

Plastics Interlaboratory Testing Program

Web Summary Report #61, 1st Qtr 2007

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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 #61

Plastics Interlaboratory Testing Program

Analysis 704 - Tensile Stress at Yield

Material: ABS	Sample F59	7,140.22	psi	2.00% COV
	Sample F60	7,015.29	psi	1.79% COV

Analysis 705 - Tensile Stress at Break

Material: ABS	Sample F59	5,032.38	psi	4.51% COV
	Sample F60	5,023.87	psi	4.07% COV

Analysis 706 - Percent Elongation at Yield

Material: ABS	Sample F59	2.7129	Percent	4.54% COV
	Sample F60	2.9009	Percent	4.96% COV

Analysis 708 - Modulus of Elasticity

Material: ABS	Sample F59	350.34	ksi	6.69% COV
	Sample F60	340.86	ksi	7.27% COV

Analysis 730 - Tensile Stress at Yield, ISO Method

Material: ABS	Sample C59	48.843	MPa	1.73% COV
	Sample C60	47.802	MPa	1.52% COV

Analysis 731 - Tensile Stress at Break, ISO Method

Material: ABS	Sample C59	34.468	MPa	4.09% COV
	Sample C60	34.404	MPa	3.69% COV

Analysis 732 - Strain at Yield, ISO Method

Material: ABS	Sample C59	2.6623	Percent	4.00% COV
	Sample C60	2.8135	Percent	4.61% COV

Analysis 734 - Modulus of Elasticity, ISO Method

Material: ABS	Sample C59	2,388.95	MPa	4.26% COV
	Sample C60	2,299.78	MPa	4.57% COV

Analysis 720 - Flexural Modulus

Material: HIPS	Sample J59	338.17	ksi	6.35% COV
	Sample J60	337.49	ksi	6.42% COV

Analysis 721 - Flexural Stress at 5% Strain

Material: HIPS	Sample J59	6,594.97	psi	4.63% COV
	Sample J60	6,564.29	psi	4.62% COV

Analysis 722 - Flexural Stress at Yield

Material: HIPS	Sample J59	6,587.75	psi	3.75% COV
	Sample J60	6,575.45	psi	3.76% COV

Analysis 736 - Flexural Modulus

Material: ABS	Sample K59	2,400.01	MPa	3.77% COV
	Sample K60	2,327.78	MPa	3.68% COV

Analysis 737 - Flexural Stress at 3.5% Strain

Material: ABS	Sample K59	72.284	MPa	2.39% COV
	Sample K60	69.404	MPa	2.73% COV

Results Summary for Web Summary Report #61

Plastics Interlaboratory Testing Program

Analysis 738 - Flexural Stress at Yield

Material: ABS	Sample K59	73.605	MPa	2.21% COV
	Sample K60	71.572	MPa	2.54% COV

Analysis 790 - Notched Izod Impact

Material: HIPS	Sample S59	4.5592	ft.lbf/in	6.08% COV
	Sample S60	4.4288	ft.lbf/in	5.95% COV

Analysis 792 - Notched Charpy Impact

Material: ABS	Sample M59	23.292	kJ/m ²	6.78% COV
	Sample M60	35.231	kJ/m ²	7.87% COV

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

Material: HIPS	Sample E59	79.386	Degrees C	1.06% COV
	Sample E60	79.399	Degrees C	0.904% COV

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

Material: PP	Sample G59	85.664	Degrees C	2.74% COV
	Sample G60	115.44	Degrees C	1.64% COV

Analysis 712 - Temperature of Deflection (1.80 MPa)

Material: ABS	Sample N59	79.429	Degrees C	1.12% COV
	Sample N60	79.191	Degrees C	1.57% COV

Analysis 715 - Vicat Temperature (Rate A)

Material: HIPS	Sample H59	100.59	Degrees C	0.944% COV
	Sample H60	100.60	Degrees C	1.09% COV

Analysis 716 - Vicat Temperature (Rate B)

Material: HIPS	Sample R59	102.85	Degrees C	1.01% COV
	Sample R60	102.90	Degrees C	1.22% COV

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

Material: PE	Sample X59	9.2964	grams/10 mins	3.30% COV
	Sample X60	12.561	grams/10 mins	3.38% COV

Analysis 718 - Specific Gravity

Material: ABS	Sample T59	1.0429	sp gr 23/23 C	0.192% COV
	Sample T60	1.0437	sp gr 23/23 C	0.210% COV

Analysis 757 - Ash Content

Material: PBT	Sample L59	17.863	Percent	1.34% COV
	Sample L60	15.113	Percent	0.677% COV

Analysis 770 - Tensile Stress at Yield, Films

Material: LDPE	Sample B59	2,286.72	psi	10.6% COV
	Sample B60	2,629.46	psi	14.8% COV

Analysis 771 - Tensile Stress at Break, Films

Material: LDPE	Sample B59	4,107.70	psi	8.78% COV
	Sample B60	4,428.11	psi	9.41% COV

Results Summary for Web Summary Report #61

Plastics Interlaboratory Testing Program

Analysis 772 - Elongation at Yield, Films

Material: LDPE	Sample B59	80.066	Percent	40.2% COV
	Sample B60	90.964	Percent	42.2% COV

Analysis 773 - Elongation at Break, Films

Material: LDPE	Sample B59	638.75	Percent	14.5% COV
	Sample B60	560.64	Percent	18.3% COV

Analysis 774 - Thickness of Film Specimens

Material: LDPE	Sample B59	1.9717	mils	3.53% COV
	Sample B60	1.9358	mils	2.68% COV

Analysis 775 - Secant Modulus at 1% Strain

Material: LDPE	Sample B59	33,284.48	psi	6.67% COV
	Sample B60	33,095.23	psi	6.67% COV

Analysis 776 - Secant Modulus at 2% Strain

Material: LDPE	Sample B59	28,560.79	psi	5.11% COV
	Sample B60	28,748.44	psi	5.57% COV

Analysis 780 - Static Friction

Material: LDPE	Sample P59	0.20920	COF	18.5% COV
	Sample P60	0.17853	COF	30.3% COV

Analysis 781 - Kinetic Friction

Material: LDPE	Sample P59	0.14945	COF	19.5% COV
	Sample P60	0.11671	COF	27.3% COV

Analysis 782 - Tear Resistance of Film

Material: LDPE	Sample Q59	77.406	grams-force	28.0% COV
	Sample Q60	44.837	grams-force	28.6% COV

Analysis 785 - Percent Haze

Material: LDPE	Sample D59	15.230	Percent	8.17% COV
	Sample D60	8.0739	Percent	7.97% COV

Analysis 786 - Total Transmittance

Material: LDPE	Sample D59	93.142	Percent	1.30% COV
	Sample D60	93.137	Percent	1.15% COV

Plastics Interlaboratory Testing Program
Analysis 704
Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
21D9Z9		6,925.2	-215.0	-1.51	6,812.6	-202.7	-1.62
2S81EA		7,195.6	55.4	0.39	7,016.4	1.1	0.01
2ZY46C		7,184.4	44.1	0.31	7,071.1	55.8	0.45
46GGDX		7,266.2	126.0	0.88	7,131.4	116.1	0.93
4D917C		7,098.2	-42.0	-0.29	6,990.2	-25.1	-0.20
4E5291		7,159.1	18.9	0.13	7,048.9	33.6	0.27
4KXBBM		7,163.4	23.2	0.16	7,000.4	-14.9	-0.12
4XBRT1		6,978.8	-161.4	-1.13	6,924.6	-90.7	-0.72
4YD7RH		7,159.4	19.2	0.13	6,988.6	-26.7	-0.21
5M16VP		7,066.6	-73.6	-0.52	6,888.4	-126.9	-1.01
75QWS9		7,133.6	-6.6	-0.05	6,930.2	-85.1	-0.68
7ATCXH	X	6,597.6	-542.6	-3.80	6,728.8	-286.5	-2.29
7HVFLE		7,237.0	96.8	0.68	7,042.8	27.5	0.22
7MBN7T		7,178.4	38.2	0.27	7,048.0	32.7	0.26
8C5QSB		7,197.8	57.6	0.40	7,078.4	63.1	0.50
92H5WD		7,483.2	343.0	2.40	7,260.4	245.1	1.96
9FV2UG		7,162.0	21.8	0.15	7,012.6	-2.7	-0.02
A319FQ		7,174.4	34.2	0.24	7,062.4	47.1	0.38
AGBFC9		7,317.4	177.2	1.24	7,238.8	223.5	1.78
ARB86A		7,012.0	-128.2	-0.90	6,890.0	-125.3	-1.00
AUYC5E		7,241.8	101.6	0.71	6,981.4	-33.9	-0.27
B7AUXV		7,056.6	-83.6	-0.59	6,845.4	-169.9	-1.36
BAK4HK	*	7,410.4	270.2	1.89	7,350.4	335.1	2.67
CEP3YX		6,912.2	-228.0	-1.60	6,876.6	-138.7	-1.11
D1JMN7		7,143.8	3.6	0.03	7,017.6	2.3	0.02
D5UCV2		7,047.2	-93.0	-0.65	7,066.0	50.7	0.40
DD12DD		7,047.0	-93.2	-0.65	6,942.4	-72.9	-0.58
DKF3XV		7,135.9	-4.3	-0.03	6,970.6	-44.7	-0.36
DKSCTW		7,309.8	169.5	1.19	7,120.7	105.4	0.84
E4JLRS		7,196.3	56.0	0.39	7,079.9	64.6	0.52
ES7QKL		7,318.2	178.0	1.25	7,156.6	141.3	1.13
FBXGZB		7,043.2	-97.0	-0.68	6,846.4	-168.9	-1.35

Plastics Interlaboratory Testing Program
Analysis 704
Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FDZWB3		7,155.6	15.4	0.11	6,988.2	-27.1	-0.22
GL2PGX	X	6,824.8	-315.4	-2.21	6,513.6	-501.7	-4.00
H9GLP4		7,270.3	130.1	0.91	7,088.9	73.6	0.59
HEDDTK		7,124.8	-15.4	-0.11	7,029.8	14.5	0.12
JHZU1C		7,026.2	-114.0	-0.80	6,983.0	-32.3	-0.26
JXZ1M2		7,253.8	113.6	0.80	7,107.0	91.7	0.73
JYMBP7	*	6,893.6	-246.6	-1.73	6,935.4	-79.9	-0.64
K1PY15	*	7,446.3	306.1	2.14	7,350.6	335.3	2.68
KM4N6M		7,118.9	-21.3	-0.15	6,929.2	-86.1	-0.69
KSHVTR		6,874.0	-266.2	-1.86	6,784.2	-231.1	-1.84
L9KQ84		7,426.0	285.8	2.00	7,250.0	234.7	1.87
LJDR8F		7,005.8	-134.4	-0.94	6,935.4	-79.9	-0.64
NDJMH8		6,961.9	-178.3	-1.25	6,874.8	-140.4	-1.12
NEJT9M		7,193.9	53.7	0.38	6,961.9	-53.4	-0.43
NXXU3H		7,325.0	184.8	1.29	7,148.5	133.2	1.06
PZ3UKU		7,131.4	-8.8	-0.06	6,995.0	-20.3	-0.16
QF8FQ2		7,043.0	-97.2	-0.68	6,898.8	-116.5	-0.93
QY649R		6,936.1	-204.2	-1.43	6,955.8	-59.5	-0.47
RU33Q3		6,938.7	-201.6	-1.41	6,959.0	-56.3	-0.45
SKQRF9		7,144.6	4.4	0.03	6,969.2	-46.1	-0.37
SQM6BC	X	7,206,000.0	7,198,859.8	50,395.62	7,154,000.0	7,146,984.7	57,023.56
TK4URA		7,048.0	-92.2	-0.65	6,906.0	-109.3	-0.87
TPJWMZ		7,308.8	168.6	1.18	7,108.8	93.5	0.75
UKHAAM		7,061.9	-78.3	-0.55	6,976.7	-38.6	-0.31
UYD6AE	X	4,007.8	-3,132.4	-21.93	4,060.4	-2,954.9	-23.58
WE2ZEC	X	6,878.6	-261.6	-1.83	6,626.5	-388.7	-3.10
WKHAXY		7,181.2	41.0	0.29	7,081.1	65.8	0.53
WVU8F3		7,278.0	137.8	0.96	7,132.8	117.5	0.94
XEZPYZ		7,017.0	-123.2	-0.86	6,964.8	-50.5	-0.40
XL6LZ6		7,078.2	-62.0	-0.43	7,024.0	8.7	0.07
XVDCM7		7,014.1	-126.1	-0.88	6,880.7	-134.6	-1.07
XWMF3C		7,320.7	180.5	1.26	7,139.7	124.4	0.99

Plastics Interlaboratory Testing Program
Analysis 704
Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
YFR5S8		6,845.8	-294.4	-2.06	6,726.9	-288.4	-2.30
YXZ8VT		7,120.0	-20.2	-0.14	7,005.6	-9.7	-0.08
Z9C6GU		7,232.8	92.6	0.65	7,197.0	181.7	1.45
ZKQA6J		7,041.2	-99.0	-0.69	6,912.2	-103.1	-0.82
ZMG2KB		7,201.2	61.0	0.43	7,087.6	72.3	0.58

Summary Statistics

Grand Means

7,140.22 psi

7,015.29 psi

Std Dev Btwn Labs

142.85 psi

125.33 psi

Statistics based on 64 of 69 reporting participants

Sample F59: ABS & Sample F60: ABS

Comments on assigned Data Flags for Test #704

7ATCXH (X) - Inconsistent in testing between samples, data for Sample F59 are low.

GL2PGX (X) - Inconsistent in testing between samples, data for Sample F60 are low.

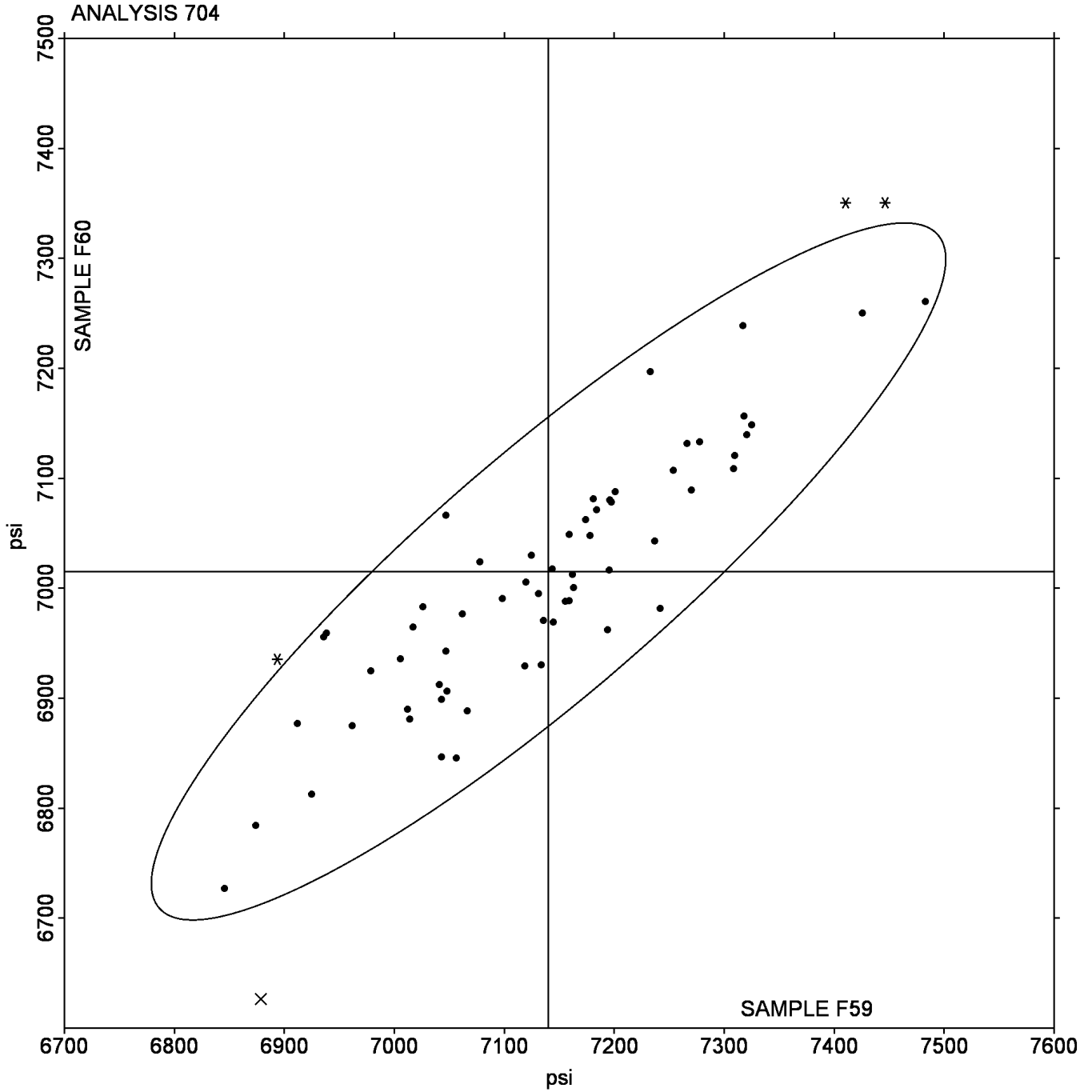
SQM6BC (X) - Extreme data. Lab indicated reporting in ksi, but data appear to be in psi.

UYD6AE (X) - Low data for all samples.

WE2ZEC (X) - Inconsistent in testing between samples, data for Sample F60 are low.

Plastics Interlaboratory Testing Program
Analysis 704
Tensile Stress at Yield - psi

Grand Mean Sample F59: 7,140.22 psi Grand Mean Sample F60: 7,015.29 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 705
Tensile Stress at Break - psi

WebCode	Data Flag	Sample F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
17V899		4,999.6	-32.8	-0.14	4,919.0	-104.9	-0.51
1CGNN9		4,878.4	-154.0	-0.68	5,052.4	28.5	0.14
1WLZ14	X	3,889.9	-1,142.4	-5.04	4,264.1	-759.7	-3.71
253GVH		4,784.0	-248.4	-1.10	4,827.8	-196.1	-0.96
2AJGE9	X	6,970.6	1,938.2	8.55	6,811.0	1,787.2	8.73
3NTLS4		4,519.4	-513.0	-2.26	4,583.2	-440.6	-2.15
48YF37		4,891.5	-140.9	-0.62	4,888.3	-135.6	-0.66
5B13JN	*	5,140.2	107.8	0.48	4,832.7	-191.2	-0.93
5CCAV9		5,112.5	80.1	0.35	5,137.0	113.1	0.55
5DPP2C		4,753.5	-278.9	-1.23	4,679.1	-344.7	-1.68
62NHQQ	X	5,981.6	949.2	4.19	5,330.4	306.5	1.50
6ZXAAU		5,035.4	3.0	0.01	5,181.0	157.1	0.77
7RD85Y	X	6,026.6	994.2	4.38	6,058.4	1,034.5	5.06
855Y9M		5,212.0	179.6	0.79	4,926.0	-97.9	-0.48
8KX5C9		5,105.0	72.6	0.32	4,971.6	-52.3	-0.26
8V3DB1		5,134.4	102.0	0.45	5,018.3	-5.5	-0.03
8VW215		4,968.8	-63.6	-0.28	4,957.4	-66.5	-0.32
94ZZ9Z		4,932.2	-100.2	-0.44	4,915.4	-108.5	-0.53
998FHN		5,102.5	70.1	0.31	5,035.8	11.9	0.06
AN7KME		4,766.9	-265.4	-1.17	4,905.9	-117.9	-0.58
BAJBKC		5,421.6	389.2	1.72	5,511.5	487.6	2.38
BHM56T		4,882.0	-150.4	-0.66	4,786.3	-237.6	-1.16
DKDDSD	X	5,407.0	374.6	1.65	5,873.8	849.9	4.15
FCYNP4		5,196.4	164.0	0.72	5,197.6	173.7	0.85
FYPZAP	X	6,983.4	1,951.0	8.60	6,927.8	1,903.9	9.30
GJ8JKY		4,844.6	-187.8	-0.83	5,035.6	11.7	0.06
GQEDWZ		4,968.5	-63.9	-0.28	5,040.7	16.8	0.08
GQLKG8	X	2,810.0	-2,222.4	-9.80	3,560.4	-1,463.5	-7.15
HBP1V9		5,082.6	50.2	0.22	5,075.6	51.7	0.25
HN11CH	*	5,238.2	205.8	0.91	5,465.6	441.7	2.16
HPGDK6		4,954.4	-78.0	-0.34	4,940.4	-83.4	-0.41
JC4753		4,812.6	-219.8	-0.97	4,786.2	-237.7	-1.16

**Plastics Interlaboratory Testing Program
Analysis 705
Tensile Stress at Break - psi**

WebCode	Data Flag	Sample F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
JGKERG		4,996.8	-35.6	-0.16	5,117.4	93.5	0.46
KDZ5WA		5,384.1	351.8	1.55	5,297.1	273.2	1.34
KJLZT7	*	5,593.0	560.6	2.47	5,301.4	277.5	1.36
KQ8VR5		5,350.8	318.4	1.40	5,274.2	250.3	1.22
LC9L3W	X	5,230.0	197.6	0.87	5,580.0	556.1	2.72
MGXU2P		4,662.0	-370.4	-1.63	4,723.2	-300.7	-1.47
MQG3V5		4,909.2	-123.2	-0.54	4,953.2	-70.7	-0.35
P5PWED		4,702.2	-330.2	-1.46	4,886.6	-137.3	-0.67
QAB1SD		5,145.9	113.5	0.50	5,059.5	35.7	0.17
RNXMM7		5,065.4	33.0	0.15	5,133.8	109.9	0.54
S42D2H		4,954.5	-77.9	-0.34	4,992.2	-31.6	-0.15
T7X9GA		4,929.0	-103.4	-0.46	4,867.8	-156.1	-0.76
TFQVAF	X	5,715.1	682.7	3.01	5,894.7	870.8	4.26
UV4DRM		4,988.8	-43.6	-0.19	4,992.6	-31.3	-0.15
VNEVFC	X	6,616.2	1,583.8	6.98	6,646.0	1,622.1	7.93
VNGWNB		4,969.8	-62.6	-0.28	4,853.7	-170.2	-0.83
XMEXEM		4,976.8	-55.6	-0.25	5,017.2	-6.7	-0.03
XUYZVQ		5,520.2	487.8	2.15	5,421.8	397.9	1.94
XXDWH9		5,402.4	370.0	1.63	5,352.2	328.4	1.60
Y3163R		5,057.0	24.6	0.11	5,064.6	40.7	0.20
Z8SD2W		5,047.4	15.0	0.07	5,047.4	23.5	0.11

Summary Statistics	
Grand Means	
5,032.38 psi	5,023.87 psi
Std Dev Btwn Labs	
226.76 psi	204.63 psi
Statistics based on 43 of 53 reporting participants	

Sample F59: ABS & Sample F60: ABS

Plastics Interlaboratory Testing Program
Analysis 705
Tensile Stress at Break - psi

Comments on assigned Data Flags for Test #705

1WLZ14 (X) - Low data for all samples.

2AJGE9 (X) - High data for all samples.

62NHQQ (X) - Inconsistent in testing between samples, data for Sample F59 are high.

7RD85Y (X) - High data for all samples.

DKDDSD (X) - Inconsistent in testing between samples, data for Sample F60 are high. Also inconsistent in testing within both samples.

FYPZAP (X) - High data for all samples.

GQLKG8 (X) - Low data for all samples.

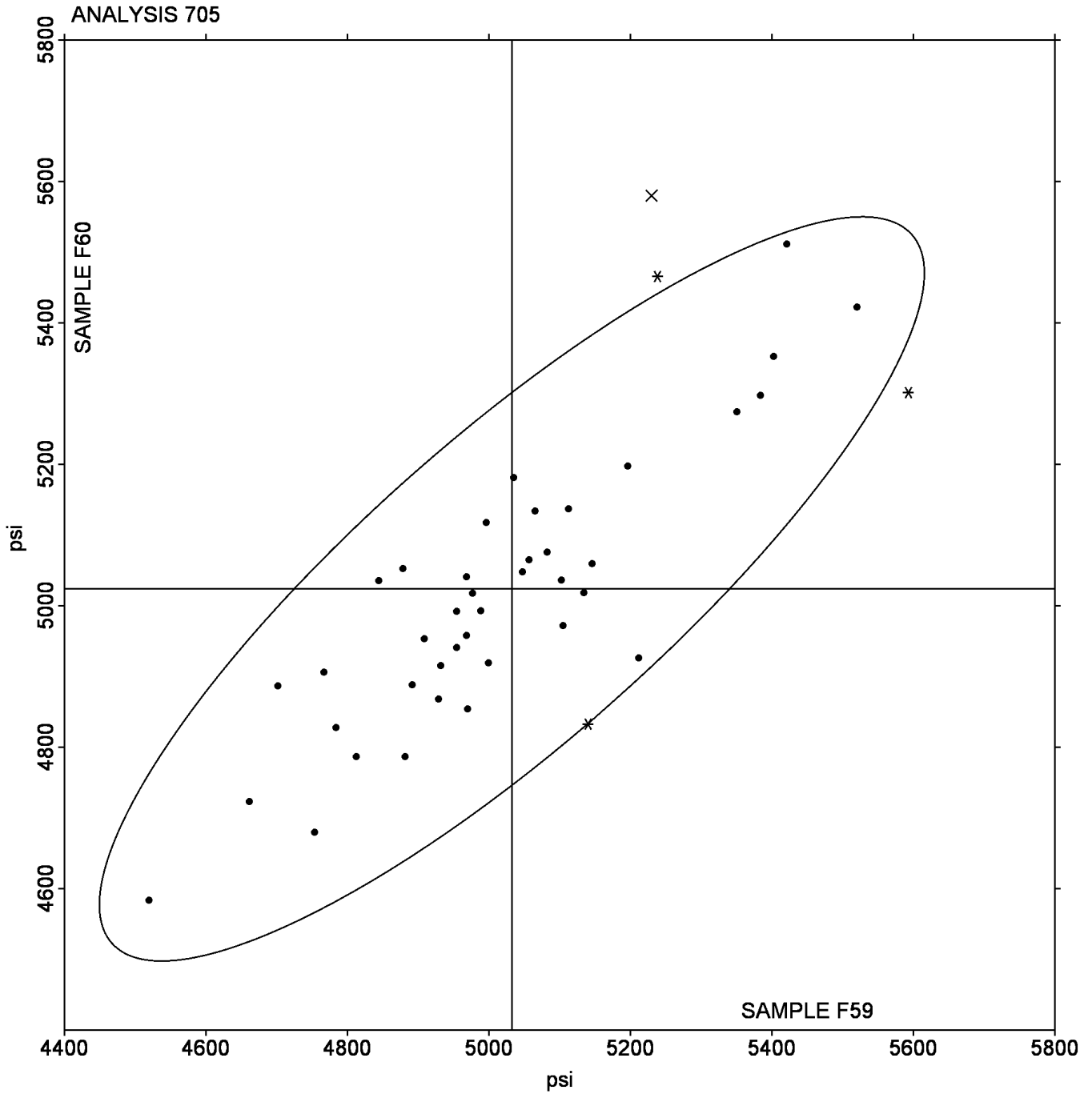
LC9L3W (X) - Inconsistent in testing between samples, data for Sample F60 are high.

