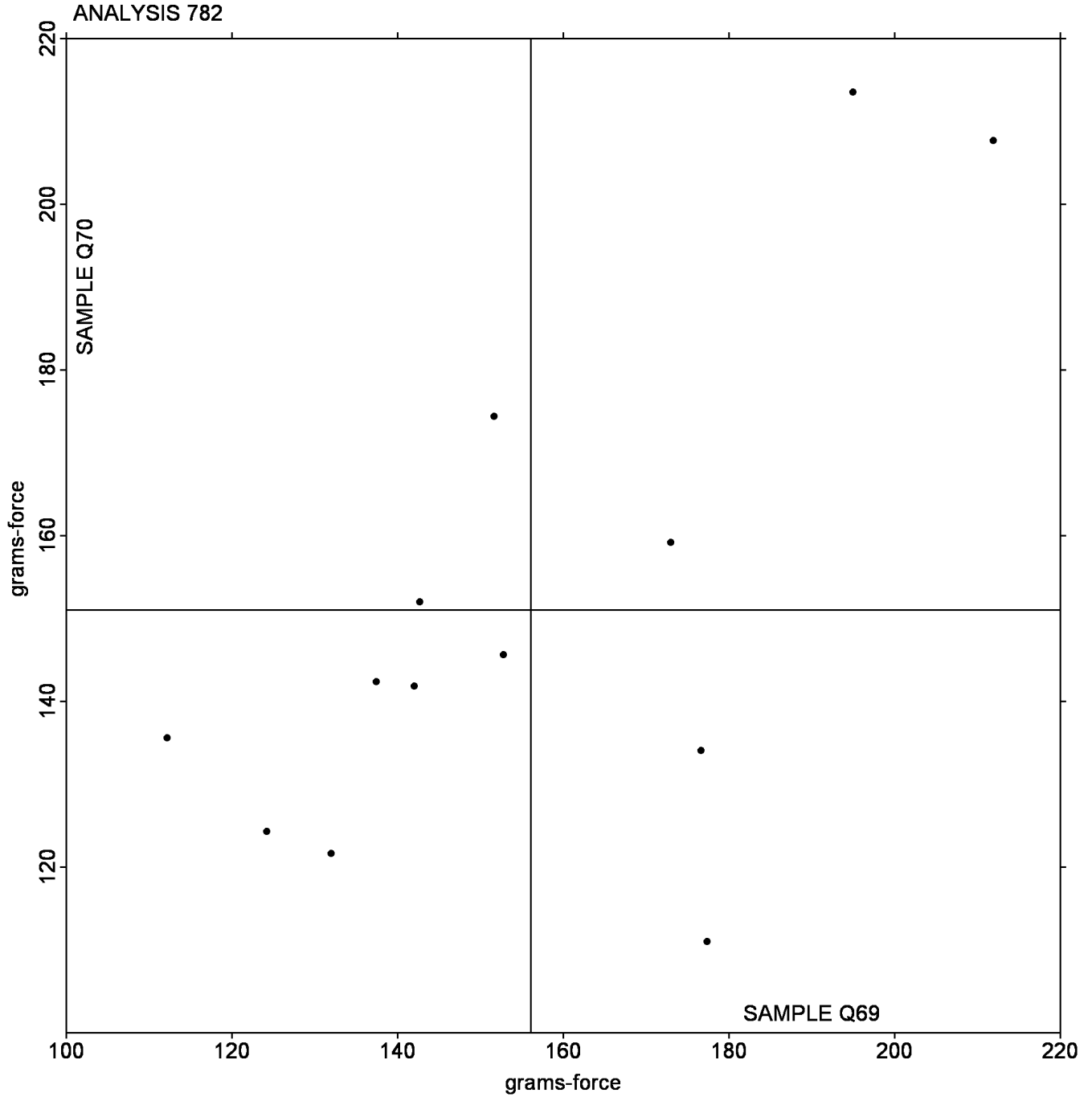
(TM) - TMI No. 83-1100

(TN) - TMI Tear Tester 83-10

(XX) - Instrument make/model not specified by lab

Analysis 782
Tear Resistance of Films

Grand Mean Sample Q69: 156.07 grams-force Grand Mean Sample Q70: 151.01 grams-force