TFQVAF (X) - High data for all samples.

VNEVFC (X) - High data for all samples.

Plastics Interlaboratory Testing Program
Analysis 705
Tensile Stress at Break - psi

Grand Mean Sample F59: 5,032.38 psi Grand Mean Sample F60: 5,023.87 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 706**

Percent Elongation at Yield - Percent

WebCode	Data Flag	Sample F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1C99LL		2.970	0.257	2.09	3.236	0.335	2.33
1MQ4K9		2.786	0.073	0.59	2.974	0.073	0.51
1SDVLB		2.762	0.049	0.40	2.958	0.057	0.40
1UT7MC		2.978	0.265	2.15	3.260	0.359	2.50
2NEFSZ		2.592	-0.121	-0.98	2.840	-0.061	-0.42
6AYMU4		2.638	-0.075	-0.61	2.770	-0.131	-0.91
6JYJZZ		2.718	0.005	0.04	2.958	0.057	0.40
6YJWRS		2.634	-0.079	-0.64	2.856	-0.045	-0.31
75RPQG		2.738	0.025	0.20	2.872	-0.029	-0.20
7HW8JN		2.758	0.045	0.37	2.926	0.025	0.17
7S4SYC	X	2.468	-0.245	-1.99	2.880	-0.021	-0.15
8MTBQ1		2.778	0.065	0.53	2.914	0.013	0.09
8PY96H		2.684	-0.029	-0.23	2.768	-0.133	-0.92
9D43DX		2.960	0.247	2.01	3.100	0.199	1.38
9MMUBG		2.730	0.017	0.14	2.776	-0.125	-0.87
9VD6GH		2.948	0.235	1.91	3.052	0.151	1.05
AFGD9M	X	1.324	-1.389	-11.28	2.922	0.021	0.15
AKVZ6Z		2.764	0.051	0.41	2.902	0.001	0.01
AUJ9UE		2.520	-0.193	-1.57	2.620	-0.281	-1.95
BXNBGN		2.504	-0.209	-1.70	2.660	-0.241	-1.68
CW1UFF	X	7.280	4.567	37.08	8.120	5.219	36.29
D24SBH		2.636	-0.077	-0.62	2.774	-0.127	-0.88
DTXRCC		2.560	-0.153	-1.24	2.702	-0.199	-1.38
FQDXPN		2.426	-0.287	-2.33	2.572	-0.329	-2.29
GEJ9ZL	X	3.766	1.053	8.55	4.000	1.099	7.64
GL65T3		2.676	-0.037	-0.30	2.826	-0.075	-0.52
HSE4FK		2.728	0.015	0.13	3.051	0.150	1.05
J1Z8QR		2.578	-0.135	-1.10	2.794	-0.107	-0.74
JRLJJC		2.716	0.003	0.03	2.922	0.021	0.15
K6SVZQ		2.688	-0.025	-0.20	2.850	-0.051	-0.35
KW9JCY		2.798	0.085	0.69	3.024	0.123	0.86
M5Z7H6		2.702	-0.011	-0.09	2.930	0.029	0.20

**Plastics Interlaboratory Testing Program
Analysis 706**

Percent Elongation at Yield - Percent

WebCode	Data Flag	Sample F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
M8MSFN		2.682	-0.031	-0.25	2.927	0.026	0.18
N49BYW		2.870	0.157	1.28	3.008	0.107	0.74
NEVSWS		2.622	-0.091	-0.74	2.886	-0.015	-0.10
PTB23U		2.848	0.135	1.10	3.140	0.239	1.66
QEH9MH	X	2.200	-0.513	-4.16	2.662	-0.239	-1.66
QT9PB3		2.678	-0.035	-0.28	2.872	-0.029	-0.20
RBR3AC		2.698	-0.015	-0.12	2.944	0.043	0.30
RSC5SV		2.804	0.091	0.74	2.952	0.051	0.36
S4ZNVZ	X	3.308	0.595	4.83	3.292	0.391	2.72
TKN6FN		2.594	-0.119	-0.97	2.840	-0.061	-0.42
TP8EX7		2.784	0.071	0.58	3.046	0.145	1.01
TV3S94	X	2.522	-0.191	-1.55	2.970	0.069	0.48
U1HAUG		2.592	-0.121	-0.98	2.796	-0.105	-0.73
VHSWCJ	X	3.232	0.519	4.21	3.372	0.471	3.28
W6Y948	X	6.770	4.057	32.94	6.916	4.016	27.92
WE6V2A		2.726	0.013	0.11	2.908	0.007	0.05
Y3SHWJ		2.636	-0.077	-0.62	2.854	-0.047	-0.33
ZBS375		2.754	0.041	0.33	2.922	0.021	0.15
ZW2CSG		2.684	-0.029	-0.23	2.856	-0.045	-0.31

Summary Statistics			
Grand Means	2.7129	Percent	2.9009
			Percent
Std Dev Btwn Labs	0.1232	Percent	0.1438
			Percent
Statistics based on 42 of 51 reporting participants			

Sample F59: ABS & Sample F60: ABS

Plastics Interlaboratory Testing Program
Analysis 706
Percent Elongation at Yield - Percent

Comments on assigned Data Flags for Test #706

7S4SYC (X) - Inconsistent in testing between samples and inconsistent in testing within Sample F59.

AFGD9M (X) - Inconsistent in testing between samples. Lab indicated breaks close to the grips while testing.

CW1UFF (X) - High data for all samples.

GEJ9ZL (X) - High data for all samples.

QEH9MH (X) - Inconsistent in testing between samples, data for Sample F59 are low.

S4ZNVZ (X) - High data for all samples. Also inconsistent in testing within both sample sets.

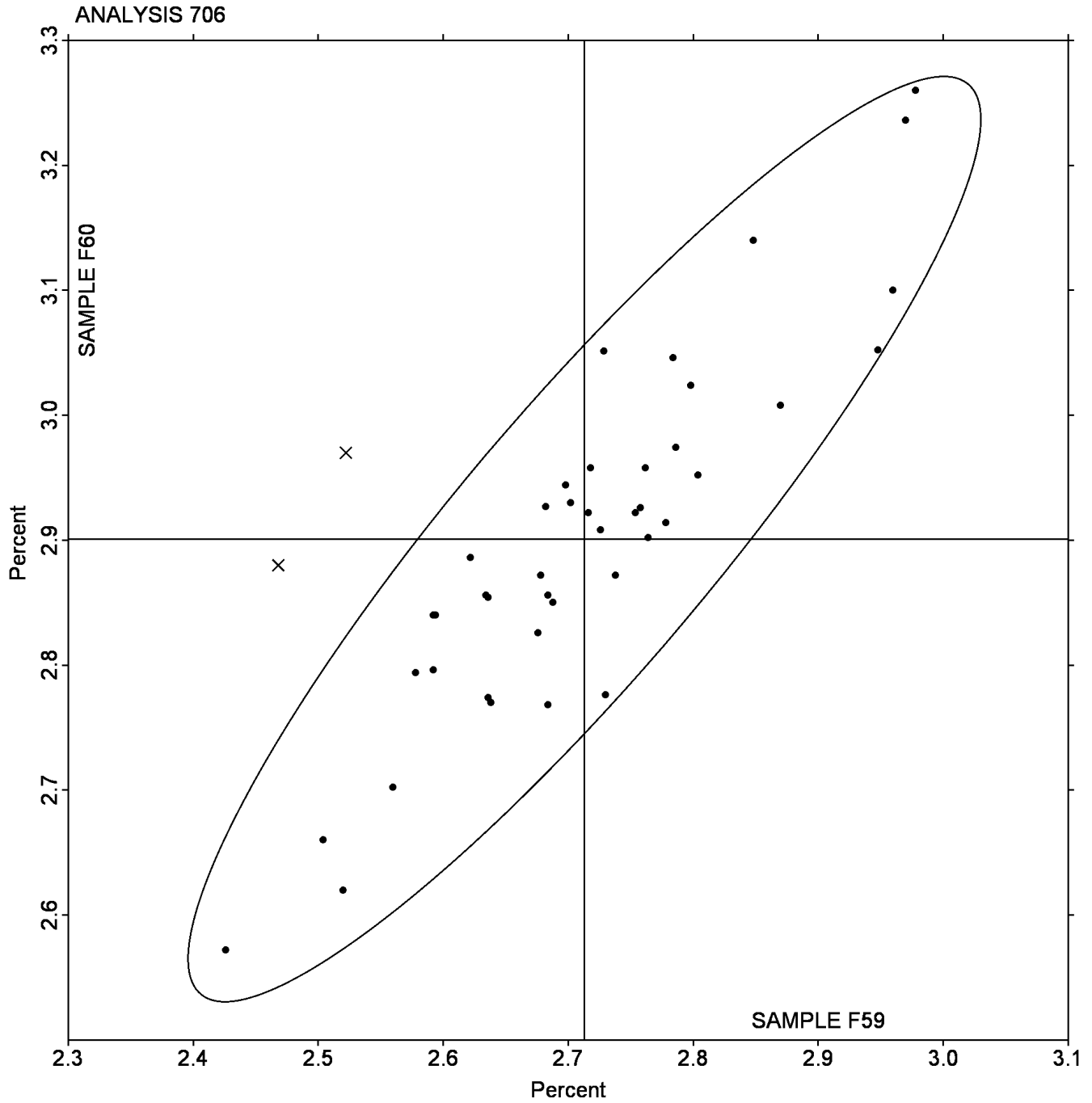
TV3S94 (X) - Inconsistent in testing between samples.

VHSWCJ (X) - High data for all samples.

W6Y948 (X) - High data for all samples.

Plastics Interlaboratory Testing Program
Analysis 706
Percent Elongation at Yield - Percent

Grand Mean Sample F59: 2.7129 Percent Grand Mean Sample F60: 2.9009 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 F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
225UMN	X	34.43	-315.92	-13.48	33.59	-307.27	-12.40
2FYPH1		312.49	-37.85	-1.62	300.90	-39.96	-1.61
3F2NCM		294.87	-55.47	-2.37	285.58	-55.28	-2.23
3RD3WN		386.73	36.39	1.55	371.27	30.41	1.23
4754LS		352.30	1.96	0.08	345.60	4.74	0.19
5R4KR3	X	395.08	44.74	1.91	349.54	8.68	0.35
67EBJZ		338.10	-12.24	-0.52	334.40	-6.46	-0.26
6DNZSD		376.22	25.88	1.10	364.82	23.96	0.97
7PCETU		366.34	16.00	0.68	339.09	-1.77	-0.07
9BG3DM		377.92	27.58	1.18	359.85	18.99	0.77
9JENM9		353.58	3.24	0.14	346.42	5.56	0.22
B6MN6R	X	255.98	-94.36	-4.03	250.26	-90.60	-3.66
DU1V61		351.98	1.64	0.07	339.60	-1.26	-0.05
EHEK2U		353.20	2.86	0.12	338.80	-2.06	-0.08
ENFKYW		347.64	-2.70	-0.12	334.92	-5.94	-0.24
F2CW71	*	408.94	58.60	2.50	410.40	69.54	2.81
FGPJ93		368.60	18.26	0.78	356.59	15.73	0.64
FSJJGU		360.60	10.26	0.44	355.66	14.80	0.60
HSM18W		301.63	-48.71	-2.08	295.54	-45.32	-1.83
J8VKTM		327.22	-23.12	-0.99	319.92	-20.94	-0.85
JC5Z3A		375.45	25.10	1.07	363.36	22.50	0.91
K2MKV2		354.80	4.46	0.19	342.00	1.14	0.05
L8587J		357.06	6.71	0.29	345.71	4.86	0.20
LBSYHP		350.20	-0.14	-0.01	339.00	-1.86	-0.08
LKQVVZ		321.44	-28.90	-1.23	305.66	-35.20	-1.42
LPR1NA		356.50	6.16	0.26	345.96	5.10	0.21
LQMX16		327.60	-22.74	-0.97	320.94	-19.92	-0.80
ML4CDG	X	112.44	-237.91	-10.15	112.37	-228.49	-9.22
N83PPL		369.15	18.81	0.80	351.21	10.35	0.42
NQTFYM		335.91	-14.44	-0.62	324.71	-16.14	-0.65
NTDTT4	X	315.60	-34.74	-1.48	275.92	-64.94	-2.62
P7QEBE		351.22	0.88	0.04	339.64	-1.22	-0.05

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

WebCode	Data Flag	Sample F59			Sample F60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PTD8H9		366.87	16.52	0.71	352.91	12.05	0.49
RACL9S		354.14	3.80	0.16	329.66	-11.20	-0.45
S9YBWL		332.66	-17.68	-0.75	322.56	-18.30	-0.74
STQBBX	*	395.20	44.86	1.91	403.80	62.94	2.54
TK9427		344.40	-5.94	-0.25	336.00	-4.86	-0.20
TR4FD4		326.86	-23.48	-1.00	327.12	-13.74	-0.55
TVAP4Z		341.05	-9.30	-0.40	346.75	5.90	0.24
USCX4M		350.84	0.49	0.02	340.06	-0.80	-0.03
VHB14B		382.29	31.94	1.36	361.54	20.68	0.83
VJG9SG		358.00	7.66	0.33	356.48	15.62	0.63
VLWGJF		345.16	-5.18	-0.22	357.18	16.32	0.66
WPWXNX		343.46	-6.88	-0.29	328.16	-12.70	-0.51
Y1A7M8		340.15	-10.20	-0.44	328.60	-12.26	-0.49
YZ129J		313.60	-36.74	-1.57	294.80	-46.06	-1.86
Z714FA	*	348.54	-1.80	-0.08	362.78	21.92	0.88
ZWBXAK		343.86	-6.48	-0.28	330.96	-9.90	-0.40

Summary Statistics

Grand Means

350.343 ksi

340.858 ksi

Std Dev Btwn Labs

23.436 ksi

24.774 ksi

Statistics based on 43 of 48 reporting participants

Sample F59: ABS & Sample F60: ABS

Comments on assigned Data Flags for Test #708

225UMN (X) - Extreme data. Data appear to be off by a factor of 10.

5R4KR3 (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

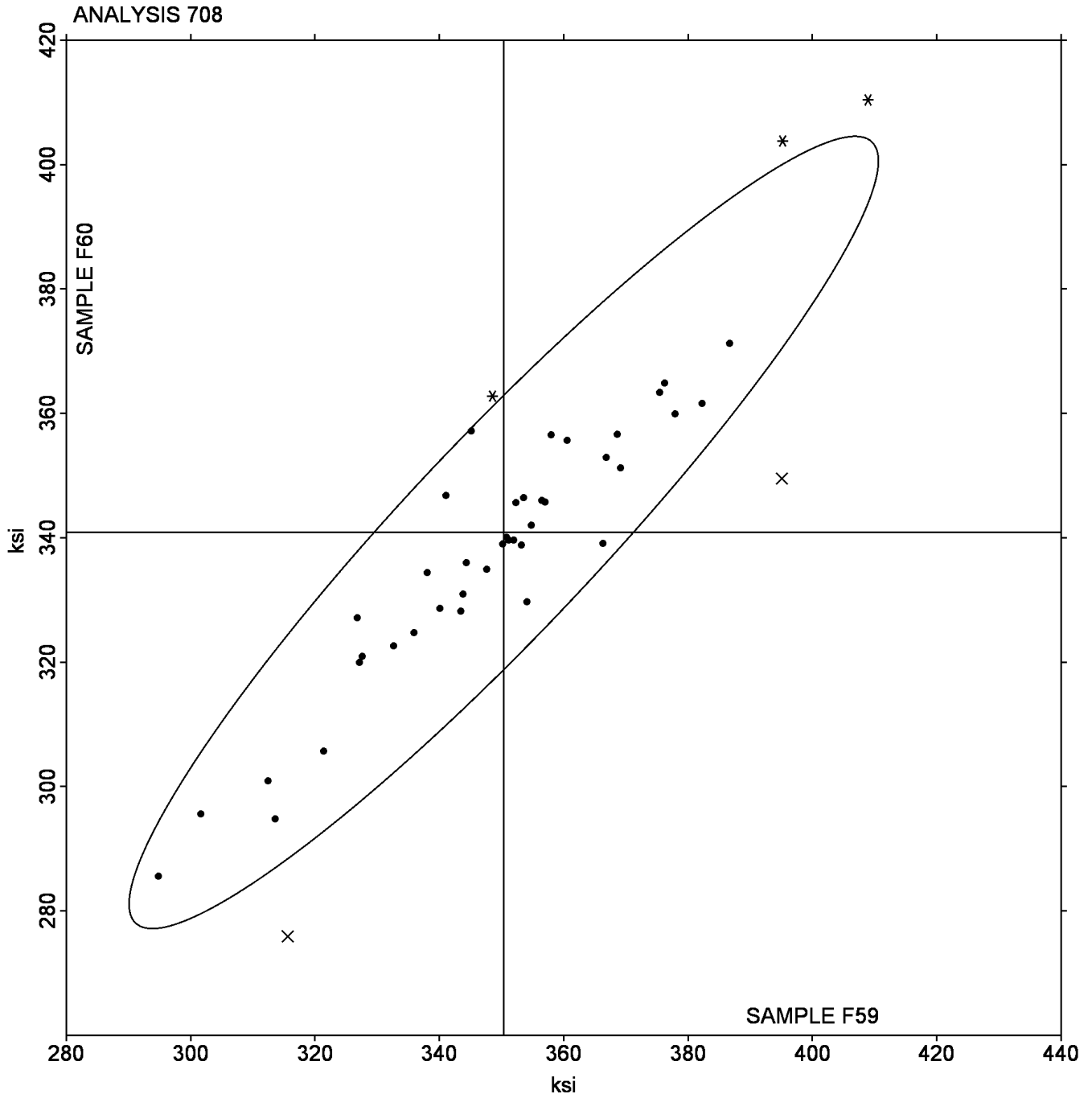
B6MN6R (X) - Low data for all samples.

ML4CDG (X) - Low data for all samples.

NTD TT4 (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

Plastics Interlaboratory Testing Program
Analysis 708
Modulus of Elasticity - ksi

Grand Mean Sample F59: 350.34 ksi Grand Mean Sample F60: 340.86 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 C59			Sample C60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
21RSDU		48.82	-0.02	-0.03	48.08	0.28	0.38
2DT9Y2	X	45.48	-3.36	-3.99	46.46	-1.34	-1.85
2FGUGR		49.44	0.60	0.71	48.32	0.52	0.72
3M8MX6		48.61	-0.23	-0.27	47.58	-0.22	-0.30
41XSC7		48.54	-0.30	-0.36	47.43	-0.37	-0.51
46SNAZ		50.13	1.28	1.52	49.39	1.59	2.19
5GM5E6	X	50.46	1.62	1.92	47.71	-0.09	-0.12
6YLMXA		50.15	1.31	1.55	48.59	0.79	1.09
7KDKW7		48.02	-0.82	-0.98	46.92	-0.88	-1.22
7UUGD6		49.05	0.20	0.24	47.15	-0.65	-0.90
BS2UC7		49.13	0.28	0.34	47.89	0.09	0.12
C7LKD6		49.16	0.32	0.38	47.91	0.10	0.14
CSXTPB		48.20	-0.64	-0.76	47.13	-0.67	-0.93
D6UVWP		47.40	-1.44	-1.71	47.04	-0.76	-1.04
DYTVMG		47.88	-0.96	-1.14	47.18	-0.62	-0.86
E35RXQ		48.54	-0.30	-0.36	47.56	-0.24	-0.34
EEGYUQ		49.74	0.90	1.06	48.96	1.16	1.59
FSAPF7	*	48.81	-0.03	-0.04	48.77	0.97	1.34
GCRHLU		47.61	-1.23	-1.46	46.77	-1.03	-1.42
HAMDZ4	M	46.02	-2.83	-3.35	No data reported for this sample		
HHMWF2		48.52	-0.32	-0.38	47.28	-0.52	-0.72
JCAMRY		48.96	0.12	0.14	47.63	-0.17	-0.24
JZB1ZF		48.20	-0.65	-0.77	46.93	-0.87	-1.20
K74R23		48.73	-0.12	-0.14	47.91	0.11	0.15
M3JLHX		50.37	1.53	1.81	48.93	1.13	1.55
MNEXK5		48.05	-0.79	-0.94	47.17	-0.64	-0.88
NB71HL		48.02	-0.82	-0.98	46.92	-0.88	-1.22
NCS2VV		49.45	0.61	0.72	47.74	-0.06	-0.08
NKT9HA		49.73	0.89	1.05	48.98	1.18	1.62
QACLTV		50.36	1.52	1.80	48.84	1.04	1.43
R1UVY2		47.99	-0.85	-1.01	47.91	0.11	0.15
RDF8AB		47.68	-1.16	-1.38	47.05	-0.75	-1.04

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

WebCode	Data Flag	Sample C59			Sample C60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RF6HYJ		49.27	0.43	0.51	48.40	0.60	0.83
S67YS3		49.51	0.67	0.79	48.25	0.45	0.62
T1BJUF		49.87	1.03	1.22	48.20	0.39	0.54
UE2XZ9	X	45.30	-3.54	-4.20	43.88	-3.92	-5.40
UJS2JK	X	45.38	-3.47	-4.11	44.92	-2.89	-3.98
UV4CU3		49.20	0.36	0.42	48.20	0.40	0.55
V1T8BR		49.04	0.20	0.23	47.64	-0.16	-0.22
V54H4V		47.12	-1.72	-2.04	46.10	-1.70	-2.34
V6NYYQ		49.40	0.56	0.66	48.39	0.59	0.81
VDB1FZ		48.76	-0.08	-0.10	47.59	-0.21	-0.29
VY8PG2		48.53	-0.31	-0.37	47.85	0.05	0.07
W58YE1		49.80	0.96	1.13	48.20	0.39	0.54
X2STNA		47.35	-1.50	-1.78	47.00	-0.80	-1.10
XA7YY2		49.52	0.68	0.80	48.32	0.52	0.71
YNMAV3		48.74	-0.10	-0.12	47.58	-0.23	-0.31

Summary Statistics	
Grand Means	
48.843 MPa	47.802 MPa
Std Dev Btwn Labs	
0.843 MPa	0.726 MPa
Statistics based on 42 of 47 reporting participants	

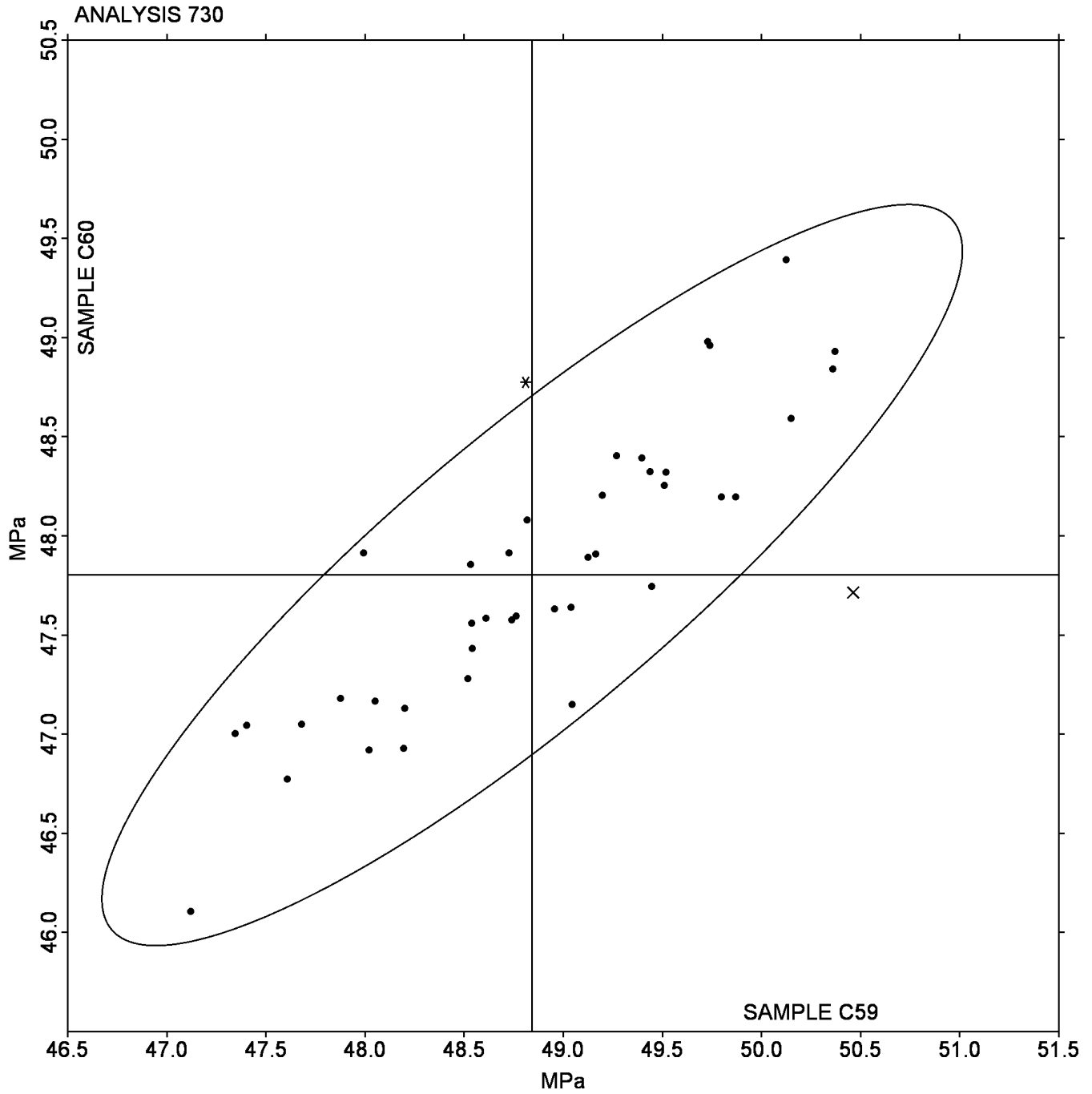
Sample C59: ABS & **Sample C60:** ABS

Comments on assigned Data Flags for Test #730

- 2DT9Y2 (X) - Inconsistent in testing between samples, data for Sample C59 are low.
- 5GM5E6 (X) - Inconsistent in testing between samples.
- HAMDZ4 (M) - Low data for Sample C59 and Laboratory did not submit data for Sample C60.
- UE2XZ9 (X) - Low data for all samples.
- UJS2JK (X) - Low data for all samples.

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

Grand Mean Sample C59: 48.843 MPa Grand Mean Sample C60: 47.802 MPa



**Plastics Interlaboratory Testing Program
Analysis 731**

Tensile Stress at Break - MPa

WebCode	Data Flag	Sample C59			Sample C60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1TVXTV		34.91	0.44	0.31	34.78	0.38	0.30
2WYFKJ		36.35	1.88	1.33	35.91	1.51	1.19
4WKF6D		33.15	-1.32	-0.93	33.73	-0.67	-0.53
81JWUW		34.47	0.00	0.00	34.80	0.39	0.31
8DREUB		36.41	1.94	1.37	34.74	0.33	0.26
8SQ12M		35.12	0.65	0.46	35.79	1.39	1.09
9CJET4		36.77	2.31	1.63	34.20	-0.21	-0.16
9R29ZN		34.44	-0.03	-0.02	34.88	0.48	0.37
AF2G67		34.03	-0.43	-0.31	33.74	-0.66	-0.52
AQW94S	*	30.56	-3.91	-2.77	32.66	-1.75	-1.38
B4K4JX		32.91	-1.56	-1.10	33.05	-1.35	-1.07
B4UWSZ	*	35.09	0.62	0.44	37.33	2.93	2.30
D8BML1	*	32.66	-1.80	-1.28	30.86	-3.55	-2.79
DL4PFL		35.82	1.35	0.96	35.07	0.67	0.52
F4ZKGF		34.52	0.05	0.04	34.53	0.13	0.10
FWKVSE		33.95	-0.51	-0.36	33.26	-1.14	-0.90
H49EPR		35.46	0.99	0.70	35.32	0.92	0.72
H7GXHZ		33.90	-0.56	-0.40	33.26	-1.14	-0.90
KA466J		33.24	-1.23	-0.87	34.50	0.10	0.08
L2CU1H		34.96	0.49	0.35	35.06	0.66	0.52
L8ZKMD	X	40.36	5.89	4.17	40.36	5.96	4.69
MVTKBR	X	39.91	5.45	3.86	47.24	12.83	10.10
MZ9X6M		35.47	1.00	0.71	35.66	1.25	0.99
MZMY2G		33.81	-0.66	-0.47	34.52	0.12	0.09
NEXVN3		36.39	1.92	1.36	37.11	2.71	2.13
PSFXPS	X	39.75	5.28	3.74	39.23	4.83	3.80
Q1UKGD		34.73	0.26	0.18	34.73	0.32	0.25
Q3MMCT		33.28	-1.19	-0.84	33.82	-0.58	-0.46
RQ6NUZ		33.66	-0.81	-0.58	35.29	0.88	0.69
RXF8NV		34.28	-0.19	-0.13	34.04	-0.36	-0.29
TFQP28		33.24	-1.23	-0.87	33.91	-0.49	-0.39
TJJTCZ		33.39	-1.08	-0.77	33.34	-1.06	-0.84

**Plastics Interlaboratory Testing Program
Analysis 731**

Tensile Stress at Break - MPa

WebCode	Data Flag	Sample C59			Sample C60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
U34P5S		33.82	-0.65	-0.46	33.54	-0.86	-0.68
UF3VMF		34.06	-0.40	-0.29	33.44	-0.97	-0.76
W1P3FP		36.00	1.53	1.09	35.02	0.62	0.48
XYTHSA	*	37.17	2.70	1.91	33.99	-0.41	-0.32
YRH9QZ		35.61	1.15	0.81	36.20	1.80	1.42
YWXR69		35.21	0.74	0.52	33.69	-0.71	-0.56
ZPW6RE		32.02	-2.45	-1.73	32.76	-1.64	-1.29

Summary Statistics

Grand Means

34.468 MPa

34.404 MPa

Std Dev Btwn Labs

1.411 MPa

1.270 MPa

Statistics based on 36 of 39 reporting participants

Sample C59: ABS & Sample C60: ABS

Comments on assigned Data Flags for Test #731

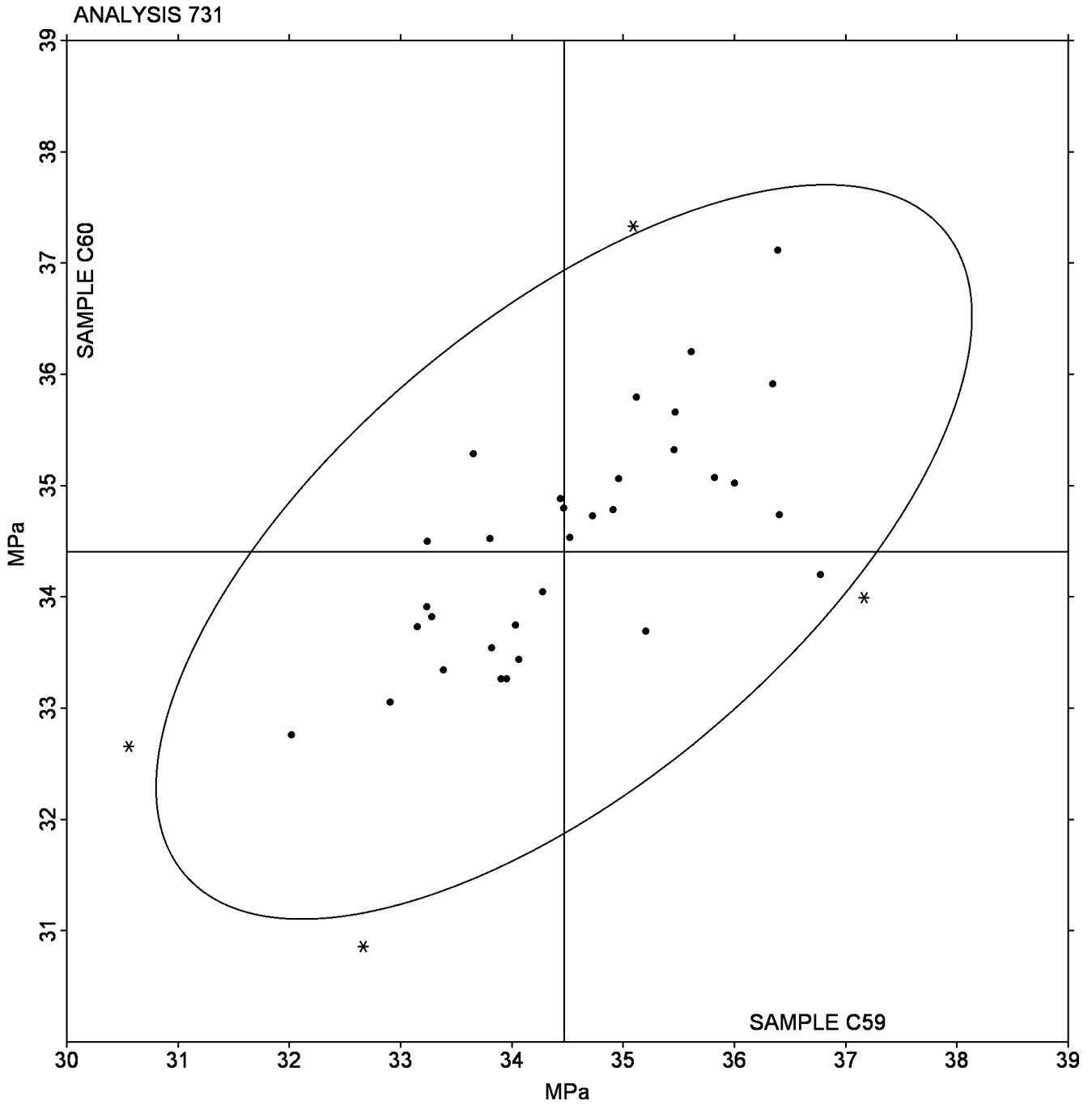
L8ZKMD (X) - High data for all samples.

MVTKBR (X) - High data for all samples.

PSFXPS (X) - High data for all samples. Possible Systematic Error.

Plastics Interlaboratory Testing Program
Analysis 731
Tensile Stress at Break - MPa

Grand Mean Sample C59: 34.468 MPa Grand Mean Sample C60: 34.404 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 732
Percent Strain at Yield

WebCode	Data Flag	Sample C59			Sample C60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2E8DTT		2.516	-0.147	-1.38	2.633	-0.181	-1.39
3PVVXD		2.610	-0.052	-0.49	2.724	-0.090	-0.69
46KJFU		2.670	0.008	0.07	2.766	-0.048	-0.37
4ZB298		2.740	0.078	0.73	2.866	0.052	0.40
5QV6S9		2.680	0.018	0.17	2.820	0.006	0.05
6J8B72	*	2.340	-0.322	-3.03	2.440	-0.374	-2.88
8RDWE3		2.646	-0.016	-0.15	2.746	-0.068	-0.52
9WJE88		2.636	-0.026	-0.25	2.754	-0.060	-0.46
ELAFFM		2.562	-0.100	-0.94	2.694	-0.120	-0.92
FTQT9Z		2.508	-0.154	-1.45	2.748	-0.066	-0.50
FXXKVS		2.704	0.042	0.39	2.774	-0.040	-0.30
H619U8		2.612	-0.050	-0.47	2.816	0.002	0.02
H7AL74		2.508	-0.154	-1.45	2.660	-0.154	-1.18
JDBX41		2.672	0.010	0.09	2.772	-0.042	-0.32
JY6VWY		2.638	-0.024	-0.23	2.758	-0.056	-0.43
LRJJKP		2.722	0.060	0.56	2.988	0.174	1.34
MHGXPG		2.838	0.176	1.65	3.002	0.188	1.45
P6BGU4		2.744	0.082	0.77	2.966	0.152	1.17
PDG1HM		2.676	0.014	0.13	2.794	-0.020	-0.15
PJ7F58		2.528	-0.134	-1.26	2.642	-0.172	-1.32
PU73CX		2.666	0.004	0.04	2.782	-0.032	-0.24
Q8LRNE	X	3.406	0.744	6.99	3.402	0.588	4.53
QD16RC		2.720	0.058	0.54	2.902	0.088	0.68
QEBD5K		2.788	0.126	1.18	3.020	0.206	1.59
QHVNYH		2.608	-0.054	-0.51	2.744	-0.070	-0.54
RFF6WJ		2.676	0.014	0.13	2.868	0.054	0.42
S6U5DN		2.514	-0.148	-1.39	2.630	-0.184	-1.41
SLBKSR		2.670	0.008	0.07	2.836	0.022	0.17
U3QLVS	M	2.340	-0.322	-3.03	No data reported for this sample		
U5UQC1		2.746	0.084	0.79	2.906	0.092	0.71
UDGWMZ		2.686	0.024	0.22	2.812	-0.002	-0.01
V21H9Q		2.862	0.200	1.88	2.946	0.132	1.02

**Plastics Interlaboratory Testing Program
Analysis 732**

Percent Strain at Yield

WebCode	Data Flag	Sample C59			Sample C60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
V79EJC	X	2.520	-0.142	-1.34	2.916	0.102	0.79
YA6DQS		2.672	0.010	0.09	2.890	0.076	0.59
YDU3UK		2.772	0.110	1.03	2.906	0.092	0.71
YNHYUZ	*	2.768	0.106	0.99	3.064	0.250	1.93
YR973T		2.742	0.080	0.75	2.904	0.090	0.70
ZPEQK5		2.740	0.078	0.73	2.900	0.086	0.67

Summary Statistics

Grand Means

2.6623 Percent

2.8135 Percent

Std Dev Btwn Labs

0.1064 Percent

0.1298 Percent

Statistics based on 35 of 38 reporting participants

Sample C59: ABS & Sample C60: ABS

Comments on assigned Data Flags for Test #732

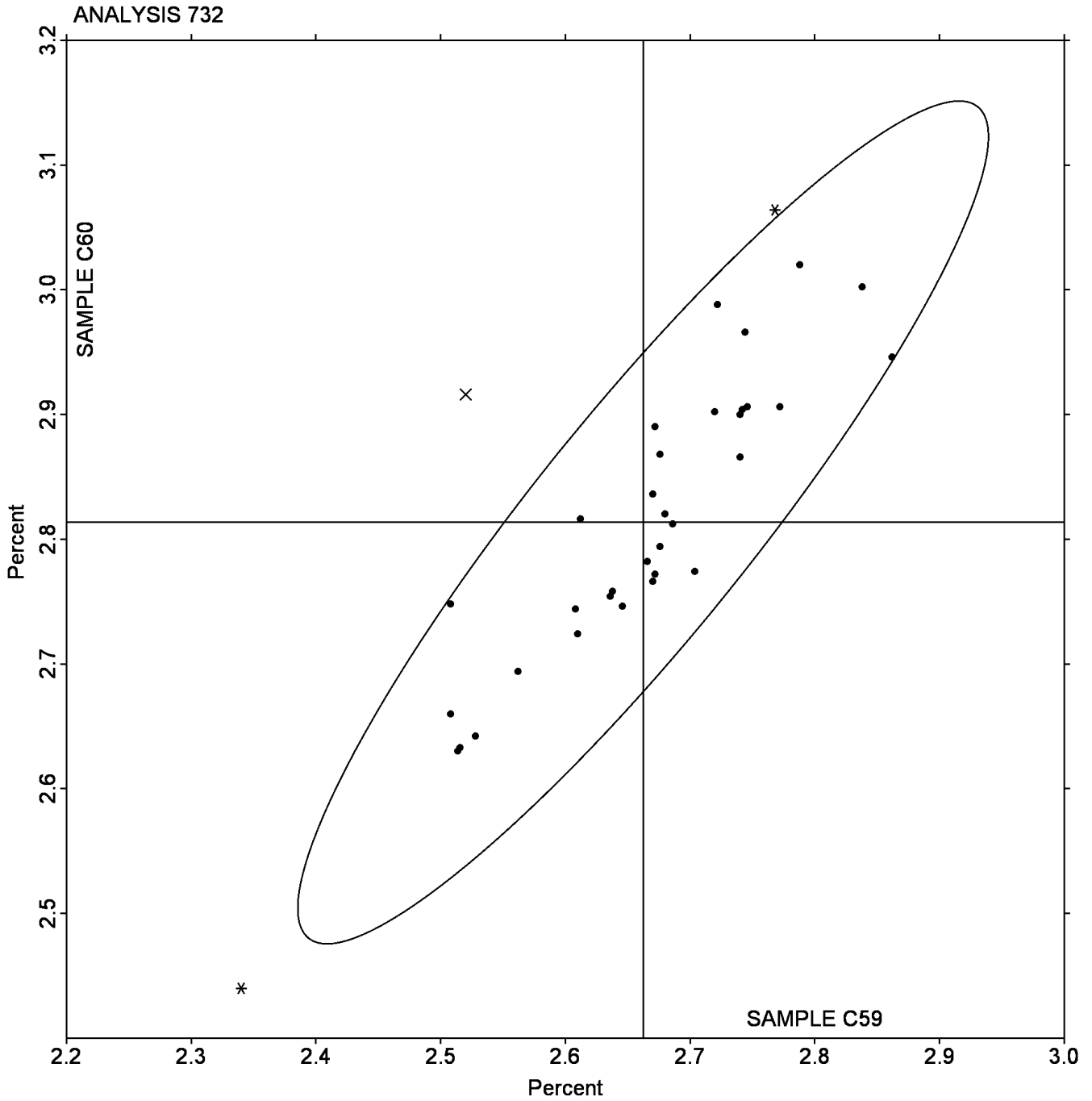
Q8LRNE (X) - High data for all samples.

U3QLVS (M) - Low data for Sample C59 and Laboratory did not submit data for Sample C60.

V79EJC (X) - Inconsistent in testing between samples and inconsistent in testing within Sample C59.

Plastics Interlaboratory Testing Program
Analysis 732
Percent Strain at Yield

Grand Mean Sample C59: 2.6623 Percent Grand Mean Sample C60: 2.8135 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 734
Modulus of Elasticity - MPa

WebCode	Data Flag	Sample C59			Sample C60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1F6D77	*	2,474	85	0.84	2,515	216	2.05
2XGMJS		2,370	-19	-0.19	2,281	-19	-0.18
31MLHS		2,549	160	1.57	2,475	175	1.67
46UCGG		2,338	-51	-0.50	2,253	-47	-0.44
4BM19M	X	2,779	390	3.83	2,424	124	1.18
69RDW5		2,390	1	0.01	2,347	47	0.45
6FKPPM		2,350	-39	-0.39	2,233	-67	-0.64
7DHEM3		2,384	-5	-0.05	2,300	0	0.00
99BGN1		2,264	-125	-1.23	2,289	-11	-0.11
9RVQNY		2,173	-216	-2.12	2,060	-239	-2.28
A72NQF		2,380	-9	-0.09	2,265	-35	-0.33
AEEXK2		2,460	71	0.69	2,400	100	0.95
DZCZE8		2,487	98	0.96	2,387	87	0.83
EENTN3		2,261	-128	-1.25	2,155	-144	-1.37
HJTUGR		2,544	155	1.52	2,456	156	1.49
JP3W7Y		2,315	-74	-0.73	2,215	-85	-0.81
K5MLPR	*	2,477	88	0.86	2,209	-91	-0.86
KW6P7S		2,279	-110	-1.08	2,202	-97	-0.93
M2Y25L	*	2,161	-228	-2.24	2,179	-120	-1.14
MUG3HG		2,303	-86	-0.84	2,237	-63	-0.60
N8388V		2,410	21	0.21	2,288	-12	-0.11
NMA25S		2,577	188	1.84	2,452	152	1.45
NU44GB		2,456	67	0.66	2,408	108	1.03
P6QK7Q		2,388	-1	-0.01	2,280	-20	-0.19
PXX4K6		2,479	90	0.89	2,352	52	0.50
RK876K		2,376	-13	-0.13	2,305	5	0.05
SRBP1R		2,361	-28	-0.28	2,292	-8	-0.07
TF8QSG		2,482	93	0.91	2,408	108	1.03
U56SK7		2,402	13	0.13	2,365	65	0.62
V2GNK9		2,315	-74	-0.72	2,108	-191	-1.82
V8H4R8		2,335	-54	-0.53	2,251	-49	-0.46
VYQ8GL		2,549	160	1.57	2,386	86	0.82

Plastics Interlaboratory Testing Program
Analysis 734
Modulus of Elasticity - MPa

WebCode	Data Flag	Sample C59			Sample C60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XHNJYS		2,367	-22	-0.22	2,263	-37	-0.35
Y9UZH4		2,382	-7	-0.07	2,276	-23	-0.22
ZYCT7L	M	383	-2,006	-19.70	No data reported for this sample		

Summary Statistics

Grand Means

2,388.9 MPa

2,299.8 MPa

Std Dev Btwn Labs

101.8 MPa

105.2 MPa

Statistics based on 33 of 35 reporting participants

Sample C59: ABS & Sample C60: ABS

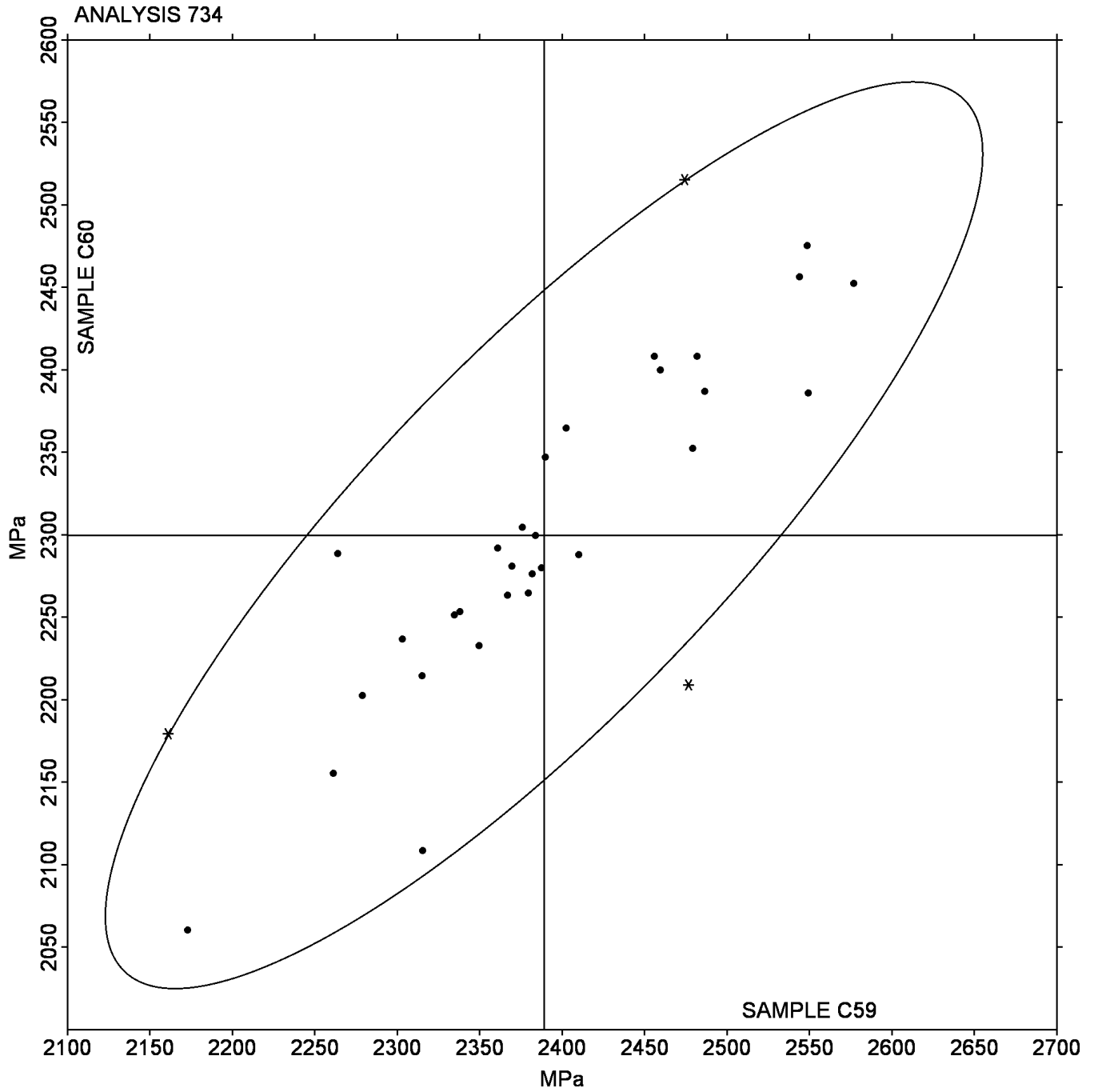
Comments on assigned Data Flags for Test #734

4BM19M (X) - Inconsistent in testing between samples, data for Sample C59 are high. Also inconsistent in testing within Sample C59.

ZYCT7L (M) - Extreme data for Sample C59 and Laboratory did not submit data for Sample C60.