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

Plastics Interlaboratory Testing Program
Analysis 785
Percent Haze of Film

WebCode	Data Flag	Sample D69			Sample D70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3ZA6EH		23.663	0.186	0.11	24.025	0.537	0.31	BJ
7MVFZ6		24.300	0.824	0.47	24.538	1.049	0.60	BJ
7SEFMR		24.963	1.486	0.85	24.225	0.737	0.42	BJ
9X7244		23.963	0.486	0.28	24.113	0.624	0.36	BJ
A2CBE5	*	18.523	-4.954	-2.83	18.579	-4.909	-2.81	XR
AFRJDN		23.350	-0.126	-0.07	23.456	-0.032	-0.02	MA
ALZW5V		24.700	1.224	0.70	24.363	0.874	0.50	BJ
B5X79A		22.563	-0.914	-0.52	22.513	-0.976	-0.56	BH
C5468Q		24.550	1.074	0.61	24.525	1.037	0.59	BJ
GV8Y3M		24.438	0.961	0.55	24.250	0.762	0.44	BJ
K6JCUD		23.406	-0.070	-0.04	23.611	0.123	0.07	BT
L34YFY		25.125	1.649	0.94	24.600	1.112	0.64	BJ
MZD4VP		23.700	0.224	0.13	23.188	-0.301	-0.17	BJ
PPDR4M		24.413	0.936	0.54	24.325	0.837	0.48	BH
QH95VG		24.050	0.574	0.33	24.475	0.987	0.56	BG
QKTRZL		24.175	0.699	0.40	24.050	0.562	0.32	BJ
RXQ874		19.176	-4.300	-2.46	18.973	-4.516	-2.58	HL
SK9BDE		24.463	0.986	0.56	24.963	1.474	0.84	XR
WRER1R	*	23.750	0.274	0.16	24.775	1.287	0.74	BT
XENWKP		23.938	0.461	0.26	23.863	0.374	0.21	BJ
XJL8MF		20.409	-3.067	-1.75	20.594	-2.894	-1.66	HL
YTXKUX		23.638	0.161	0.09	23.613	0.124	0.07	BJ
ZQ3VJB		24.700	1.224	0.70	24.613	1.124	0.64	XX

Summary Statistics			
Grand Means	23.4761	Percent	23.4880
			Percent
Stnd Dev Btwn Labs	1.7487	Percent	1.7470
			Percent
Statistics based on 23 of 23 reporting participants			

Sample D69: LDPE & Sample D70: LDPE

Plastics Interlaboratory Testing Program
Analysis 785
Percent Haze of Film

Instrument Code List as Reported by the Labs

(BG) - BYK-Gardner/Pacific Scientific

(BH) - BYK-Gardner/Pacific Scientific Model XL-211

(BJ) - BYK-Gardner Haze-Gard Plus

(BT) - BYK Gardner TCS Series

(HL) - Hunterlab Ultrascan XE

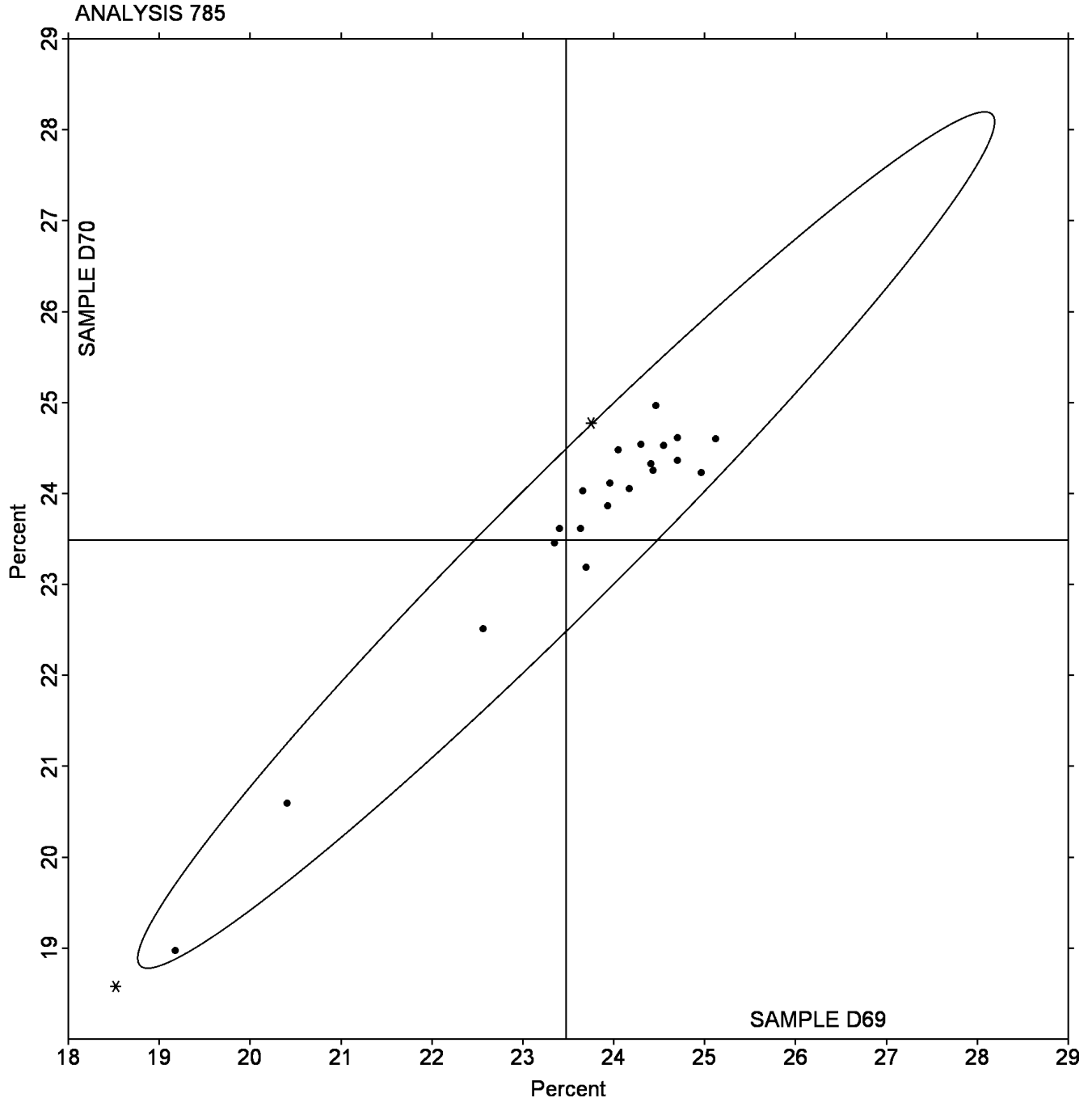
(MA) - Macbeth 7000A

(XR) - X-Rite Spectrocolorimeter (any model)

(XX) - Instrument make/model not specified by lab

Analysis 785
Percent Haze of Film

Grand Mean Sample D69: 23.476 Percent Grand Mean Sample D70: 23.488 Percent



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

Analysis 786

Total Luminous transmittance of film

WebCode	Data Flag	Sample D69			Sample D70			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2P276B		89.57	-2.67	-1.78	89.64	-2.62	-1.78	HL
563R7H		93.11	0.88	0.58	93.14	0.88	0.60	BT
5C3AB1		91.03	-1.21	-0.81	91.24	-1.02	-0.69	BJ
5M8ATF		93.01	0.78	0.52	93.13	0.87	0.59	BJ
78VTKX		93.19	0.95	0.63	93.16	0.91	0.62	BT
94UEZ5		92.00	-0.24	-0.16	91.99	-0.27	-0.18	BJ
98CB22		92.39	0.15	0.10	92.38	0.12	0.08	BJ
9RKKYL		89.08	-3.16	-2.11	89.13	-3.13	-2.13	HL
AW2RJX		91.80	-0.44	-0.29	91.79	-0.47	-0.32	BG
ECJUCW		92.04	-0.20	-0.13	92.18	-0.08	-0.06	BH
H1BT8V	X	82.44	-9.80	-6.53	82.38	-9.88	-6.73	XR
H1RA9E		90.12	-2.11	-1.41	90.18	-2.07	-1.41	MA
LCW9SE		92.90	0.66	0.44	92.78	0.52	0.35	BJ
LT5G6Z		94.20	1.96	1.31	94.14	1.88	1.28	BJ
NGY759		93.25	1.01	0.68	93.25	0.99	0.68	BJ
PDPP5T		93.50	1.26	0.84	93.40	1.14	0.78	BJ
U3GES4		93.70	1.46	0.98	93.76	1.51	1.03	BJ
UW4TBS		91.01	-1.22	-0.82	91.08	-1.18	-0.81	BJ
W7EACG		93.21	0.98	0.65	93.21	0.96	0.65	XX
XQPW3E		94.39	2.15	1.43	94.38	2.12	1.44	BJ
YXC1EN		91.22	-1.01	-0.68	91.20	-1.06	-0.72	XR

Summary Statistics			
Grand Means	92.236	Percent	92.256
Std Dev Btwn Labs	1.501	Percent	1.467
Statistics based on 20 of 21 reporting participants			

Sample D69: LDPE & Sample D70: LDPE

Comments on assigned Data Flags for Test #786

H1BT8V (X) - Data for both samples are low.