Plastics Interlaboratory Testing Program
Analysis 734
Modulus of Elasticity - MPa

Grand Mean Sample C59: 2,388.95 MPa Grand Mean Sample C60: 2,299.78 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 J59			Sample J60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1LHB1E		360.6	22.5	1.05	358.4	20.9	0.96
1MYABR	*	274.9	-63.3	-2.95	277.9	-59.6	-2.75
2ECZE2		341.5	3.3	0.15	340.5	3.0	0.14
2GJB6A	X	331.6	-6.6	-0.31	383.8	46.3	2.14
2JQ8VR		333.1	-5.1	-0.24	334.5	-3.0	-0.14
4748WU		337.4	-0.8	-0.04	336.1	-1.4	-0.07
4QR4SW		337.6	-0.6	-0.03	332.4	-5.1	-0.24
52ARX8		349.0	10.8	0.50	348.8	11.3	0.52
5DH36B		368.8	30.6	1.43	369.0	31.5	1.45
6CLJ2U		366.8	28.6	1.33	364.4	26.9	1.24
6MA61C		365.5	27.3	1.27	365.5	28.0	1.29
7A3ZYW		358.5	20.4	0.95	358.1	20.6	0.95
8PGSXM		350.6	12.4	0.58	350.6	13.1	0.60
8XQ2LF		322.8	-15.4	-0.72	318.5	-19.0	-0.88
91GG52		300.3	-37.8	-1.76	301.6	-35.9	-1.66
A7GG24		329.7	-8.4	-0.39	326.0	-11.5	-0.53
AB3MA6		337.1	-1.1	-0.05	338.2	0.7	0.03
ABD88F		360.9	22.7	1.06	352.1	14.6	0.67
AV3KX1		330.4	-7.8	-0.36	334.4	-3.1	-0.14
BJTHGF		322.3	-15.9	-0.74	327.7	-9.8	-0.45
CVY99D		338.0	-0.2	-0.01	343.0	5.5	0.25
CZ6AAR		324.9	-13.3	-0.62	319.3	-18.2	-0.84
DGHJ94		341.1	2.9	0.14	336.7	-0.8	-0.04
E9J61N		313.7	-24.4	-1.14	312.1	-25.4	-1.17
EUVU3D		323.8	-14.4	-0.67	326.4	-11.1	-0.51
F9Y8KM		332.1	-6.1	-0.28	330.8	-6.7	-0.31
FJZCE4		369.7	31.5	1.47	362.6	25.1	1.16
GWVJDL	*	374.9	36.8	1.71	383.0	45.5	2.10
HK4P3H		294.9	-43.3	-2.01	297.6	-39.9	-1.84
J3GQEW		360.6	22.5	1.04	354.6	17.1	0.79
J518AG		310.9	-27.3	-1.27	311.8	-25.7	-1.18
JD1H16		353.9	15.7	0.73	355.5	18.0	0.83

Plastics Interlaboratory Testing Program
Analysis 720
Flexural Modulus- ksi

WebCode	Data Flag	Sample J59			Sample J60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
JGJMT9		331.0	-7.2	-0.33	331.6	-5.9	-0.27
JKWMAA		356.4	18.2	0.85	351.0	13.5	0.62
KS3B9U	*	359.2	21.0	0.98	368.1	30.6	1.41
KU2CPB		342.7	4.6	0.21	343.7	6.2	0.29
LJL54A		368.2	30.1	1.40	368.5	31.0	1.43
M8FBVP		349.0	10.8	0.50	352.9	15.4	0.71
MFVCB4		344.9	6.7	0.31	338.6	1.1	0.05
MTXWQY		340.4	2.2	0.10	340.3	2.8	0.13
NKYVHK		314.4	-23.7	-1.10	310.0	-27.5	-1.27
PHFLEJ		339.6	1.4	0.06	339.0	1.5	0.07
QULX74		334.3	-3.8	-0.18	337.5	0.0	0.00
QYHJ48		351.4	13.3	0.62	350.4	12.9	0.59
R8563M		380.4	42.2	1.97	382.6	45.1	2.08
RL2N9P		309.8	-28.3	-1.32	306.6	-30.9	-1.42
RQ9PZC		313.4	-24.7	-1.15	305.2	-32.3	-1.49
RVRSF9		337.6	-0.6	-0.03	337.7	0.2	0.01
RZKC65		292.0	-46.2	-2.15	290.0	-47.5	-2.19
S46763		327.5	-10.7	-0.50	330.4	-7.1	-0.33
SMD7NW		305.9	-32.3	-1.50	306.1	-31.4	-1.45
SMX2CD		331.0	-7.2	-0.33	330.9	-6.6	-0.30
SXCX94	X	316.2	-22.0	-1.02	337.8	0.3	0.01
T9PD4F		348.1	10.0	0.46	353.2	15.7	0.72
TGUPD1		389.1	50.9	2.37	389.2	51.7	2.39
TYH7X9		340.5	2.3	0.11	335.5	-2.0	-0.09
UEDWW3		343.7	5.6	0.26	343.0	5.5	0.25
UPCL8M		342.1	3.9	0.18	341.4	3.9	0.18
V7V9HM		336.1	-2.1	-0.10	330.4	-7.1	-0.33
VBWS2E		340.4	2.3	0.10	337.1	-0.4	-0.02
VF7JTM		355.1	17.0	0.79	349.6	12.1	0.56
VHZA7D		347.5	9.3	0.43	349.4	11.9	0.55
VJQLUZ	X	312.0	-26.2	-1.22	299.4	-38.1	-1.76
VTBMCV		335.4	-2.8	-0.13	335.6	-1.9	-0.09

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

WebCode	Data Flag	Sample J59			Sample J60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
W2SJ6M		308.4	-29.8	-1.39	305.2	-32.3	-1.49
W9VUW6		329.4	-8.8	-0.41	326.5	-11.0	-0.51
WFR3EQ		340.9	2.8	0.13	342.3	4.8	0.22
XELDL7		310.0	-28.2	-1.31	310.9	-26.6	-1.23
Y5K98Q		343.9	5.7	0.27	342.6	5.1	0.23
YHZF2B		336.0	-2.1	-0.10	335.3	-2.1	-0.10
YR8MPL		352.6	14.4	0.67	348.6	11.1	0.51
ZPVDT6		317.1	-21.1	-0.98	321.6	-15.9	-0.74
ZS6GDP		340.5	2.4	0.11	338.7	1.2	0.06

Summary Statistics	
Grand Means	
338.17 ksi	337.49 ksi
Std Dev Btwn Labs	
21.49 ksi	21.68 ksi
Statistics based on 70 of 73 reporting participants	

Sample J59: HIPS & **Sample J60:** HIPS

Comments on assigned Data Flags for Test #720

2GJB6A (X) - Inconsistent in testing between samples.

SXCX94 (X) - Inconsistent in testing between samples and inconsistent in testing within Sample J60.

VJQLUZ (X) - Inconsistent in testing between samples.

**Plastics Interlaboratory Testing Program
Analysis 721**

Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J59			Sample J60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1CMHJ7		6,650	55	0.18	6,705	140	0.46
2AUR5F		6,650	55	0.18	6,718	154	0.51
2L7LSN		6,902	307	1.01	6,772	208	0.69
352K1J		6,558	-37	-0.12	6,661	97	0.32
352XT1		6,602	7	0.02	6,512	-52	-0.17
5CRD8V		6,621	26	0.08	6,428	-136	-0.45
5YT7AT	*	7,551	956	3.13	7,461	897	2.96
6XKE7W		6,268	-327	-1.07	6,163	-401	-1.33
74V37Y		6,246	-349	-1.14	6,169	-395	-1.30
88A8K5		6,628	33	0.11	6,579	15	0.05
891QHK		6,435	-160	-0.52	6,411	-153	-0.51
9FG9YJ		6,441	-154	-0.50	6,560	-5	-0.02
9M8VAX		6,773	178	0.58	6,660	95	0.31
9RZ71N		6,730	135	0.44	6,759	195	0.64
9TSXCT		6,921	326	1.07	6,861	297	0.98
ACB3Y4		6,722	127	0.42	6,574	10	0.03
B7XGVY		6,571	-24	-0.08	6,622	58	0.19
BA48AC		6,534	-61	-0.20	6,463	-101	-0.33
DRYQV1		6,399	-196	-0.64	6,274	-290	-0.96
E795VG		6,000	-595	-1.95	6,000	-564	-1.86
FCYXQV		6,644	49	0.16	6,681	117	0.39
FD2LFZ		6,961	366	1.20	6,874	310	1.02
FJXWQJ		6,836	241	0.79	6,850	286	0.94
G6S9KD		6,745	150	0.49	6,808	244	0.80
G8J81X		7,320	725	2.37	7,237	672	2.22
JHFHAY		6,706	111	0.36	6,724	159	0.53
K2PCRP		6,654	59	0.19	6,514	-50	-0.16
KZK4VY		6,280	-315	-1.03	6,280	-284	-0.94
L32TSG		6,703	108	0.35	6,766	202	0.67
LQH2D8	*	6,406	-189	-0.62	6,122	-442	-1.46
Q6ZG3Y		7,108	513	1.68	7,073	509	1.68
QNQUN1		6,251	-344	-1.13	6,235	-329	-1.09

**Plastics Interlaboratory Testing Program
Analysis 721**

Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J59			Sample J60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RE4ATZ		6,728	133	0.43	6,692	128	0.42
RXC27F		6,085	-510	-1.67	6,023	-541	-1.79
SXTH1P		6,717	122	0.40	6,609	45	0.15
THHMP7	*	6,191	-404	-1.32	6,483	-81	-0.27
TP7MZY		6,327	-268	-0.88	6,414	-150	-0.50
TPYVPH		6,513	-82	-0.27	6,560	-4	-0.01
UHKMAT		6,557	-38	-0.12	6,562	-2	-0.01
UTCSUK		6,534	-61	-0.20	6,400	-164	-0.54
V1RCW2		6,654	59	0.19	6,487	-78	-0.26
VBN29A		6,250	-345	-1.13	6,352	-212	-0.70
WDAGEH		6,534	-61	-0.20	6,696	132	0.44
WVWXMK		6,692	97	0.32	6,479	-85	-0.28
XZR32A		6,005	-590	-1.93	5,918	-647	-2.13
YHXK3L		6,769	174	0.57	6,767	202	0.67
ZKR34S	X	1,064	-5,531	-18.10	1,071	-5,493	-18.13

Summary Statistics	
Grand Means	
6,595.0 psi	6,564.3 psi
Std Dev Btwn Labs	
305.6 psi	302.9 psi
Statistics based on 46 of 47 reporting participants	

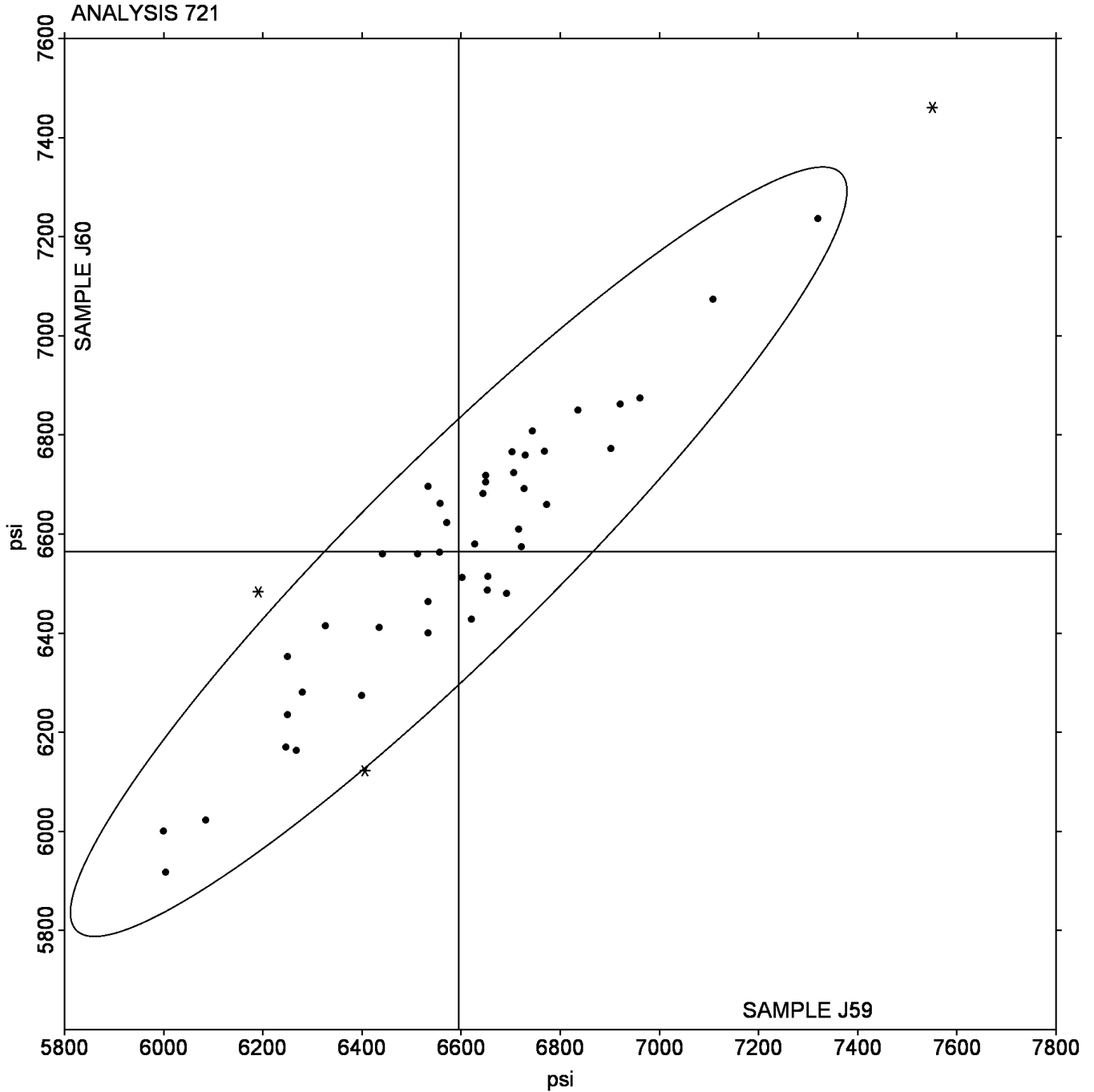
Sample J59: HIPS & Sample J60: HIPS

Comments on assigned Data Flags for Test #721

ZKR34S (X) - Low data for all samples.

Plastics Interlaboratory Testing Program
Analysis 721
Flexural Stress at 5% Strain - psi

Grand Mean Sample J59: 6,594.97 psi Grand Mean Sample J60: 6,564.29 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 722
Flexural Stress at Yield - psi

WebCode	Data Flag	Sample J59			Sample J60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1FCFGE		6,884	296	1.20	6,944	369	1.49
24748Q		6,676	88	0.36	6,733	157	0.64
2973V2		6,678	90	0.36	6,564	-11	-0.04
39G5ZS		6,800	212	0.86	6,841	266	1.07
51Z3Z9		7,000	412	1.67	6,945	370	1.50
5EKLUY		6,857	269	1.09	6,782	207	0.84
5Y94JQ		6,778	190	0.77	6,814	239	0.97
64EH69		6,722	135	0.54	6,664	88	0.36
6ATY7C		6,426	-162	-0.65	6,397	-178	-0.72
6GFT4A		6,753	165	0.67	6,646	71	0.29
74BXP5		6,686	98	0.40	6,636	61	0.25
7Z82QB		6,831	243	0.98	6,799	224	0.91
8GK5FH		6,363	-225	-0.91	6,362	-214	-0.86
9BGX3J		6,592	5	0.02	6,598	23	0.09
9Y2DMH		6,528	-60	-0.24	6,487	-88	-0.36
B597KC		6,302	-286	-1.16	6,293	-282	-1.14
B5N6NG		6,453	-135	-0.55	6,195	-380	-1.54
BKALDF	X	6,440	-148	-0.60	6,918	343	1.39
BYRL61		6,675	87	0.35	6,712	137	0.55
BZC5GR		6,382	-206	-0.83	6,263	-312	-1.26
D54ZWF		6,330	-258	-1.04	6,446	-129	-0.52
D943QN		6,498	-90	-0.36	6,538	-37	-0.15
DXPJ7M		6,854	266	1.08	6,868	293	1.18
EFF3JK		6,758	171	0.69	6,583	8	0.03
EKFDFK	*	6,245	-343	-1.39	6,542	-34	-0.14
EPVT3R		6,437	-151	-0.61	6,313	-262	-1.06
F2U2FY		6,432	-156	-0.63	6,636	61	0.25
FHTANJ		6,507	-81	-0.33	6,487	-89	-0.36
HECLVC		6,000	-588	-2.38	6,000	-575	-2.33
KA76CU		6,433	-155	-0.63	6,347	-229	-0.92
L3A5U1		6,613	26	0.10	6,721	146	0.59
LNR3YP		6,781	193	0.78	6,738	162	0.66

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

WebCode	Data Flag	Sample J59			Sample J60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LW4Z1A		6,259	-329	-1.33	6,429	-147	-0.59
MARE1E		6,390	-198	-0.80	6,505	-71	-0.29
N3Y4ZA		6,896	309	1.25	6,900	324	1.31
NETZYK		6,213	-375	-1.52	6,138	-438	-1.77
NHM8LD	X	5,599	-989	-4.00	5,659	-916	-3.71
QL7HEP		6,489	-99	-0.40	6,344	-231	-0.94
R4ZSUB		6,729	141	0.57	6,779	203	0.82
R8J9DM		7,083	495	2.00	7,116	540	2.18
RMZCTQ		6,706	118	0.48	6,419	-157	-0.63
TK8B4Y		6,399	-189	-0.76	6,485	-91	-0.37
UD1QBG		5,980	-608	-2.46	5,979	-596	-2.41
UXR212		6,665	78	0.31	6,560	-15	-0.06
VNG2XD		6,665	77	0.31	6,705	129	0.52
W2CZMP		6,514	-74	-0.30	6,570	-6	-0.02
W3YTZR		6,601	13	0.05	6,589	14	0.06
WCAZYT		6,982	394	1.59	6,854	279	1.13
ZPR2QH		6,779	191	0.77	6,779	204	0.82

Summary Statistics	
Grand Means	
6,587.7 psi	6,575.4 psi
Std Dev Btwn Labs	
247.2 psi	247.2 psi
Statistics based on 47 of 49 reporting participants	

Sample J59: HIPS & Sample J60: HIPS

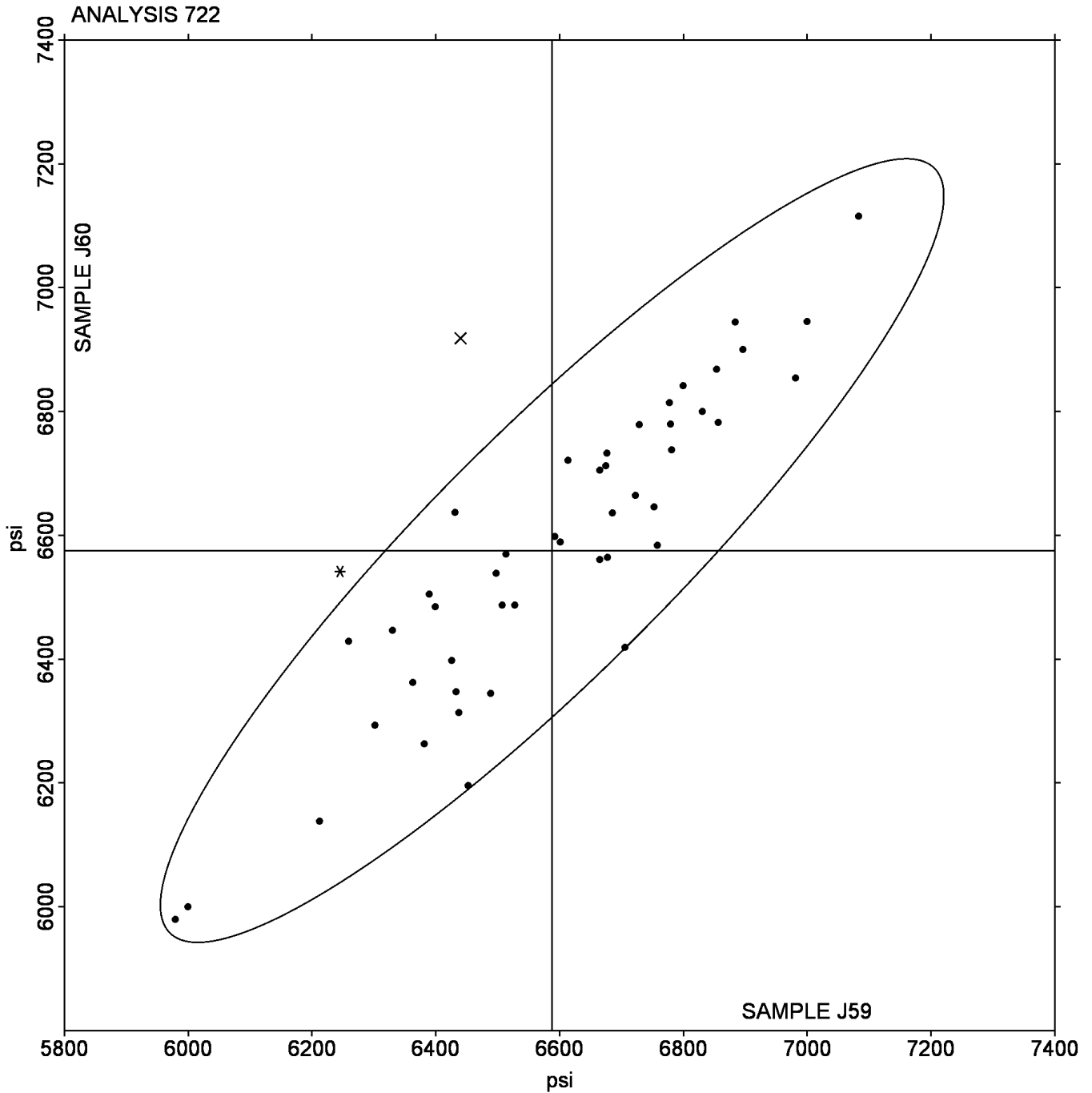
Comments on assigned Data Flags for Test #722

BKALDF (X) - Inconsistent in testing between samples.

NHM8LD (X) - Low data for all samples.

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

Grand Mean Sample J59: 6,587.75 psi Grand Mean Sample J60: 6,575.45 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 K59			Sample K60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1JY9ET		2,502	102	1.12	2,402	74	0.87
1L3H6C		2,486	86	0.95	2,412	84	0.99
2X3BPU		2,564	164	1.81	2,467	139	1.63
3GXFGZ		2,304	-96	-1.06	2,222	-106	-1.24
3JXJD9		2,334	-66	-0.73	2,240	-88	-1.02
48JEPR	*	2,323	-77	-0.86	2,298	-30	-0.35
4G7KXQ		2,356	-44	-0.49	2,276	-52	-0.60
4KQ989		2,256	-144	-1.59	2,206	-122	-1.42
56Q6KE		2,419	19	0.20	2,327	-1	-0.01
5FAUK3		2,363	-37	-0.41	2,320	-7	-0.09
6CHHWG		2,382	-18	-0.20	2,314	-14	-0.16
6UTWXB		2,361	-39	-0.43	2,295	-33	-0.39
6UUA7K		2,421	21	0.23	2,332	4	0.04
73RWAW		2,229	-171	-1.89	2,157	-171	-1.99
8RCJP8		2,260	-140	-1.55	2,179	-149	-1.74
A4KDM9		2,399	-1	-0.01	2,325	-3	-0.04
C9M6SQ		2,443	43	0.47	2,364	36	0.43
CAE6RV	X	2,431	31	0.35	2,299	-29	-0.34
CCMBEH		2,495	95	1.05	2,416	88	1.03
DTK385		2,510	110	1.21	2,439	112	1.30
E2G6E1		2,475	75	0.83	2,423	95	1.11
FBHVQA		2,282	-118	-1.30	2,210	-117	-1.37
FS33NM		2,534	134	1.48	2,441	113	1.32
FZMXRG	*	2,643	243	2.69	2,543	215	2.51
GDGS92		2,423	23	0.26	2,350	22	0.25
GFEXAU	X	2,494	94	1.04	2,318	-10	-0.11
JURGAD		2,406	6	0.06	2,315	-12	-0.14
KRPERQ		2,388	-12	-0.13	2,337	9	0.10
LAG3VW		2,506	106	1.17	2,439	111	1.29
LE7HFX		2,350	-50	-0.55	2,290	-37	-0.44
LPM6H4		2,283	-117	-1.30	2,221	-106	-1.24
M6SQCZ		2,492	92	1.01	2,431	103	1.21

Plastics Interlaboratory Testing Program
Analysis 736
Flexural Modulus - MPa

WebCode	Data Flag	Sample K59			Sample K60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
M9PEDE		2,437	37	0.41	2,354	26	0.31
ML3CJH		2,249	-151	-1.67	2,178	-150	-1.75
MZPN8Y		2,394	-6	-0.07	2,338	10	0.12
N72Z1Q		2,451	51	0.57	2,372	44	0.51
QRTNPR		2,289	-111	-1.22	2,229	-98	-1.15
R37KG7		2,420	20	0.22	2,345	17	0.20
RDHXGU	X	395	-2,005	-22.15	371	-1,957	-22.85
RHVEF5		2,360	-40	-0.44	2,312	-16	-0.18
RVTKDG		2,391	-9	-0.10	2,321	-7	-0.08
TYMEVG		2,410	10	0.11	2,327	-1	-0.01
U3H4AT		2,400	0	0.00	2,351	23	0.27
WXJLWZ		2,395	-5	-0.06	2,329	1	0.02
XEBWVU	X	2	-2,398	-26.49	2	-2,325	-27.15
XQE29U		2,526	126	1.39	2,454	126	1.47
YW7TP9		2,394	-6	-0.06	2,316	-12	-0.14
ZGARS2		2,314	-86	-0.95	2,240	-88	-1.02
ZH12F9		2,384	-16	-0.18	2,294	-34	-0.40

Summary Statistics

Grand Means

2,400.0 MPa

2,327.8 MPa

Std Dev Btwn Labs

90.5 MPa

85.6 MPa

Statistics based on 45 of 49 reporting participants

Sample K59: ABS & Sample K60: ABS

Comments on assigned Data Flags for Test #736

CAE6RV (X) - Inconsistent in testing between samples.

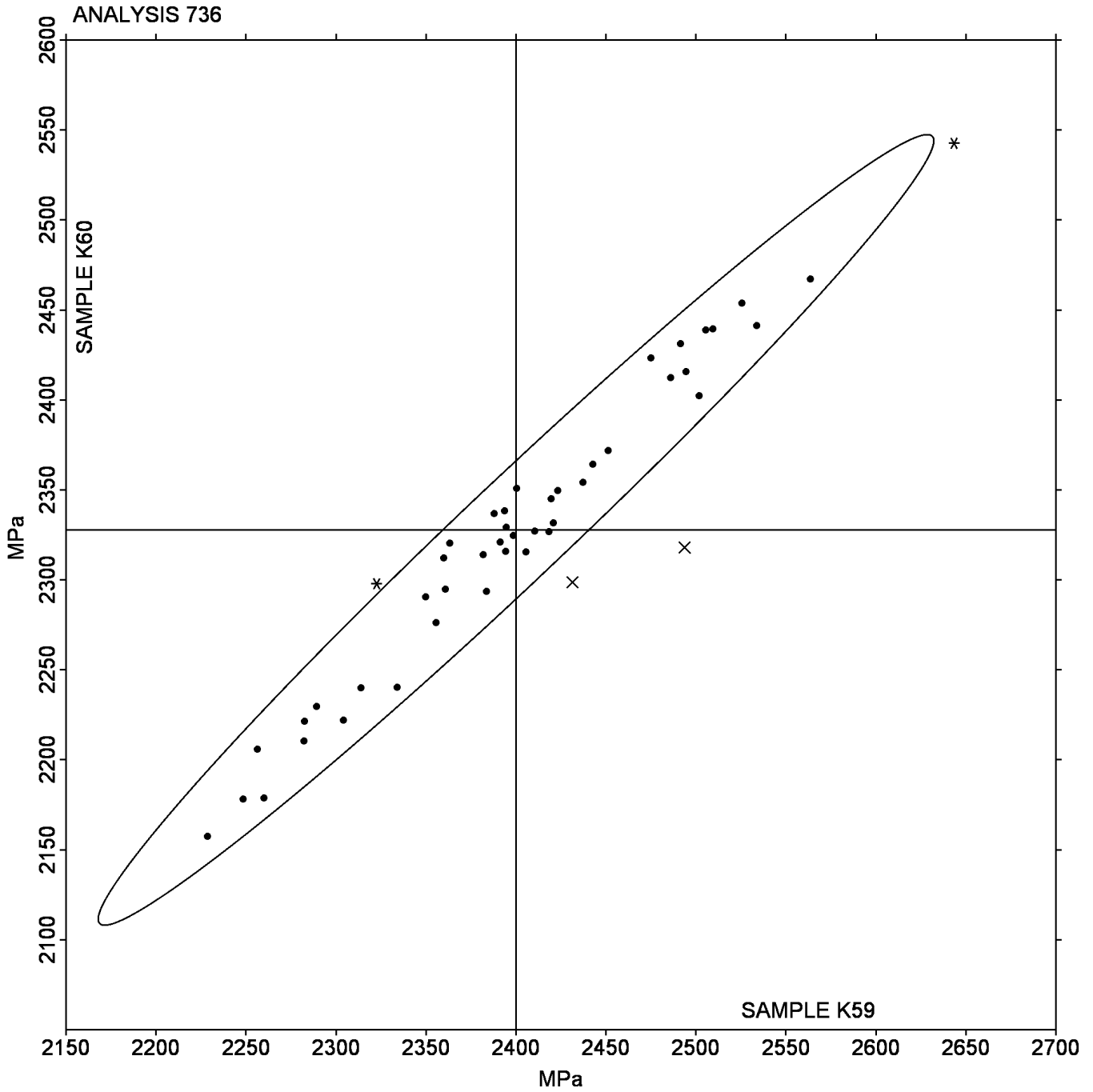
GFEXAU (X) - Inconsistent in testing between samples and inconsistent in testing within Sample K60.

RDHXGU (X) - Extreme data.

XEBWVU (X) - Extreme data. Data appear to be off by a factor of 1000.

Plastics Interlaboratory Testing Program
Analysis 736
Flexural Modulus - MPa

Grand Mean Sample K59: 2,400.01 MPa Grand Mean Sample K60: 2,327.78 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 737**

Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K59			Sample K60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1MECVQ		71.81	-0.48	-0.28	68.31	-1.09	-0.58
2QVG78		73.20	0.92	0.53	71.00	1.60	0.84
2ZSFNT		74.04	1.76	1.02	71.15	1.74	0.92
3FQPHD		71.93	-0.36	-0.21	69.41	0.01	0.00
3JA1BU		69.44	-2.84	-1.65	67.00	-2.40	-1.27
416Y59		72.75	0.46	0.27	70.09	0.68	0.36
41M5CC		73.69	1.41	0.82	71.72	2.32	1.23
4JZ1H4	M	No data reported for this sample			67.23	-2.17	-1.15
61P292		72.12	-0.16	-0.09	70.58	1.18	0.62
671BPV		72.95	0.67	0.39	70.38	0.97	0.51
737XY6		75.25	2.97	1.72	71.60	2.20	1.16
84VTWY		71.97	-0.31	-0.18	69.10	-0.30	-0.16
8YVAB6		73.81	1.53	0.88	71.91	2.50	1.32
978Y4S		72.57	0.29	0.17	69.82	0.42	0.22
BUCMQ6		72.09	-0.20	-0.11	69.03	-0.37	-0.20
D8WA8F		74.13	1.85	1.07	69.91	0.50	0.27
ES9FR4		72.55	0.26	0.15	70.04	0.63	0.33
FJYPNS		72.24	-0.05	-0.03	69.18	-0.23	-0.12
G6Y2TV	*	67.46	-4.82	-2.80	64.46	-4.94	-2.61
HAEWHL		68.42	-3.86	-2.24	64.86	-4.54	-2.40
JPXZNG		70.16	-2.12	-1.23	67.95	-1.45	-0.77
KLTNHT		74.89	2.61	1.51	71.86	2.46	1.30
M2EQF8		74.61	2.33	1.35	72.71	3.30	1.74
MG35XL		72.88	0.59	0.34	68.71	-0.69	-0.37
P6QFWM	*	72.21	-0.07	-0.04	66.79	-2.62	-1.38
QE3BMK		73.43	1.14	0.66	70.47	1.07	0.56
SAMDF9		71.71	-0.57	-0.33	68.87	-0.53	-0.28
SHHFFZ		73.39	1.10	0.64	70.37	0.96	0.51
VEA56U		71.28	-1.01	-0.58	68.04	-1.37	-0.72
Y5Q7VD		71.09	-1.20	-0.69	67.93	-1.47	-0.78
Z3Y8EU		72.23	-0.05	-0.03	69.45	0.04	0.02
ZQFM6M		71.12	-1.16	-0.68	68.84	-0.56	-0.30

**Plastics Interlaboratory Testing Program
Analysis 737**

Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K59			Sample K60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ZS72UG		71.68	-0.60	-0.35	69.40	0.00	0.00

Summary Statistics

Grand Means

72.284 MPa

69.404 MPa

Std Dev Btwn Labs

1.724 MPa

1.893 MPa

Statistics based on 32 of 33 reporting participants

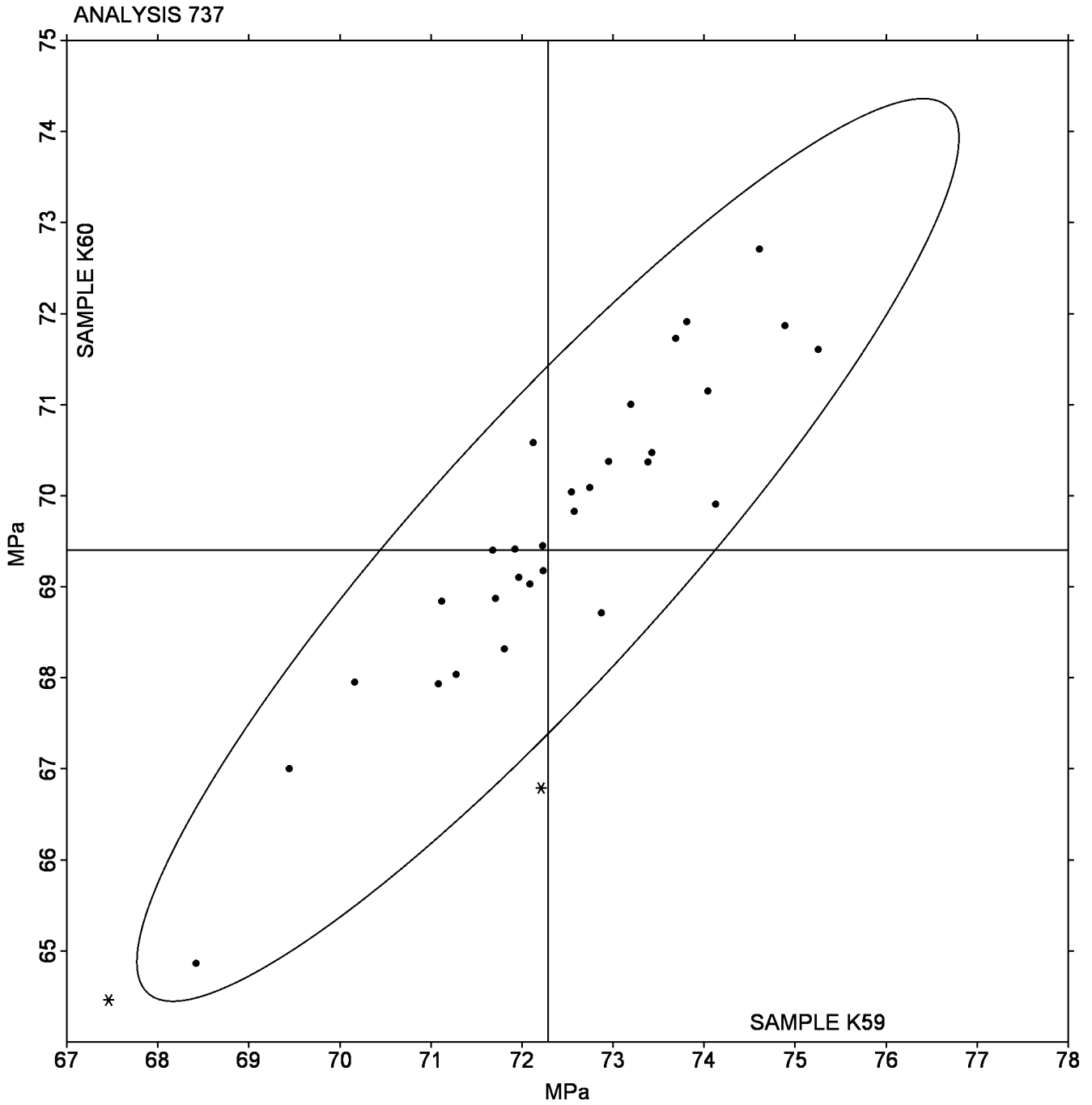
Sample K59: ABS & Sample K60: ABS

Comments on assigned Data Flags for Test #737

4JZ1H4 (M) - Laboratory did not submit data for Sample K59.

Plastics Interlaboratory Testing Program
Analysis 737
Flexural Stress at 3.5% Strain - MPa

Grand Mean Sample K59: 72.284 MPa Grand Mean Sample K60: 69.404 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 738
Flexural Stress at Yield - MPa

WebCode	Data Flag	Sample K59			Sample K60		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
5UYR4C		73.50	-0.11	-0.06	72.32	0.75	0.41
618A7P		72.43	-1.17	-0.72	71.10	-0.47	-0.26
6SRRMB		73.71	0.11	0.07	71.65	0.08	0.04
8CQUGH		74.15	0.55	0.34	71.62	0.05	0.03
AEXRA4		74.87	1.26	0.78	73.57	1.99	1.10
CPBGZZ		73.43	-0.18	-0.11	71.46	-0.11	-0.06
CXQB5U		74.12	0.52	0.32	71.96	0.39	0.22
DTVJ5X	*	73.64	0.03	0.02	68.87	-2.70	-1.49
E3UQ8A		73.33	-0.28	-0.17	70.64	-0.93	-0.51
EDPS6S		73.64	0.03	0.02	73.25	1.67	0.92
G6FKML		70.72	-2.89	-1.78	68.18	-3.39	-1.86
KQAKXN		70.80	-2.81	-1.73	67.34	-4.24	-2.33
LNVCJF		74.61	1.00	0.62	72.63	1.06	0.58
NM19XQ		74.07	0.47	0.29	72.15	0.57	0.32
NV98KT		73.74	0.14	0.09	71.99	0.41	0.23
PKK7ZA		71.66	-1.94	-1.20	70.18	-1.39	-0.76
PW9JEN		71.18	-2.43	-1.49	69.48	-2.09	-1.15
QKQ4G7		70.46	-3.15	-1.94	68.84	-2.73	-1.50
RCYP2T		74.02	0.41	0.26	72.00	0.43	0.24
SG6GLR		73.99	0.39	0.24	72.87	1.29	0.71
TPS9MN		74.73	1.12	0.69	73.41	1.83	1.01
UP5MTR		76.00	2.39	1.47	73.20	1.63	0.89
W6WJXQ		72.94	-0.67	-0.41	71.46	-0.11	-0.06
WSVUVY		75.66	2.05	1.26	73.84	2.27	1.25
XARNCF		76.48	2.87	1.77	74.45	2.87	1.58
YPFVAU		75.85	2.25	1.38	72.42	0.85	0.47
ZQ1JVL	X	9.52	-64.08	-39.44	9.17	-62.41	-34.30

Plastics Interlaboratory Testing Program
Analysis 738
Flexural Stress at Yield - MPa

Summary Statistics	
Grand Means	
73.605 MPa	71.572 MPa
Std Dev Btwn Labs	
1.625 MPa	1.820 MPa
Statistics based on 26 of 27 reporting participants	

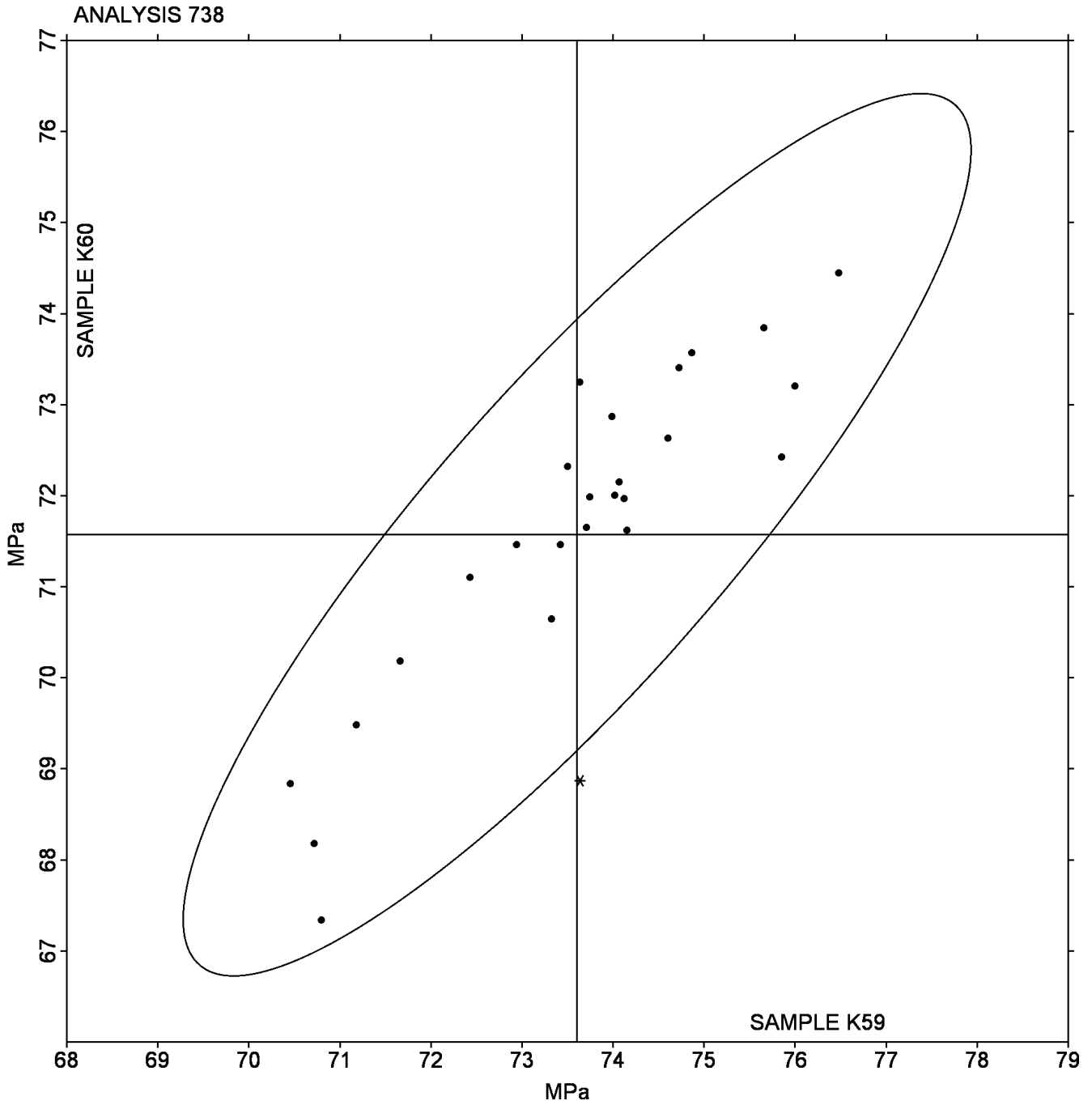
Sample K59: ABS & **Sample K60:** ABS

Comments on assigned Data Flags for Test #738

ZQ1JVL (X) - Extreme data.

Plastics Interlaboratory Testing Program
Analysis 738
Flexural Stress at Yield - MPa

Grand Mean Sample K59: 73.605 MPa Grand Mean Sample K60: 71.572 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 790**

Notched Izod Impact - ft.lbf/in

WebCode	Data Flag	Sample S59			Sample S60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
16UY2E	*	4.66	0.10	0.35	4.95	0.52	1.98	TM
1W96T9		4.85	0.29	1.06	4.67	0.25	0.93	CS
2XZ7XJ		4.80	0.24	0.86	4.50	0.07	0.26	TO
2ZT8L1	X	7.23	2.67	9.62	7.26	2.84	10.76	TO
3GE9YH		4.94	0.38	1.37	4.47	0.04	0.16	TO
44P8Y8		4.86	0.30	1.07	4.31	-0.12	-0.46	CE
4V6G29		4.38	-0.18	-0.63	4.33	-0.10	-0.37	TM
4Z3LYG	X	0.49	-4.07	-14.68	0.45	-3.98	-15.10	TM
5CSUF6		4.78	0.22	0.80	4.71	0.28	1.07	TO
5QCVV7		4.39	-0.17	-0.62	4.45	0.02	0.07	TO
6BV8DM		4.53	-0.03	-0.10	4.42	-0.01	-0.03	TM
6Q1S6S		4.67	0.11	0.41	4.58	0.15	0.57	TO
6QEVJD		4.11	-0.45	-1.63	4.12	-0.31	-1.16	TM
8ACS6Y		4.74	0.18	0.64	4.64	0.21	0.81	TM
8MP4TT		4.97	0.42	1.50	4.56	0.13	0.49	TM
8UFQET	X	5.99	1.43	5.17	5.23	0.80	3.05	XX
8X51MY		4.37	-0.19	-0.68	4.51	0.08	0.31	XX
9FMXLA	*	4.93	0.37	1.32	5.09	0.67	2.52	TO
9JGFKG	X	6.47	1.91	6.88	6.73	2.30	8.72	CS
A358UD		4.72	0.16	0.59	4.38	-0.05	-0.20	TO
AUXK67	X	5.98	1.42	5.14	6.08	1.65	6.26	XX
AVQ7V4		4.45	-0.11	-0.39	4.75	0.32	1.23	XX
B76Y44		4.67	0.11	0.39	4.71	0.28	1.08	CE
BCN4CQ		4.60	0.04	0.13	4.65	0.22	0.82	BA
BFSNN5		5.20	0.64	2.30	4.91	0.48	1.83	TM
BGGMCH		4.30	-0.26	-0.94	3.90	-0.53	-2.01	TO
BTWVEV		4.44	-0.12	-0.42	4.58	0.15	0.58	WZ
CBLSX8		4.65	0.10	0.34	4.47	0.04	0.15	TM
CLUMA9		4.67	0.11	0.39	4.53	0.10	0.37	TO
CQWHAN		4.79	0.23	0.83	4.65	0.22	0.83	CE
D791LE		4.56	0.00	0.01	4.29	-0.14	-0.53	TO
DBU5XW		4.19	-0.37	-1.33	4.08	-0.35	-1.34	TO

Plastics Interlaboratory Testing Program
Analysis 790

Notched Izod Impact - ft.lbf/in

WebCode	Data Flag	Sample S59			Sample S60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
DNK1VP		4.48	-0.08	-0.29	4.22	-0.21	-0.78	CE
DVYKR3		4.17	-0.39	-1.41	4.11	-0.32	-1.20	XX
EP5QH3		4.74	0.18	0.64	4.68	0.25	0.95	AT
FBZ66U		4.25	-0.31	-1.12	4.47	0.04	0.17	TO
FZ2A27		4.63	0.07	0.27	4.16	-0.27	-1.03	TM
FZ8SPR		4.55	-0.01	-0.03	4.57	0.14	0.53	TO
G4C2TE	X	0.54	-4.02	-14.50	0.52	-3.91	-14.84	TO
G5TWC6		4.69	0.13	0.49	4.65	0.22	0.82	TM
J64SEV	X	5.52	0.96	3.48	4.58	0.15	0.56	TO
JJ27DY		4.79	0.23	0.84	4.27	-0.16	-0.60	TM
JMTC14	*	5.05	0.49	1.78	4.46	0.03	0.11	TM
JQMC4D		4.60	0.04	0.14	4.62	0.20	0.74	TO
KNG4QF		4.54	-0.02	-0.07	4.44	0.01	0.02	TO
KTVWPL		4.73	0.17	0.62	4.48	0.05	0.20	BA
LDXCY2		4.50	-0.06	-0.22	4.28	-0.15	-0.56	TO
LMXT27	X	5.66	1.10	3.98	5.70	1.27	4.81	TM
LYXECC		4.41	-0.15	-0.53	4.42	0.00	-0.02	WZ
ME6ZV7		4.53	-0.03	-0.09	4.41	-0.02	-0.06	TM
MJ2Y2Q	X	2.57	-1.99	-7.19	2.46	-1.97	-7.48	TO
N36V2X		4.24	-0.32	-1.15	4.17	-0.26	-0.98	TO
NHY26E		4.32	-0.24	-0.86	3.92	-0.51	-1.93	TM
NN5BZP		4.52	-0.04	-0.13	4.34	-0.09	-0.34	TY
NT4FCS		4.44	-0.12	-0.42	4.29	-0.14	-0.52	CE
NWL8GM		4.60	0.04	0.13	4.22	-0.21	-0.79	TO
P7D1EC		4.44	-0.12	-0.43	4.08	-0.35	-1.33	CE
PFY261		4.89	0.33	1.21	4.45	0.02	0.08	BA
Q5N3G5		4.42	-0.14	-0.49	4.35	-0.07	-0.28	TM
QADWR5		5.04	0.48	1.73	5.01	0.58	2.19	TO
QERFFK		4.64	0.08	0.29	4.49	0.06	0.23	TM
RSNH6L	X	0.53	-4.03	-14.53	0.54	-3.89	-14.75	TM
RVHKRM	*	3.73	-0.83	-2.98	3.68	-0.75	-2.84	CE
S45E7U		4.92	0.36	1.32	4.48	0.05	0.19	TO

**Plastics Interlaboratory Testing Program
Analysis 790**

Notched Izod Impact - ft.lbf/in

WebCode	Data Flag	Sample S59			Sample S60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
S68RQA		4.36	-0.20	-0.71	4.30	-0.13	-0.49	TM
SA1JHZ		4.58	0.02	0.09	4.34	-0.09	-0.35	TM
SUF7B5		4.64	0.08	0.30	4.55	0.12	0.45	TM
SVYNRD		4.61	0.05	0.18	4.62	0.19	0.72	CE
T5ZSJ8		4.73	0.17	0.61	4.58	0.15	0.57	CE
TDP8YG		4.45	-0.11	-0.41	4.36	-0.06	-0.25	TO
U32YY9		4.09	-0.47	-1.70	4.31	-0.11	-0.44	TO
UEPBT6		3.94	-0.62	-2.23	3.96	-0.47	-1.78	TO
UHSLUV		4.28	-0.28	-1.00	4.18	-0.25	-0.94	TO
UWCCZA		4.84	0.28	1.02	4.72	0.29	1.10	TM
UXV8W4		4.34	-0.22	-0.78	4.43	0.00	0.01	WY
WBZ14K		4.35	-0.21	-0.75	4.04	-0.39	-1.49	TO
WNWZZW	X	1.32	-3.24	-11.68	1.17	-3.26	-12.36	CE
X5AJ1D		4.42	-0.14	-0.50	4.34	-0.09	-0.35	TM
XBMSWV		4.35	-0.21	-0.76	4.44	0.01	0.05	TM
XYHXL1		5.20	0.64	2.30	5.01	0.58	2.19	TM
Y5ANAF		4.91	0.35	1.25	4.72	0.29	1.12	TO
YVVLCN		4.44	-0.12	-0.42	4.36	-0.07	-0.26	TM
ZNR52F		4.18	-0.37	-1.35	4.15	-0.28	-1.07	TO
ZP4QUQ		4.42	-0.14	-0.52	4.32	-0.10	-0.40	TM
ZPCYEH		4.45	-0.11	-0.39	4.32	-0.11	-0.41	CE
ZQU7J4		4.26	-0.30	-1.08	4.19	-0.24	-0.91	CE

Summary Statistics	
Grand Means	4.559 ft.lbf/in
Std Dev Btwn Labs	0.277 ft.lbf/in
	4.429 ft.lbf/in
	0.264 ft.lbf/in
Statistics based on 75 of 86 reporting participants	

Sample S59: HIPS & Sample S60: HIPS

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

Comments on assigned Data Flags for Test #790

2ZT8L1 (X) - High data for all samples.

4Z3LYG (X) - Extreme data. Lab indicated reporting in J/m, but data appear to be in kg.cm/cm.

8UFQET (X) - High data for all samples.

9JGFKG (X) - High data for all samples.

AUXK67 (X) - High data for all samples.

G4C2TE (X) - Extreme data.

J64SEV (X) - Inconsistent in testing between samples, data for Sample S59 are high.

LMXT27 (X) - High data for all samples.

MJ2Y2Q (X) - High data for all samples.

RSNH6L (X) - Extreme data.

WNWZZW (X) - Low data for all samples.