Analysis 786

Total Luminous transmittance of film

Instrument Code List as Reported by the Labs

(BG) - BYK-Gardner/Pacific Scientific

(BH) - BYK-Gardner/Pacific Scientific Model XL-211

(BJ) - BYK-Gardner Haze-Gard Plus

(BT) - BYK Gardner TCS Plus Spectrophotometer

(HL) - Hunterlab Ultrascan XE

(MA) - Macbeth 7000A

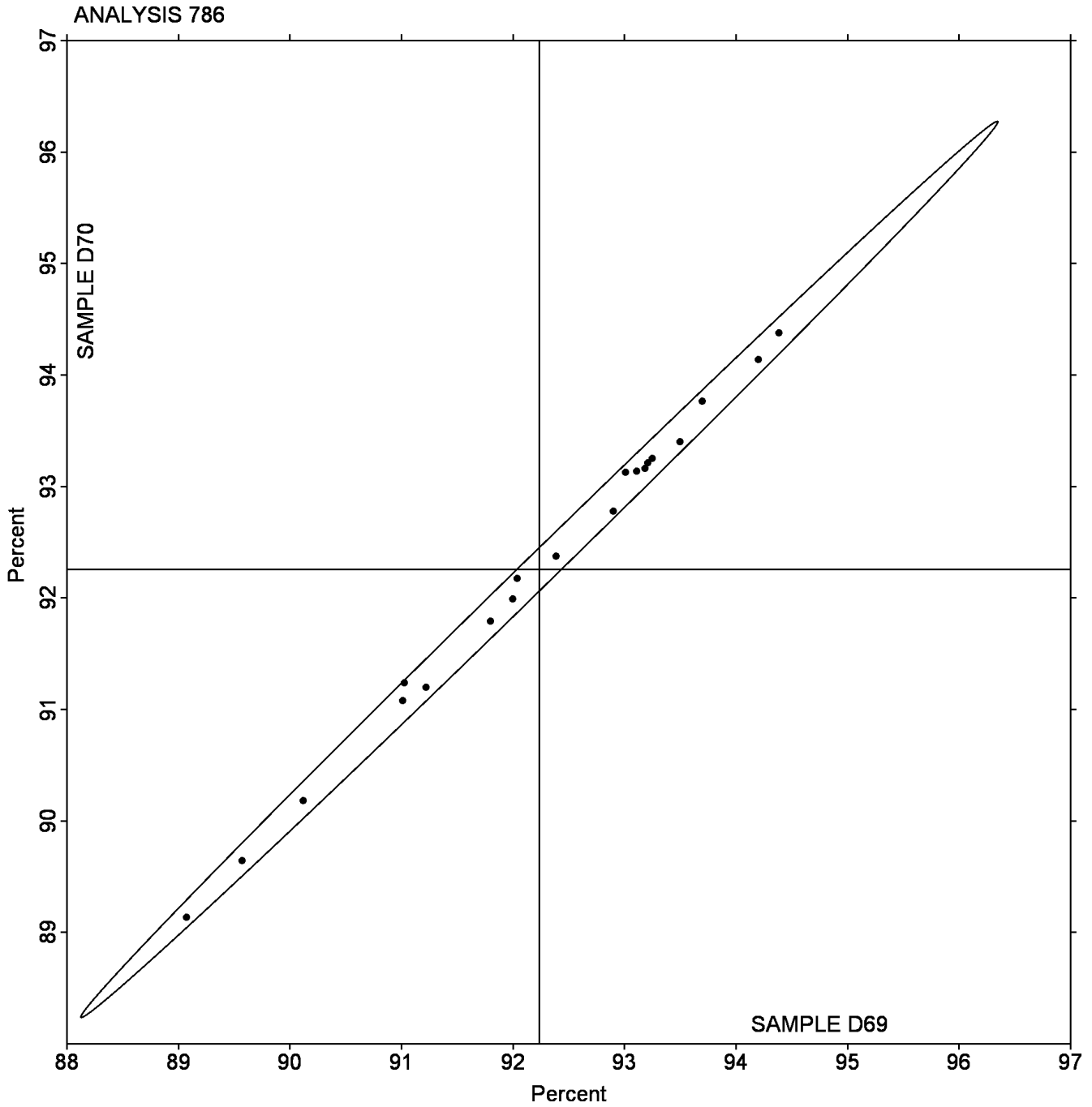
(XR) - X-Rite Spectrocolorimeter (any model)

(XX) - Instrument make/model not specified by lab

Analysis 786

Total Luminous transmittance of film

Grand Mean Sample D69: 92.236 Percent Grand Mean Sample D70: 92.256 Percent



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