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(TM) - TMI

(TY) - Toyoseiki

(WZ) - Zwick

(BA) - Baldwin

(CS) - CSI

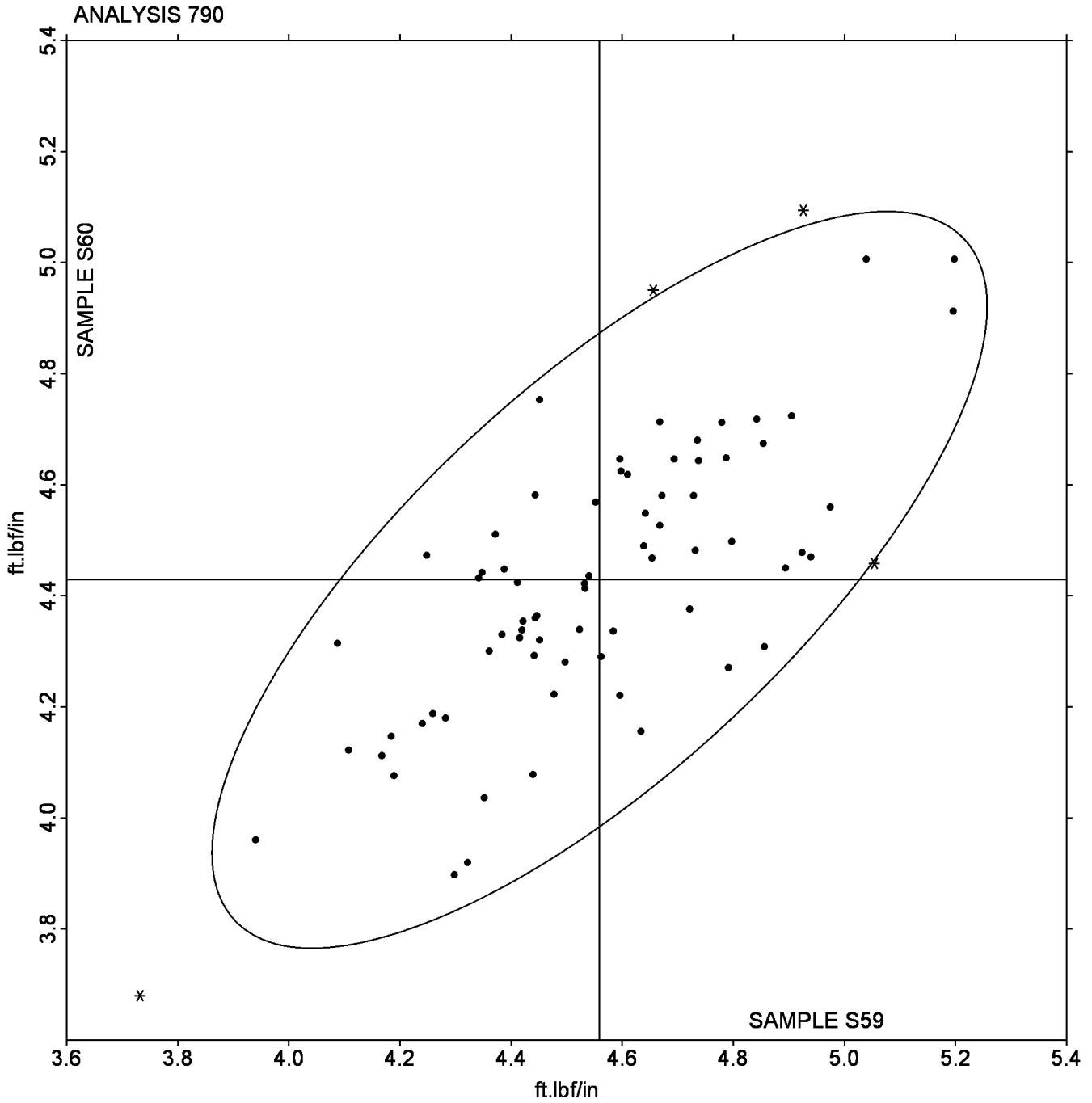
(TO) - Tinius Olsen

(WY) - Yasuda Seiki

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample S59: 4.5592 ft.lbf/in Grand Mean Sample S60: 4.4288 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

Plastics Interlaboratory Testing Program
Analysis 792

Notched Charpy Impact - kJ/m²

WebCode	Data Flag	Sample M59			Sample M60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1QV6QJ		22.20	-1.09	-0.69	29.36	-5.87	-2.12	TO
33ECWJ		23.48	0.19	0.12	35.92	0.69	0.25	TO
459B2N	*	18.54	-4.75	-3.01	27.35	-7.89	-2.84	TM
4NTE8U		23.34	0.05	0.03	35.83	0.60	0.22	TM
6DL7U6		25.24	1.95	1.23	39.20	3.97	1.43	CE
6QV2UX		22.96	-0.33	-0.21	34.94	-0.29	-0.10	TM
6S1FAB	X	80.55	57.26	36.27	78.42	43.19	15.58	XX
7ZV2V8		22.33	-0.96	-0.61	37.21	1.98	0.71	TM
83PW23		22.52	-0.77	-0.49	35.78	0.55	0.20	TY
8JQTWT		25.19	1.90	1.20	38.87	3.64	1.31	TM
8X5NUH		23.79	0.49	0.31	35.92	0.69	0.25	TM
9WS29M		22.14	-1.15	-0.73	36.37	1.14	0.41	GR
AQMSEZ		23.38	0.09	0.05	36.66	1.43	0.52	TO
ASB6VW		22.98	-0.32	-0.20	35.99	0.76	0.27	XX
CGVBD9		23.51	0.22	0.14	35.98	0.75	0.27	TO
E7USKR		20.19	-3.11	-1.97	28.53	-6.70	-2.42	CE
FZQB9J		24.80	1.51	0.96	34.73	-0.50	-0.18	PO
G5BLWM		24.44	1.15	0.73	37.03	1.80	0.65	XX
GQKSH1	X	158.56	135.27	85.69	232.53	197.29	71.16	XX
GZKF2X		23.81	0.52	0.33	37.46	2.23	0.80	CE
HE2TNA		23.46	0.17	0.10	38.89	3.66	1.32	XX
JHBXPR		23.57	0.28	0.18	35.45	0.22	0.08	KF
K916MZ		23.75	0.46	0.29	34.33	-0.90	-0.32	TM
KCHAE4		25.22	1.93	1.22	34.77	-0.46	-0.17	TM
N6VXA6		20.50	-2.79	-1.77	30.46	-4.77	-1.72	XX
PG45GR		23.27	-0.03	-0.02	36.86	1.62	0.59	CE
PPXXED		22.82	-0.47	-0.30	35.22	-0.01	0.00	WZ
R9MBLL		23.03	-0.26	-0.17	36.86	1.63	0.59	CE
RKVLKQ		24.29	1.00	0.63	35.54	0.31	0.11	CE
S7SJX1		23.25	-0.04	-0.03	32.38	-2.85	-1.03	TO
SQQ7GP		23.23	-0.06	-0.04	35.90	0.66	0.24	TO
SRE857		21.78	-1.52	-0.96	34.28	-0.95	-0.34	TO

**Plastics Interlaboratory Testing Program
Analysis 792**

Notched Charpy Impact - kJ/m²

WebCode	Data Flag	Sample M59			Sample M60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
T1D81X		22.29	-1.00	-0.63	37.20	1.97	0.71	CE
VP6EDA		22.98	-0.31	-0.20	32.24	-3.00	-1.08	SA
XARKP6		24.31	1.01	0.64	36.48	1.25	0.45	TM
YQJWF7		25.71	2.42	1.53	37.62	2.39	0.86	TM
Z9UUSG	*	26.94	3.65	2.31	35.48	0.25	0.09	BA

Summary Statistics

Grand Means

23.292 kJ/m²

35.231 kJ/m²

Std Dev Btwn Labs

1.579 kJ/m²

2.772 kJ/m²

Statistics based on 35 of 37 reporting participants

Sample M59: ABS & **Sample M60:** ABS

Comments on assigned Data Flags for Test #792

6S1FAB (X) - High data for all samples.

GQKSH1 (X) - Extreme data.

Instrument Code List as Reported by the Labs

(BA) - Baldwin

(CE) - Ceast

(GR) - GRC

(KF) - Karl Frank GmbH

(PO) - POE

(SA) - Satec

(TM) - TMI

(TO) - Tinius Olsen

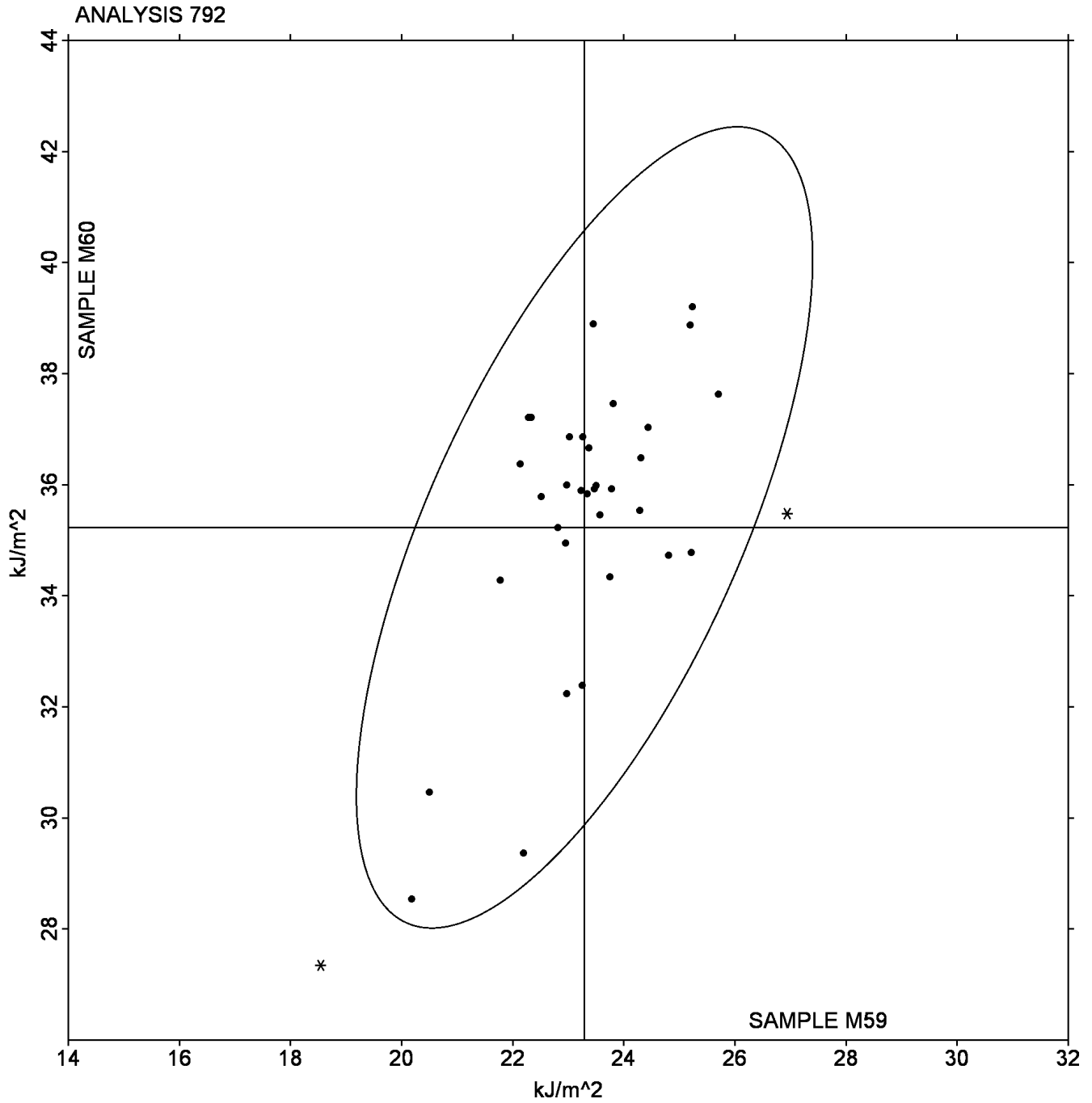
(TY) - Toyoseiki

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 792
Notched Charpy Impact - kJ/m^2

Grand Mean Sample M59: 23.292 kJ/m^2 Grand Mean Sample M60: 35.231 kJ/m^2



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 E59			Sample E60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3B8Y59		78.73	-0.66	-0.79	78.48	-0.92	-1.29	RO
43QPXL		79.53	0.14	0.17	79.35	-0.05	-0.07	XX
49VDJZ	X	81.45	2.06	2.45	79.23	-0.17	-0.24	DN
5YU2ZR		81.05	1.66	1.98	80.58	1.18	1.64	CE
6W3UCD		79.63	0.24	0.28	79.98	0.58	0.80	CE
74C7PW	X	64.65	-14.74	-17.51	62.93	-16.47	-22.95	RR
74TC1F		79.13	-0.26	-0.31	79.05	-0.35	-0.49	TO
7KXZ5N	*	81.05	1.66	1.98	81.43	2.03	2.82	TO
96JKNV	X	89.25	9.86	11.72	89.33	9.93	13.83	AT
9BHUEA		79.13	-0.26	-0.31	79.43	0.03	0.04	XX
A6MCP2		78.88	-0.51	-0.61	79.15	-0.25	-0.35	TO
DWDL6B		79.83	0.44	0.52	80.00	0.60	0.84	AT
E6767V		79.30	-0.09	-0.10	79.68	0.28	0.38	WY
FDP8D3		80.63	1.24	1.47	80.03	0.63	0.87	AT
JATV3M		80.05	0.66	0.79	79.93	0.53	0.73	XX
JKZH7F		78.53	-0.86	-1.02	78.50	-0.90	-1.25	CE
KTWPMT		79.60	0.21	0.25	79.53	0.13	0.17	AT
KU4UEW		78.23	-1.16	-1.38	79.23	-0.17	-0.24	CE
L6CGTS		78.00	-1.39	-1.65	79.00	-0.40	-0.56	DN
L8YPXF		79.48	0.09	0.11	79.30	-0.10	-0.14	TO
LA8SSS		79.78	0.39	0.46	80.58	1.18	1.64	AT
MGLRCB		77.75	-1.64	-1.94	78.75	-0.65	-0.90	TO
NCVWS3		78.65	-0.74	-0.87	78.85	-0.55	-0.77	TO
NG87QJ		79.93	0.54	0.64	79.70	0.30	0.42	XX
NV31HD		78.18	-1.21	-1.44	78.45	-0.95	-1.32	TO
P3LJXX		80.83	1.44	1.71	80.90	1.50	2.09	EM
P8ECD7		78.55	-0.84	-0.99	78.63	-0.77	-1.08	CE
PGVETT		79.70	0.31	0.37	78.85	-0.55	-0.77	TO
PRBPY1	X	77.58	-1.81	-2.15	76.55	-2.85	-3.97	TO
PV5C6E		78.85	-0.54	-0.64	78.73	-0.67	-0.94	CE
RCE5U1		79.70	0.31	0.37	79.98	0.58	0.80	EM
RH8XAA		79.30	-0.09	-0.10	79.25	-0.15	-0.21	TO

**Plastics Interlaboratory Testing Program
Analysis 710**

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

WebCode	Data Flag	Sample E59			Sample E60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
RUQ1U8		78.60	-0.79	-0.93	78.43	-0.97	-1.36	TO
SJK3DR		80.08	0.69	0.82	79.58	0.18	0.24	CE
TK5AYM		79.53	0.14	0.17	79.73	0.33	0.45	AT
TLKSZ6		79.55	0.16	0.19	79.28	-0.12	-0.17	AT
UJBD9X		78.40	-0.99	-1.17	78.50	-0.90	-1.25	CE
UM8CHW		80.75	1.36	1.62	79.75	0.35	0.49	XA
WE2U4A		79.63	0.24	0.28	79.23	-0.17	-0.24	TY
WHECRC		79.63	0.24	0.28	79.80	0.40	0.56	DN
WJXRN9		78.75	-0.64	-0.76	78.55	-0.85	-1.18	XX
YC8QHG		78.83	-0.56	-0.67	79.05	-0.35	-0.49	XX
YRWG8G		78.85	-0.54	-0.64	79.08	-0.32	-0.45	XX
ZHX5LZ		79.48	0.09	0.11	78.78	-0.62	-0.87	XX
ZQ3924		80.85	1.46	1.74	80.40	1.00	1.39	XA

Summary Statistics

Grand Means

79.386 Degrees C

79.399 Degrees C

Std Dev Btwn Labs

0.841 Degrees C

0.718 Degrees C

Statistics based on 41 of 45 reporting participants

Sample E59: HIPS & Sample E60: HIPS

Comments on assigned Data Flags for Test #710

49VDJZ (X) - Inconsistent in testing between samples.

74C7PW (X) - Low data for all samples.

96JKNV (X) - High data for all samples.

PRBPY1 (X) - Inconsistent in testing between samples, data for Sample E60 are low.

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(DN) - DYNISCO

(EM) - Empire-Vortex

(RO) - Rosand

(RR) - Ray-Ran

(TO) - Tinius Olsen

(TY) - Toyoseiki

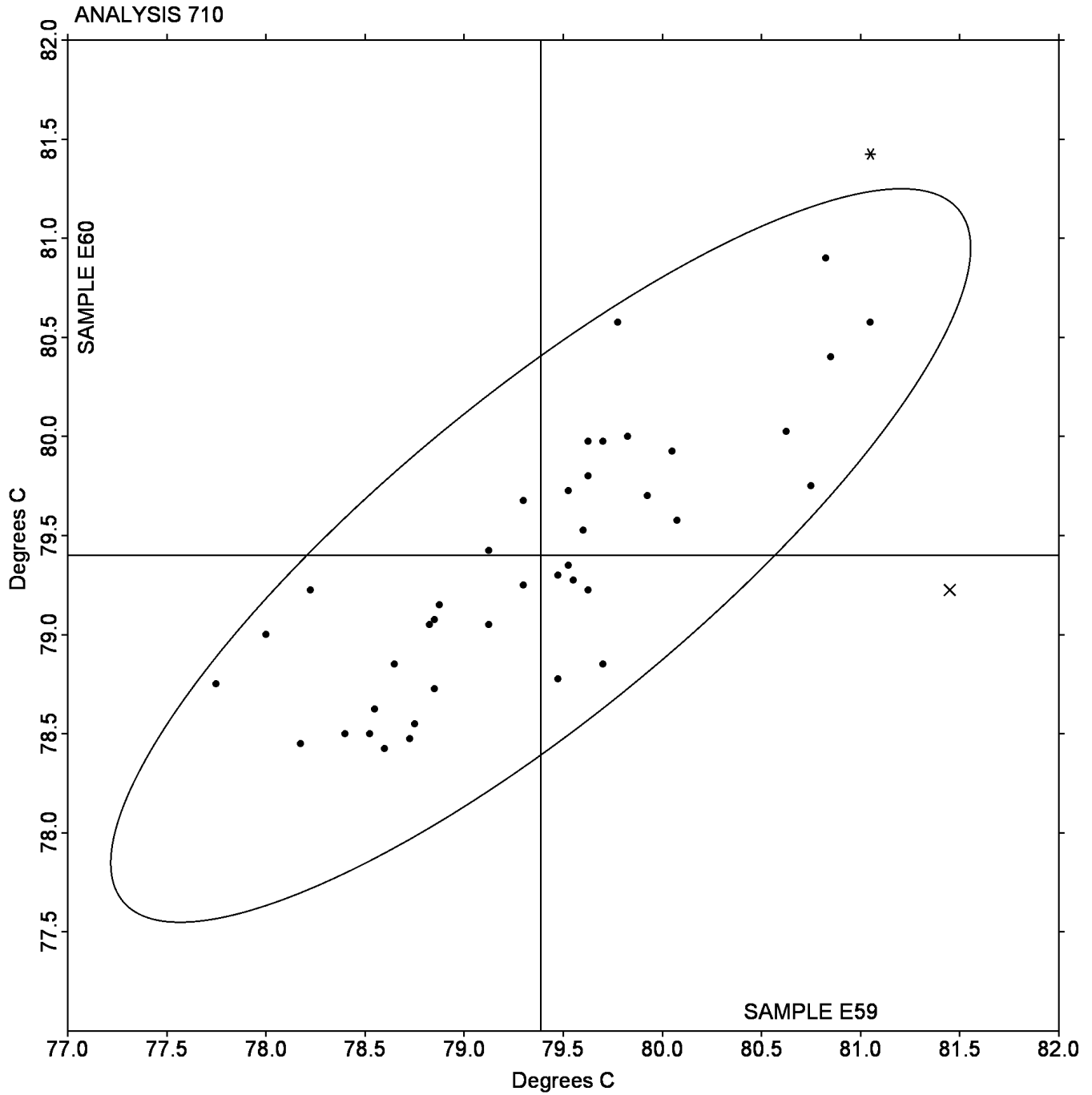
(WY) - Yasuda Seiki

(XA) - Special In-House Instrument

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample E59: 79.386 Degrees C Grand Mean Sample E60: 79.399 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 G59			Sample G60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1E96R2		85.9	0.2	0.08	117.3	1.8	0.95	TO
3TJZB5	*	90.6	4.9	2.08	114.8	-0.7	-0.35	EM
5CBBXU		81.9	-3.8	-1.62	114.5	-0.9	-0.49	TO
6JNYQB		82.9	-2.8	-1.18	113.6	-1.9	-1.00	TO
7HQP9K		86.7	1.0	0.43	118.2	2.8	1.47	EM
7J7H9U		85.8	0.1	0.06	117.9	2.4	1.27	TO
9B492S		84.1	-1.5	-0.65	114.2	-1.3	-0.68	TO
BC6X5M		90.5	4.8	2.05	116.2	0.7	0.37	XX
CC58T3		86.0	0.4	0.15	113.8	-1.6	-0.86	CE
CQVQCE		87.1	1.4	0.59	118.5	3.1	1.61	XX
DH3S4S		87.0	1.3	0.56	115.5	0.0	0.02	XX
DPWATA		85.0	-0.7	-0.29	116.3	0.9	0.45	AT
EMQ9BA		82.8	-2.9	-1.23	112.7	-2.7	-1.44	TO
EN1GNW		88.3	2.7	1.13	118.8	3.4	1.78	EM
EUWA9Q		87.3	1.6	0.70	116.0	0.6	0.31	XX
LL98JH	X	48.4	-37.3	-15.87	52.9	-62.6	-32.97	RR
P6NH8Q	X	92.0	6.3	2.68	107.5	-8.0	-4.20	TO
SZ2DGR		86.7	1.0	0.43	115.3	-0.2	-0.10	XX
U2SULL		84.2	-1.5	-0.64	114.6	-0.9	-0.47	CE
UQKPBQ		85.4	-0.3	-0.13	116.2	0.7	0.37	CE
WE3SE6		84.1	-1.6	-0.68	114.3	-1.1	-0.60	TO
YTPPW6		83.1	-2.6	-1.11	112.3	-3.2	-1.68	AT
ZKZAWY		84.0	-1.7	-0.71	113.7	-1.8	-0.94	CE

Summary Statistics			
Grand Means	85.66	Degrees C	115.44
			Degrees C
Std Dev Btwn Labs	2.35	Degrees C	1.90
			Degrees C
Statistics based on 21 of 23 reporting participants			

Sample G59: PP & Sample G60: PP

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

Comments on assigned Data Flags for Test #711

LL98JH (X) - Low data for all samples.

P6NH8Q (X) - Inconsistent in testing between samples. High data for Sample G59 and Low data for Sample G60.

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(EM) - Empire-Vortex

(RR) - Ray-Ran

(TO) - Tinius Olsen

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 712

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

WebCode	Data Flag	Sample N59			Sample N60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
4DTVXE		79.13	-0.30	-0.34	79.05	-0.14	-0.11	CE
4SG38E		78.50	-0.93	-1.04	77.95	-1.24	-1.00	RO
5QYESR		78.93	-0.50	-0.57	79.38	0.18	0.15	XX
5UEMBK		80.55	1.12	1.26	80.18	0.98	0.79	XX
6VQ7TD		78.75	-0.68	-0.76	79.53	0.33	0.27	CE
8WMBNR		78.00	-1.43	-1.61	77.13	-2.07	-1.66	AT
949TGZ		78.63	-0.80	-0.90	78.20	-0.99	-0.80	CE
94ZVYX		79.63	0.20	0.22	79.23	0.03	0.03	TY
9DSPHF		79.95	0.52	0.59	80.15	0.96	0.77	XX
CQ92XF		78.48	-0.95	-1.07	79.23	0.03	0.03	XX
CTBEZS		78.00	-1.43	-1.61	77.30	-1.89	-1.52	XX
D4SLBM		79.23	-0.20	-0.23	78.33	-0.87	-0.70	AT
DLV9RS		79.78	0.35	0.39	78.08	-1.12	-0.90	CE
DLXYXA		79.63	0.20	0.22	81.65	2.46	1.98	AT
DM6565		80.08	0.65	0.73	79.18	-0.02	-0.01	AT
DWM68S		80.38	0.95	1.06	80.08	0.88	0.71	CE
EPT4X8		78.33	-1.10	-1.24	78.45	-0.74	-0.60	TO
GV1JAL		80.35	0.92	1.04	79.45	0.26	0.21	CE
KAC8PJ		78.28	-1.15	-1.30	77.80	-1.39	-1.12	DN
NW7JDA	*	80.05	0.62	0.70	76.83	-2.37	-1.90	CE
PES1G2		79.83	0.40	0.45	79.43	0.23	0.19	XX
Q9B44B		78.33	-1.10	-1.24	78.20	-0.99	-0.80	AT
QQ42LU		80.55	1.12	1.26	81.28	2.08	1.68	EM
RL1VBF		80.13	0.70	0.78	79.68	0.48	0.39	EM
S6SE76		79.05	-0.38	-0.43	79.58	0.38	0.31	AT
T9U3R7		79.13	-0.30	-0.34	77.75	-1.44	-1.16	CS
U5D6CG		81.23	1.80	2.02	80.25	1.06	0.85	AT
UYTHQL		77.78	-1.65	-1.86	79.03	-0.17	-0.13	CE
V7GCD8		80.58	1.15	1.29	79.80	0.61	0.49	AT
VY28W3	*	80.25	0.82	0.92	82.48	3.28	2.64	XX
XBK2QC		80.33	0.90	1.01	79.85	0.66	0.53	EM
XYSQU3		79.03	-0.40	-0.45	78.70	-0.49	-0.40	TO

**Plastics Interlaboratory Testing Program
Analysis 712**

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

WebCode	Data Flag	Sample N59			Sample N60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
Y3JPUW		80.00	0.57	0.64	80.55	1.36	1.09	XX
YNF8NG		79.45	0.02	0.02	78.55	-0.64	-0.52	AT
Z3RFVY		79.78	0.35	0.39	79.48	0.28	0.23	TO

Summary Statistics

Grand Means

79.429 Degrees C

79.191 Degrees C

Std Dev Btwn Labs

0.889 Degrees C

1.243 Degrees C

Statistics based on 35 of 35 reporting participants

Sample N59: ABS & Sample N60: ABS

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(CS) - CSI

(DN) - DYNISCO

(EM) - Empire-Vortex

(RO) - Rosand

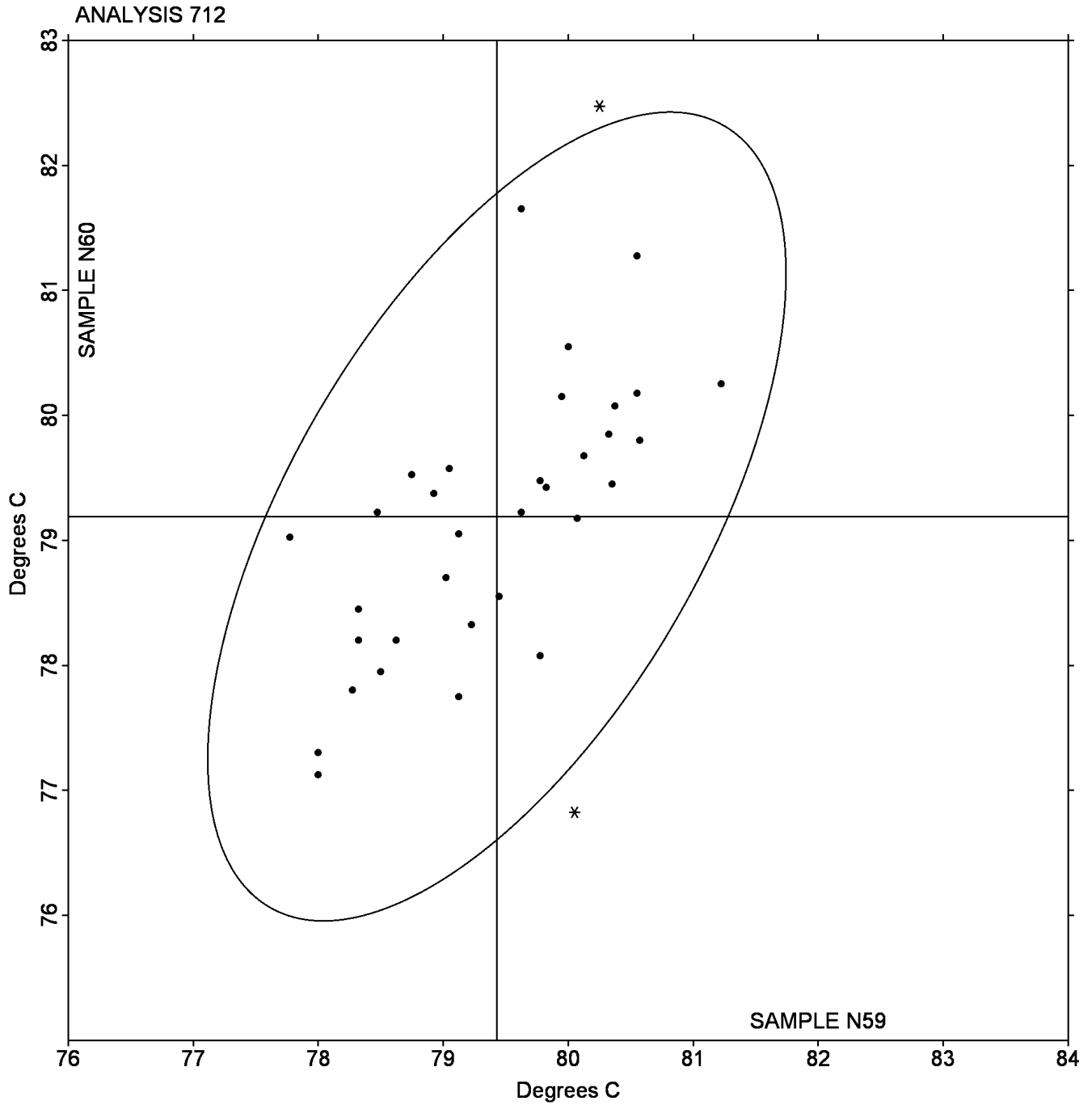
(TO) - Tinius Olsen

(TY) - Toyoseiki

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample N59: 79.429 Degrees C Grand Mean Sample N60: 79.191 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 H59			Sample H60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1KYRUG		100.87	0.28	0.30	100.90	0.30	0.27	AT
1LFKVR		100.57	-0.02	-0.02	100.33	-0.27	-0.25	EM
1S6KDY		100.05	-0.54	-0.56	100.17	-0.44	-0.40	CS
2N5NJX		100.13	-0.45	-0.48	100.37	-0.24	-0.22	TO
32Y82S		102.02	1.43	1.51	102.37	1.76	1.60	CE
3KFA11	*	103.38	2.80	2.95	103.55	2.95	2.68	RR
3LAB4P		99.52	-1.07	-1.13	99.05	-1.55	-1.41	TO
3S85QC	*	101.20	0.61	0.65	102.32	1.71	1.56	CS
7UULP8		99.58	-1.00	-1.06	99.57	-1.04	-0.94	TO
8M1JQW		99.88	-0.70	-0.74	99.92	-0.69	-0.63	CE
BYTU9Y		101.40	0.81	0.86	101.42	0.81	0.74	EM
F162H8	X	101.58	1.00	1.05	100.02	-0.59	-0.53	TO
JCLMET		100.33	-0.25	-0.27	100.83	0.23	0.21	CE
LFWLFC		99.50	-1.09	-1.14	99.45	-1.15	-1.05	XX
LJEZ7M		102.22	1.63	1.72	102.12	1.51	1.38	EM
LLCDZX		99.75	-0.84	-0.88	99.47	-1.14	-1.03	RO
NM8BY9		100.70	0.11	0.12	100.70	0.10	0.09	AT
NWM5NC		101.50	0.91	0.96	101.23	0.63	0.57	CE
PBESF3		99.58	-1.00	-1.06	99.53	-1.07	-0.97	CE
PMW9AU		99.93	-0.65	-0.69	99.35	-1.25	-1.14	CE
QFTHNJ		99.92	-0.67	-0.70	99.88	-0.72	-0.66	DN
QKL67Q		99.47	-1.12	-1.18	99.45	-1.15	-1.05	CE
R9N4JT		100.65	0.06	0.07	100.65	0.05	0.04	CE
SLQM67		100.08	-0.50	-0.53	99.97	-0.64	-0.58	AT
SP52TD		101.42	0.83	0.88	101.35	0.75	0.68	XX
T88FDB		100.95	0.36	0.38	100.57	-0.03	-0.03	XX
TKJF1B		100.23	-0.35	-0.37	100.30	-0.30	-0.28	TY
UL2EG6		100.37	-0.22	-0.23	100.20	-0.40	-0.37	RO
WLTRXC		101.20	0.61	0.65	101.92	1.31	1.19	XX

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

Summary Statistics	
Grand Means	
100.586 Degrees C	100.604 Degrees C
Stnd Dev Btwn Labs	
0.949 Degrees C	1.099 Degrees C
Statistics based on 28 of 29 reporting participants	

Sample H59: HIPS & **Sample H60:** HIPS

Comments on assigned Data Flags for Test #715

F162H8 (X) - Inconsistent in testing between samples.

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CS) - CSI

(EM) - Empire-Vortex

(RR) - Ray-Ran

(TY) - Toyoseiki

(CE) - Ceast

(DN) - DYNISCO

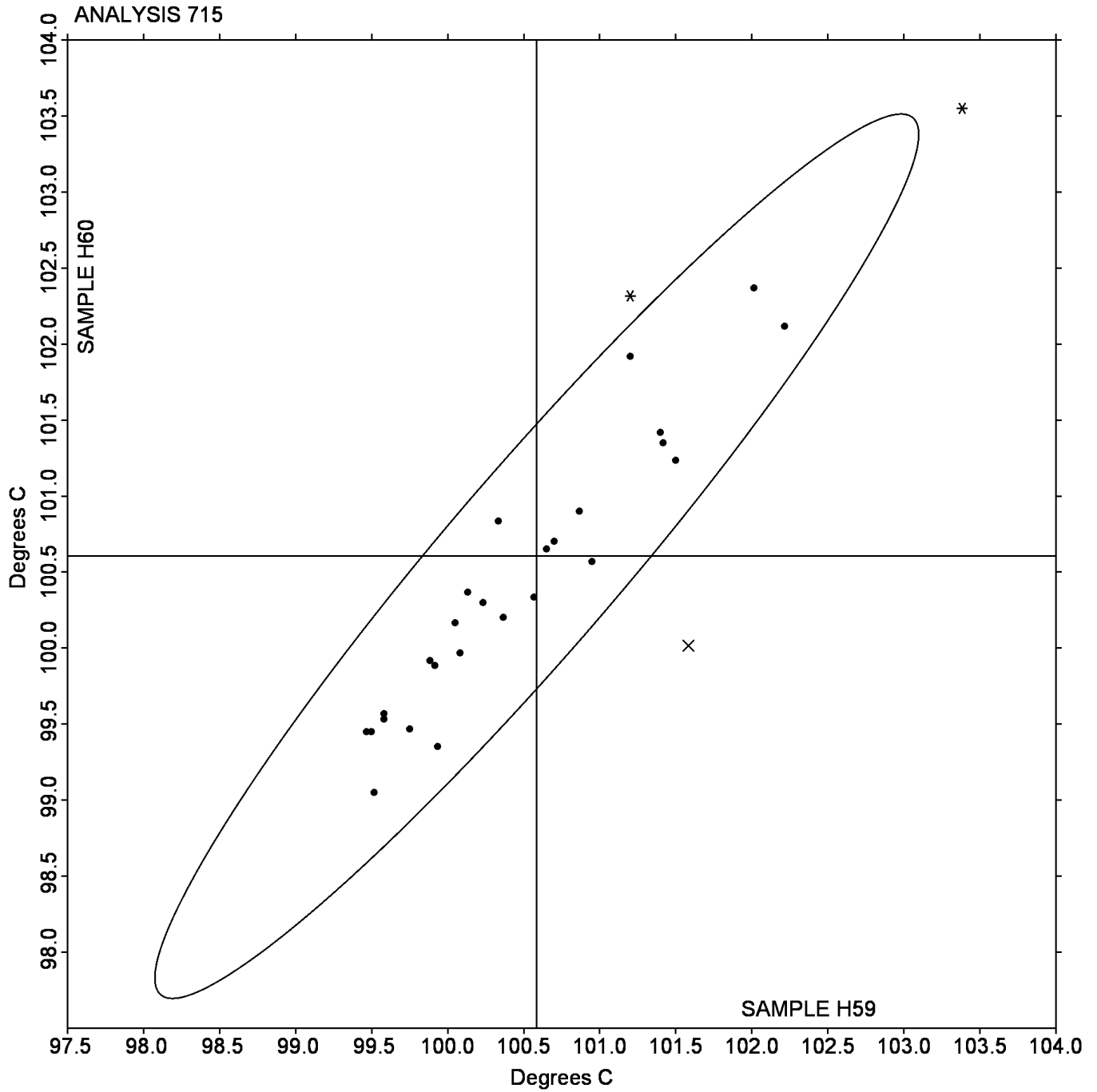
(RO) - Rosand

(TO) - Tinius Olsen

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample H59: 100.59 Degrees C Grand Mean Sample H60: 100.60 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 R59			Sample R60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2QFH5P		101.43	-1.42	-1.36	100.92	-1.98	-1.57	TO
2WT213		104.90	2.05	1.97	105.02	2.12	1.68	XX
34WV3G		103.02	0.16	0.16	103.00	0.10	0.08	CE
4TH1UM		103.13	0.28	0.27	103.17	0.27	0.21	EM
4WRJH4		102.35	-0.50	-0.48	102.13	-0.76	-0.61	DN
9CJJ36		101.18	-1.67	-1.60	101.25	-1.65	-1.31	TO
A15DFN		101.72	-1.14	-1.09	102.32	-0.58	-0.46	TO
AS9FPD	X	103.23	0.38	0.37	101.40	-1.50	-1.19	TO
B23R5T		102.87	0.01	0.01	102.57	-0.33	-0.26	XX
B48WM3	X	107.43	4.58	4.40	104.72	1.82	1.45	XX
E2EF8H		103.47	0.61	0.59	103.38	0.49	0.39	AT
F7ZDWR		104.43	1.58	1.52	105.17	2.27	1.80	EM
HP5BWS		104.32	1.46	1.41	104.40	1.50	1.19	EM
JHDT4G		104.45	1.60	1.53	104.58	1.69	1.34	CE
JQW3BQ	*	103.45	0.60	0.57	104.60	1.70	1.35	CE
JVPR4V		103.25	0.40	0.38	103.38	0.49	0.39	XX
LQPN7N	X	112.50	9.65	9.27	110.90	8.00	6.36	XX
MV6K7V		102.57	-0.29	-0.27	102.65	-0.25	-0.20	AT
NP8P4V		101.85	-1.00	-0.96	101.28	-1.61	-1.28	XX
PD4TNB		102.42	-0.44	-0.42	102.15	-0.75	-0.59	RO
PYRLPT		101.48	-1.37	-1.31	101.35	-1.55	-1.23	XX
Q3W41L		103.00	0.15	0.14	103.50	0.60	0.48	CE
QKNEC9		102.55	-0.30	-0.29	102.28	-0.61	-0.49	CS
SUF313		104.17	1.31	1.26	104.47	1.57	1.25	TO
T3HUT4		101.75	-1.10	-1.06	101.48	-1.41	-1.12	XX
UB8DEB		102.92	0.06	0.06	102.87	-0.03	-0.02	XX
X96MY7		101.82	-1.04	-0.99	101.75	-1.15	-0.91	CE
Z5QC2Z		102.82	-0.04	-0.03	102.78	-0.11	-0.09	AT

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

Summary Statistics				
Grand Means	102.852	Degrees C	102.898	Degrees C
Stnd Dev Btwn Labs	1.041	Degrees C	1.259	Degrees C
Statistics based on 25 of 28 reporting participants				

Sample R59: HIPS & Sample R60: HIPS

Comments on assigned Data Flags for Test #716

AS9FPD (X) - Inconsistent in testing between samples.

B48WM3 (X) - Inconsistent in testing between samples, data for Sample R59 are high.

LQPN7N (X) - High data for all samples. Lab only tested one replicate per sample set due to instrument problems.

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(CS) - CSI

(DN) - DYNISCO

(EM) - Empire-Vortex

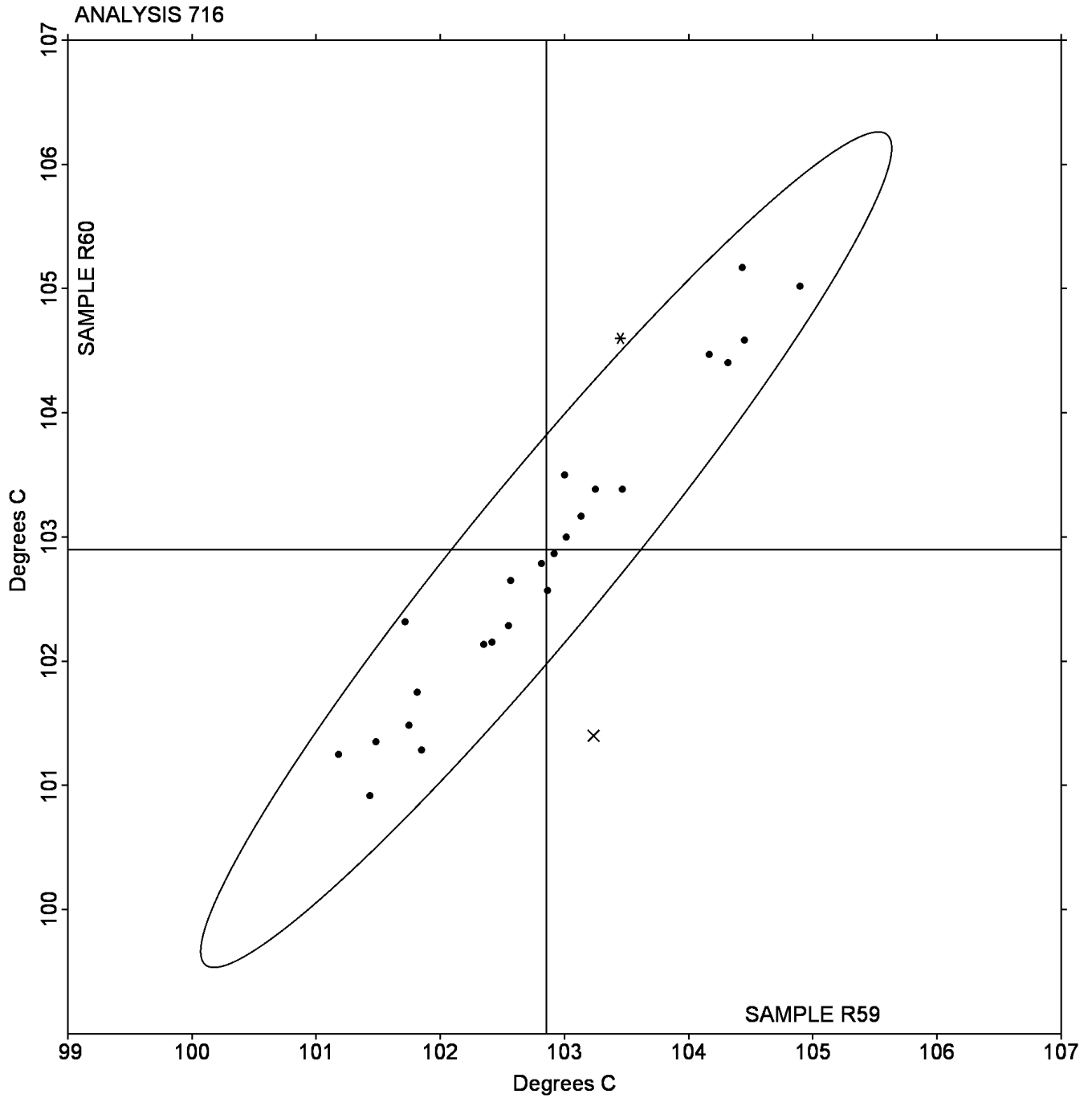
(RO) - Rosand

(TO) - Tinius Olsen

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample R59: 102.85 Degrees C Grand Mean Sample R60: 102.90 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 750

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

WebCode	Data Flag	Sample X59			Sample X60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
12RVK4		9.45	0.15	0.50	12.70	0.14	0.33	TO
1FKC9R		9.35	0.05	0.17	12.50	-0.06	-0.14	XX
1HA6XZ		9.30	0.00	0.01	12.60	0.04	0.09	KA
21P27B		9.34	0.04	0.14	12.63	0.07	0.16	TO
2YMETS		9.40	0.10	0.33	12.71	0.14	0.34	QT
31NDFZ		9.10	-0.20	-0.66	12.25	-0.31	-0.73	XA
36DNQX		8.75	-0.55	-1.78	12.15	-0.41	-0.97	TO
39SADB		9.29	-0.01	-0.03	12.69	0.12	0.29	TO
3NDRZN		9.25	-0.05	-0.15	12.55	-0.01	-0.03	CE
4C4U9X	*	8.60	-0.69	-2.25	11.43	-1.13	-2.66	TO
4DT5Y4		9.53	0.23	0.76	12.88	0.32	0.75	TO
5GFPU8	*	8.95	-0.35	-1.13	13.00	0.44	1.04	DY
5RQ9FV	*	9.00	-0.30	-0.97	12.95	0.39	0.92	GO
5RR2E3		8.90	-0.40	-1.29	12.35	-0.21	-0.50	TO
5Y252A		9.10	-0.20	-0.64	12.30	-0.26	-0.62	TO
5Y9LKP		9.35	0.05	0.17	12.75	0.19	0.45	TO
69T33M		9.13	-0.17	-0.54	12.40	-0.16	-0.38	DY
6L9ABE		8.85	-0.45	-1.47	12.54	-0.02	-0.05	TO
6Y832J		9.45	0.15	0.50	12.40	-0.16	-0.38	TO
6Y8BLH		9.30	0.00	0.01	12.70	0.14	0.33	TO
729N5P		9.40	0.10	0.34	12.80	0.24	0.56	TO
77DCZW		9.40	0.10	0.34	12.77	0.20	0.48	DY
7DVBAW		9.70	0.40	1.31	13.55	0.99	2.33	XX
7EHLVA		9.35	0.05	0.17	12.75	0.19	0.45	XX
7R1V1G		9.06	-0.24	-0.77	12.06	-0.50	-1.18	KA
7X6MBZ		9.15	-0.15	-0.48	12.50	-0.06	-0.14	HA
8BZNFK		9.01	-0.29	-0.93	12.20	-0.36	-0.86	DY
9281TF		9.85	0.55	1.80	13.15	0.59	1.39	TO
9A2SC8		9.15	-0.15	-0.48	12.30	-0.26	-0.62	AT
9K2C9G		9.15	-0.15	-0.48	12.20	-0.36	-0.85	TO
A7N7MZ		9.20	-0.10	-0.31	12.55	-0.01	-0.03	TO
AD7GMW		9.00	-0.30	-0.97	12.45	-0.11	-0.26	TO

Plastics Interlaboratory Testing Program
Analysis 750

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

WebCode	Data Flag	Sample X59			Sample X60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
AMJFDM	*	9.55	0.25	0.83	13.50	0.93	2.20	TO
AWZKSB		10.00	0.70	2.29	13.30	0.74	1.74	TO
B93LBN		9.28	-0.02	-0.07	12.54	-0.03	-0.06	CS
BG2R3P		9.00	-0.30	-0.97	12.55	-0.01	-0.03	XX
BLMFZ8		9.90	0.60	1.97	13.45	0.89	2.10	TO
C9HS43		9.00	-0.30	-0.97	12.30	-0.26	-0.62	TO
CB9D16		9.50	0.20	0.66	12.92	0.36	0.85	KA
CMQPCX	*	8.60	-0.70	-2.28	11.35	-1.21	-2.86	WZ
CPWZBL		9.17	-0.13	-0.43	12.54	-0.03	-0.06	TO
CR4414	X	8.55	-0.75	-2.43	13.25	0.69	1.62	XX
D24N1F		9.35	0.05	0.17	12.50	-0.06	-0.14	TO
D76C92		9.50	0.20	0.66	12.20	-0.36	-0.85	CS
D7VCM8		9.50	0.20	0.66	12.90	0.34	0.80	TO
D868ZZ		9.50	0.20	0.66	12.85	0.29	0.68	GO
DXARDA		9.19	-0.11	-0.35	12.71	0.15	0.35	TO
E6SBV7		9.70	0.40	1.31	13.10	0.54	1.27	TO
EEWGDN		9.36	0.06	0.21	12.82	0.25	0.60	WZ
EL4YX9		9.45	0.15	0.50	12.80	0.24	0.56	TO
F64WYW		9.07	-0.23	-0.75	11.78	-0.79	-1.85	XX
FFBFF6		9.05	-0.25	-0.80	12.25	-0.31	-0.73	TO
FKZ841		9.29	-0.01	-0.02	12.49	-0.08	-0.18	TO
GKTDY1		9.75	0.45	1.48	12.90	0.34	0.80	TO
GTWXGU		8.71	-0.58	-1.90	12.28	-0.28	-0.66	TO
GZDN8A		9.35	0.05	0.17	12.45	-0.11	-0.26	TO
HRA8DU		9.75	0.46	1.49	12.69	0.13	0.31	KA
HV8ABN		9.46	0.17	0.54	12.79	0.23	0.54	DY
J5JR2M		9.50	0.20	0.66	12.80	0.24	0.56	TO
J97JNW		9.47	0.17	0.57	12.71	0.15	0.35	DY
JN64V6		9.05	-0.25	-0.80	12.15	-0.41	-0.97	HA
JZXQ73		9.19	-0.11	-0.35	11.86	-0.70	-1.65	KA
KDS6EV		9.00	-0.30	-0.97	12.10	-0.46	-1.09	KA
KUFTUC		9.60	0.30	0.99	12.85	0.29	0.68	TO

Plastics Interlaboratory Testing Program
Analysis 750

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

WebCode	Data Flag	Sample X59			Sample X60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
KWABA6		9.28	-0.02	-0.07	12.12	-0.45	-1.05	KA
L5DT4W		8.88	-0.41	-1.34	12.19	-0.37	-0.88	TO
L7SYUC		9.55	0.25	0.83	12.85	0.29	0.68	KA
LCFJZD		9.40	0.10	0.34	12.75	0.19	0.45	TO
LF1SAT		9.35	0.05	0.17	12.20	-0.36	-0.85	KA
LHPCTH		9.43	0.13	0.42	12.95	0.39	0.92	KA
LQ6SQM		9.40	0.10	0.34	12.60	0.04	0.09	TO
LRL9R7		9.19	-0.11	-0.35	12.34	-0.23	-0.53	TO
MC7B5Q		9.63	0.33	1.09	12.92	0.35	0.83	TO
NFVNTT		9.10	-0.20	-0.64	12.50	-0.07	-0.16	DY
NFVS4V		9.55	0.25	0.83	12.25	-0.31	-0.73	TO
PF5SB4		9.52	0.22	0.73	12.69	0.13	0.30	TO
PULGHT		9.50	0.20	0.66	12.60	0.04	0.09	TO
Q2NYUC		9.40	0.10	0.34	12.75	0.19	0.45	TO
Q3E8GZ		9.30	0.00	0.01	12.90	0.34	0.80	TO
QHXC51		9.51	0.21	0.70	12.85	0.29	0.68	XX
QKNVD8		9.25	-0.05	-0.15	12.80	0.24	0.56	TO
QMNCYG		9.65	0.35	1.15	12.95	0.39	0.92	TO
R5GHW9		8.75	-0.55	-1.78	12.35	-0.21	-0.50	GO
R8XUR5		9.50	0.20	0.66	12.35	-0.21	-0.50	TO
RA5K5U		9.70	0.40	1.31	12.90	0.34	0.80	TO
RMMK19		9.85	0.55	1.79	13.22	0.65	1.54	CS
SDC7JA		9.80	0.50	1.64	13.35	0.79	1.86	TO
SEFY66		9.00	-0.30	-0.97	11.95	-0.61	-1.44	TM
T1SVCK		9.15	-0.15	-0.48	12.56	-0.01	-0.01	WZ
T8Y3E8		8.99	-0.30	-0.99	12.37	-0.19	-0.45	CE
U1T33J		9.15	-0.15	-0.48	12.50	-0.06	-0.14	TO
U7XQ76		9.60	0.30	0.99	12.40	-0.16	-0.38	TY
UDDY7H		9.15	-0.15	-0.48	12.45	-0.11	-0.26	CE
UUNBS1		9.06	-0.23	-0.76	12.35	-0.21	-0.50	DY
UZUGBT		8.95	-0.35	-1.13	11.70	-0.86	-2.03	TO

**Plastics Interlaboratory Testing Program
Analysis 750**

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

WebCode	Data Flag	Sample X59			Sample X60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
V87M3F		9.28	-0.02	-0.05	12.91	0.35	0.82	TO
VBE5GY		9.13	-0.17	-0.56	12.53	-0.03	-0.07	TO
VJBHJZ		9.30	0.00	0.01	12.80	0.24	0.56	TO
VJGE3J	*	8.35	-0.95	-3.08	11.50	-1.06	-2.50	XX
VSWBBG		9.47	0.17	0.55	12.67	0.10	0.25	KA
VTQWPN		9.00	-0.30	-0.97	11.85	-0.71	-1.68	TO
W91L3Z		9.45	0.15	0.50	12.45	-0.11	-0.26	TO
WL48L5		9.44	0.14	0.47	12.64	0.08	0.18	TO
WT46AE		8.75	-0.55	-1.78	11.70	-0.86	-2.03	TO
WU647A		9.40	0.10	0.34	12.20	-0.36	-0.85	TO
X9QYPK		9.62	0.32	1.05	12.86	0.30	0.70	TO
XMEREF	*	9.44	0.14	0.45	11.87	-0.69	-1.63	TO
Y9EM6D	*	10.05	0.75	2.45	13.65	1.09	2.57	TO
ZDJEDJ		9.64	0.35	1.13	13.15	0.59	1.39	KA
ZF5TPT	*	8.80	-0.50	-1.62	12.60	0.04	0.09	TO
ZMK71R		9.30	0.00	0.01	12.50	-0.06	-0.14	XX
ZVB249		9.38	0.08	0.26	12.62	0.05	0.13	KA

Summary Statistics			
Grand Means	9.296	grams/10 mins	12.561
			grams/10 mins
Std Dev Btwn Labs	0.307	grams/10 mins	0.424
			grams/10 mins
Statistics based on 111 of 112 reporting participants			

Sample X59: PE & Sample X60: PE

CR4414 (X) - Inconsistent in testing between samples.

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

Instrument Code List as Reported by the Labs

(AT) - Atlas

(CS) - CSI

(GO) - Gottfert

(KA) - Kayeness

(TM) - TMI

(TY) - Toyoseiki Seisakusho

(XA) - Special In-House Instrument

(CE) - Ceast

(DY) - Dynisco

(HA) - Haake

(QT) - Qualitest

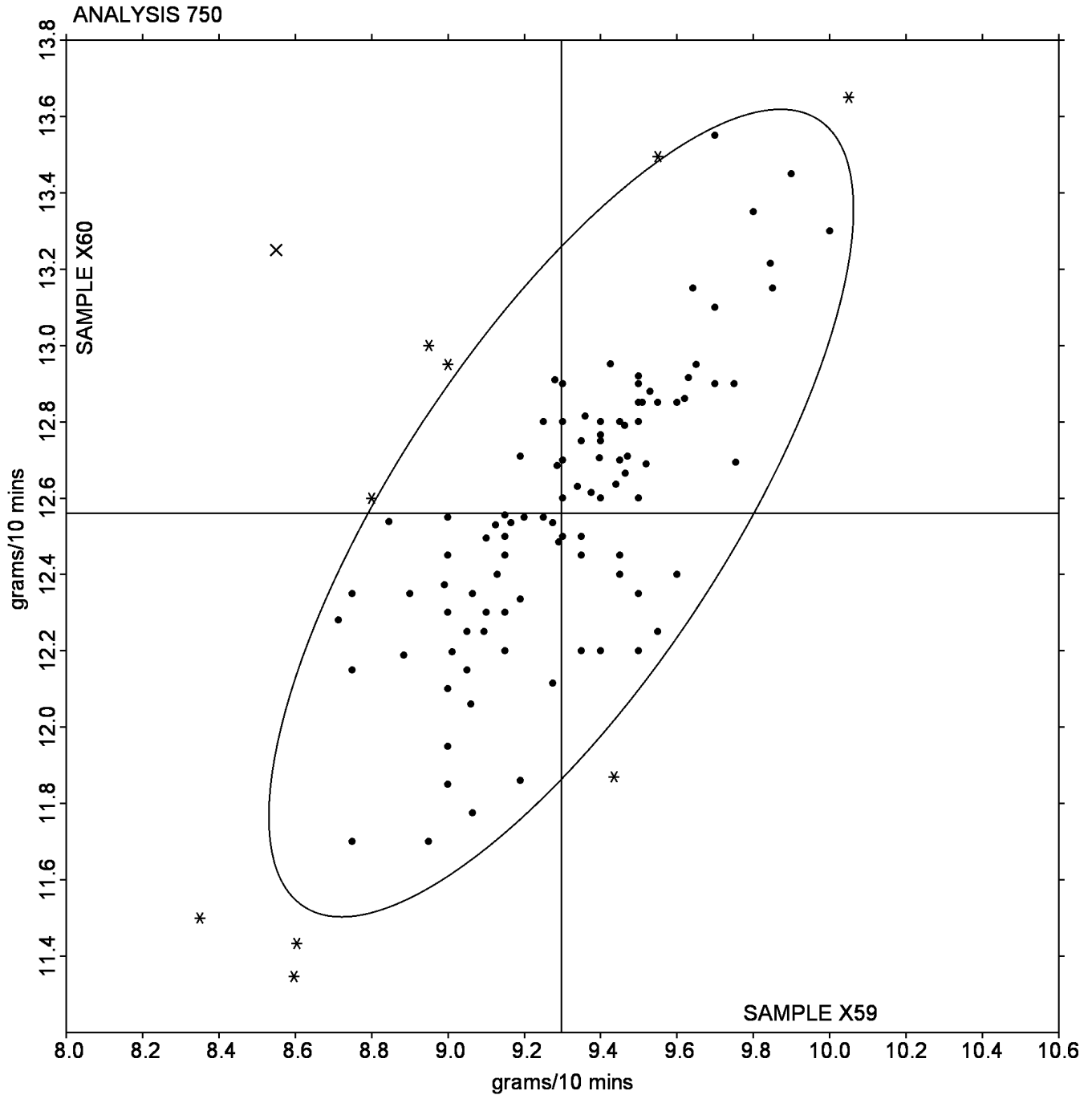
(TO) - Tinius Olsen

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample X59: 9.2964 grams/10 mins Grand Mean Sample X60: 12.561 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 T59			Sample T60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1JTCV9		1.04380	0.00094	0.47	1.04503	0.00134	0.61	XX
1QXVW2		1.04363	0.00077	0.39	1.04320	-0.00049	-0.22	XX
1RDZWD		1.04097	-0.00189	-0.95	1.04137	-0.00232	-1.06	XX
1WP243	*	1.04107	-0.00179	-0.90	1.03877	-0.00492	-2.24	XX
2F1VPH		1.04440	0.00154	0.77	1.04640	0.00271	1.24	XX
2MPNZ8		1.04427	0.00141	0.70	1.04450	0.00081	0.37	XX
2PEAGW		1.03930	-0.00356	-1.78	1.03910	-0.00459	-2.09	XX
2SUR53		1.03950	-0.00336	-1.68	1.04050	-0.00319	-1.45	XX
2VLDP		1.04077	-0.00209	-1.05	1.04237	-0.00132	-0.60	XX
3J8B5C	*	1.04003	-0.00283	-1.41	1.04383	0.00014	0.07	XX
3TKSAC		1.04090	-0.00196	-0.98	1.04237	-0.00132	-0.60	XX
562S6A		1.04540	0.00254	1.27	1.04477	0.00108	0.49	XX
58SLW6		1.03943	-0.00343	-1.71	1.03937	-0.00432	-1.97	XX
5S9M4D		1.04390	0.00104	0.52	1.04530	0.00161	0.73	XX
5UTPSM		1.04177	-0.00109	-0.55	1.04273	-0.00096	-0.44	XX
5Y6X6R		1.04157	-0.00129	-0.65	1.04210	-0.00159	-0.72	XX
5YA7KA	*	1.04697	0.00411	2.05	1.04547	0.00178	0.81	XX
6GHYH4		1.04467	0.00181	0.90	1.04533	0.00164	0.75	XX
6NC4WD		1.04527	0.00241	1.20	1.04543	0.00174	0.79	XX
73TLGE	*	1.03793	-0.00493	-2.46	1.03977	-0.00392	-1.79	XX
7AAB8V		1.04360	0.00074	0.37	1.04393	0.00024	0.11	XX
7M54XR		1.04450	0.00164	0.82	1.04473	0.00104	0.48	XX
7MAV9L		1.04317	0.00031	0.15	1.04417	0.00048	0.22	XX
7W75WA	X	1.03533	-0.00753	-3.76	1.04063	-0.00306	-1.39	XX
7ZHTZ7		1.04433	0.00147	0.74	1.04543	0.00174	0.79	XX
8KXADB		1.03940	-0.00346	-1.73	1.04117	-0.00252	-1.15	XX
8PYS74		1.04447	0.00161	0.80	1.04557	0.00188	0.86	XX
8WEC8V		1.04130	-0.00156	-0.78	1.04447	0.00078	0.35	XX
8XSUJN		1.04383	0.00097	0.49	1.04493	0.00124	0.57	XX
8YBGMQ		1.04323	0.00037	0.19	1.04440	0.00071	0.32	XX
8ZTL5P		1.04350	0.00064	0.32	1.04570	0.00201	0.92	XX
93T7FS		1.04583	0.00297	1.49	1.04603	0.00234	1.07	XX

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

WebCode	Data Flag	Sample T59			Sample T60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
9UDEYF		1.04053	-0.00233	-1.16	1.04100	-0.00269	-1.23	XX
A2HFBG		1.04460	0.00174	0.87	1.04577	0.00208	0.95	XX
A4ULAA		1.04133	-0.00153	-0.76	1.04100	-0.00269	-1.23	XX
ANU118		1.03833	-0.00453	-2.26	1.03967	-0.00402	-1.83	XX
AQ2VNE		1.04067	-0.00219	-1.10	1.04233	-0.00136	-0.62	XX
B1E6M4		1.04090	-0.00196	-0.98	1.04327	-0.00042	-0.19	XX
B25GBB		1.04450	0.00164	0.82	1.04560	0.00191	0.87	XX
BGR9DW		1.04500	0.00214	1.07	1.04500	0.00131	0.60	XX
BQKHYM		1.04247	-0.00039	-0.20	1.04357	-0.00012	-0.06	XX
BUDVPC		1.04020	-0.00266	-1.33	1.04180	-0.00189	-0.86	XX
BXBA32		1.04417	0.00131	0.65	1.04520	0.00151	0.69	XX
CADGEB		1.04033	-0.00253	-1.26	1.04133	-0.00236	-1.07	XX
CAKV96		1.04650	0.00364	1.82	1.04730	0.00361	1.65	XX
CCRXY5		1.04063	-0.00223	-1.11	1.04090	-0.00279	-1.27	XX
E9GFU6	X	1.03567	-0.00719	-3.59	1.03623	-0.00746	-3.40	XX
EEJN18		1.04437	0.00151	0.75	1.04413	0.00044	0.20	XX
EGP9SE		1.04583	0.00297	1.49	1.04653	0.00284	1.30	XX
FWZ92A		1.04143	-0.00143	-0.71	1.04307	-0.00062	-0.28	XX
G7H2B5		1.04400	0.00114	0.57	1.04567	0.00198	0.90	XX
G7KRHN		1.04397	0.00111	0.55	1.04590	0.00221	1.01	XX
GGM3KJ		1.04507	0.00221	1.10	1.04617	0.00248	1.13	XX
GS88QN		1.04453	0.00167	0.84	1.04580	0.00211	0.96	XX
GYTECM		1.03967	-0.00319	-1.59	1.04100	-0.00269	-1.23	XX
HJR1JJ		1.04420	0.00134	0.67	1.04440	0.00071	0.32	XX
J399UX	X	1.03923	-0.00363	-1.81	1.04630	0.00261	1.19	XX
K64FP1		1.04350	0.00064	0.32	1.04480	0.00111	0.51	XX
LCZWEX		1.04367	0.00081	0.40	1.04557	0.00188	0.86	XX
M41LQU		1.04313	0.00027	0.14	1.04373	0.00004	0.02	XX
MK52Q1		1.04233	-0.00053	-0.26	1.04333	-0.00036	-0.16	XX
N95ZVV		1.04170	-0.00116	-0.58	1.04370	0.00001	0.00	XX
NDJG86		1.04323	0.00037	0.19	1.04203	-0.00166	-0.76	XX
NMWGS9		1.04477	0.00191	0.95	1.04677	0.00308	1.40	XX

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

WebCode	Data Flag	Sample T59			Sample T60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
P9QDZ5		1.04297	0.00011	0.05	1.04580	0.00211	0.96	XX
PGKSVT		1.04467	0.00181	0.90	1.04600	0.00231	1.05	XX
Q4VRUY		1.04130	-0.00156	-0.78	1.04113	-0.00256	-1.17	XX
Q6ARPZ		1.04467	0.00181	0.90	1.04433	0.00064	0.29	XX
QDC1XC		1.04253	-0.00033	-0.16	1.04403	0.00034	0.16	XX
QGU6S2		1.04153	-0.00133	-0.66	1.04347	-0.00022	-0.10	XX
QQPGSP	*	1.04297	0.00011	0.05	1.04070	-0.00299	-1.36	XX
RX5RZ3		1.04330	0.00044	0.22	1.04413	0.00044	0.20	XX
SVCZKB		1.04460	0.00174	0.87	1.04557	0.00188	0.86	XX
TKJDA7		1.04357	0.00071	0.35	1.04463	0.00094	0.43	XX
U1R3EC		1.04310	0.00024	0.12	1.04393	0.00024	0.11	XX
ULRK2K	X	1.05040	0.00754	3.77	1.05183	0.00814	3.71	XX
UP7CXN		1.04037	-0.00249	-1.25	1.04090	-0.00279	-1.27	XX
UPXAF9		1.04277	-0.00009	-0.05	1.04413	0.00044	0.20	XX
URACTE		1.04500	0.00214	1.07	1.04610	0.00241	1.10	XX
URVDRV	X	1.03843	-0.00443	-2.21	1.04267	-0.00102	-0.47	XX
USVSVP		1.04433	0.00147	0.74	1.04600	0.00231	1.05	XX
UWCWNS		1.04550	0.00264	1.32	1.04460	0.00091	0.41	XX
UWRJ1Z	X	1.03530	-0.00756	-3.78	1.03697	-0.00672	-3.07	XX
UXD8P7		1.03933	-0.00353	-1.76	1.03913	-0.00456	-2.08	XX
VGYDJB		1.04467	0.00181	0.90	1.04567	0.00198	0.90	XX
VPHLEM		1.04410	0.00124	0.62	1.04587	0.00218	0.99	XX
VWBX8V		1.04457	0.00171	0.85	1.04580	0.00211	0.96	XX
WASED4		1.04140	-0.00146	-0.73	1.04370	0.00001	0.00	XX
WJ119K		1.04347	0.00061	0.30	1.04537	0.00168	0.76	XX
X66FD9		1.04070	-0.00216	-1.08	1.04270	-0.00099	-0.45	XX
Y9UQGD		1.04173	-0.00113	-0.56	1.04343	-0.00026	-0.12	XX
YMXXGR	*	1.04087	-0.00199	-1.00	1.03890	-0.00479	-2.18	XX
YSLBQC	*	1.04223	-0.00063	-0.31	1.04030	-0.00339	-1.55	XX
YTLL8F		1.04503	0.00217	1.09	1.04557	0.00188	0.86	XX
YTNBEY		1.04250	-0.00036	-0.18	1.04260	-0.00109	-0.50	XX

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

WebCode	Data Flag	Sample T59			Sample T60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
Z8CASW		1.04517	0.00231	1.15	1.04587	0.00218	0.99	XX
ZB1CQC		1.04317	0.00031	0.15	1.04370	0.00001	0.00	XX
ZMBV12		1.04500	0.00214	1.07	1.04600	0.00231	1.05	XX
ZNAHQX	*	1.04050	-0.00236	-1.18	1.03853	-0.00516	-2.35	XX

Summary Statistics

Grand Means

1.042859 sp gr 23/23 C

1.043690 sp gr 23/23 C

Std Dev Btwn Labs

0.002001 sp gr 23/23 C

0.002193 sp gr 23/23 C

Statistics based on 93 of 99 reporting participants

Sample T59: ABS & **Sample T60:** ABS

Comments on assigned Data Flags for Test #718

7W75WA (X) - Inconsistent in testing between samples, data for Sample T59 are low. Also inconsistent in testing within both sample sets.

E9GFU6 (X) - High data for all samples. Possible Systematic Error.

J399UX (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

ULRK2K (X) - High data for all samples. Possible Systematic Error.

URVDRV (X) - Inconsistent in testing between samples.

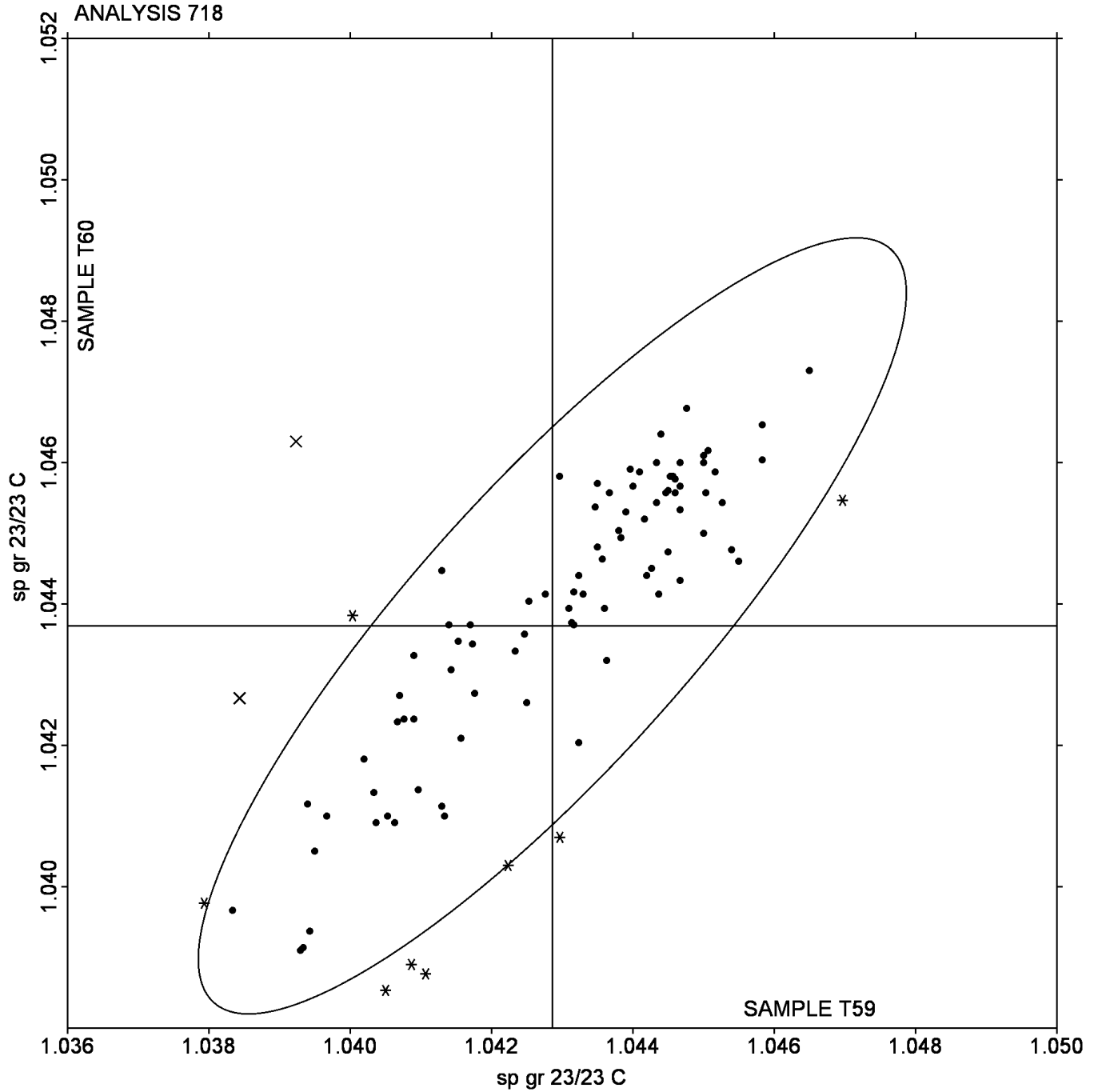
UWRJ1Z (X) - Low data for all samples. Possible Systematic Error.

Instrument Code List as Reported by the Labs

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

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

Grand Mean Sample T59: 1.0429 sp gr 23/23 C Grand Mean Sample T60: 1.0437 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 757**

Ash Content in Thermoplastics - Percent

WebCode	Data Flag	Sample L59			Sample L60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1NPL1Y		17.950	0.087	0.36	15.130	0.017	0.17	XX
3DP33Z		18.200	0.337	1.41	15.185	0.072	0.70	XX
3KDKUH		17.650	-0.213	-0.89	15.040	-0.073	-0.71	XX
3L2RLM		18.035	0.172	0.72	15.170	0.057	0.56	XX
3MDE88		17.850	-0.013	-0.05	15.130	0.017	0.17	XX
3SHYXC		17.885	0.022	0.09	15.105	-0.008	-0.08	XX
4RW2V6		18.215	0.352	1.47	15.125	0.012	0.12	XX
5FWUQY		18.190	0.327	1.37	15.105	-0.008	-0.08	XX
5Q5STN		17.795	-0.068	-0.28	15.035	-0.078	-0.76	XX
7H52KA		18.035	0.172	0.72	15.170	0.057	0.56	XX
7R4JFZ		17.815	-0.048	-0.20	15.140	0.027	0.26	XX
88L1S7	X	26.245	8.382	34.99	20.140	5.027	49.10	XX
9PLSAG		17.665	-0.198	-0.83	15.110	-0.003	-0.03	XX
9SP2HJ	X	22.240	4.377	18.27	17.505	2.392	23.36	XX
A37X1V		17.670	-0.193	-0.80	14.855	-0.258	-2.52	XX
AEES9Z	*	17.220	-0.643	-2.68	15.100	-0.013	-0.13	XX
AGRYW7		17.765	-0.098	-0.41	15.065	-0.048	-0.47	XX
AV3P73		18.075	0.212	0.89	15.220	0.107	1.04	XX
AY7A61		17.760	-0.103	-0.43	15.300	0.187	1.83	XX
BAKKSG		18.189	0.326	1.36	15.145	0.032	0.31	XX
BLG6P9		17.930	0.067	0.28	15.030	-0.083	-0.81	XX
C5U216		17.845	-0.018	-0.07	15.070	-0.043	-0.42	XX
CPFZ25		17.890	0.027	0.11	15.140	0.027	0.26	XX
E5QN2G		17.885	0.022	0.09	15.095	-0.018	-0.18	XX
E5VKL1	*	17.790	-0.073	-0.30	14.845	-0.268	-2.62	XX
ENDS39		17.680	-0.183	-0.76	15.100	-0.013	-0.13	XX
GL5CUU		17.381	-0.482	-2.01	15.120	0.006	0.06	XX
GN4YHL		17.748	-0.115	-0.48	15.146	0.033	0.32	XX
HCAZGT		18.020	0.157	0.66	15.180	0.067	0.65	XX
HYY78U		17.700	-0.163	-0.68	15.210	0.097	0.95	XX
HZXEQE		18.110	0.247	1.03	15.025	-0.088	-0.86	XX
JB6Q9		17.526	-0.337	-1.41	14.947	-0.166	-1.62	XX

**Plastics Interlaboratory Testing Program
Analysis 757**

Ash Content in Thermoplastics - Percent

WebCode	Data Flag	Sample L59			Sample L60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
KSYPWM		17.890	0.027	0.11	15.305	0.192	1.88	XX
L5K5Y7		17.565	-0.298	-1.24	15.045	-0.068	-0.66	XX
LCX4GQ		17.990	0.127	0.53	15.005	-0.108	-1.06	XX
MZ77Z4		17.915	0.052	0.22	15.250	0.137	1.34	XX
NA5VKT		17.780	-0.083	-0.35	15.310	0.197	1.92	XX
NXBEFZ		17.795	-0.068	-0.28	15.000	-0.113	-1.10	XX
PBVP82		18.020	0.157	0.66	15.195	0.082	0.80	XX
PN2HIL	*	18.550	0.687	2.87	15.350	0.237	2.31	XX
PPP1PM		17.795	-0.068	-0.28	15.025	-0.088	-0.86	XX
PQDD5J		17.790	-0.073	-0.30	15.090	-0.023	-0.22	XX
PRRM1K		18.035	0.172	0.72	15.095	-0.018	-0.18	XX
Q7ZCSW		17.885	0.022	0.09	15.025	-0.088	-0.86	XX
QNZ2B2		17.785	-0.078	-0.32	15.190	0.077	0.75	XX
S7HQWD		17.605	-0.258	-1.08	15.120	0.007	0.07	XX
SARVT1		17.845	-0.018	-0.07	15.110	-0.003	-0.03	XX
STEWCA		17.845	-0.018	-0.07	15.140	0.027	0.26	XX
TAZAJT		18.255	0.392	1.64	15.175	0.062	0.61	XX
TTM8WC	X	19.050	1.187	4.96	15.095	-0.018	-0.18	XX
TZZBHT		17.860	-0.003	-0.01	15.080	-0.033	-0.32	XX
UXTR7K		18.070	0.207	0.86	15.120	0.007	0.07	XX
V8KUXR		17.898	0.035	0.15	15.235	0.122	1.19	XX
W2G49J		17.560	-0.303	-1.26	14.880	-0.233	-2.28	XX
WKGHZR		17.880	0.017	0.07	15.125	0.012	0.12	XX
WPUR1Q		17.500	-0.363	-1.51	15.020	-0.093	-0.91	XX
WRX5AW		17.630	-0.233	-0.97	15.115	0.002	0.02	XX
YFZ4L4		17.530	-0.333	-1.39	15.050	-0.063	-0.62	XX
YP66K9		18.240	0.377	1.57	15.245	0.132	1.29	XX
ZR5J8F		18.200	0.337	1.41	15.105	-0.008	-0.08	XX

Ash Content in Thermoplastics - Percent

Summary Statistics

Grand Means

17.8628 Percent

15.1130 Percent

Std Dev Btwn Labs

0.2396 Percent

0.1024 Percent

Statistics based on 57 of 60 reporting participants

Sample L59: PBT & Sample L60: PBT

Comments on assigned Data Flags for Test #757

88L1S7 (X) - High data for all samples.

9SP2HJ (X) - High data for all samples.

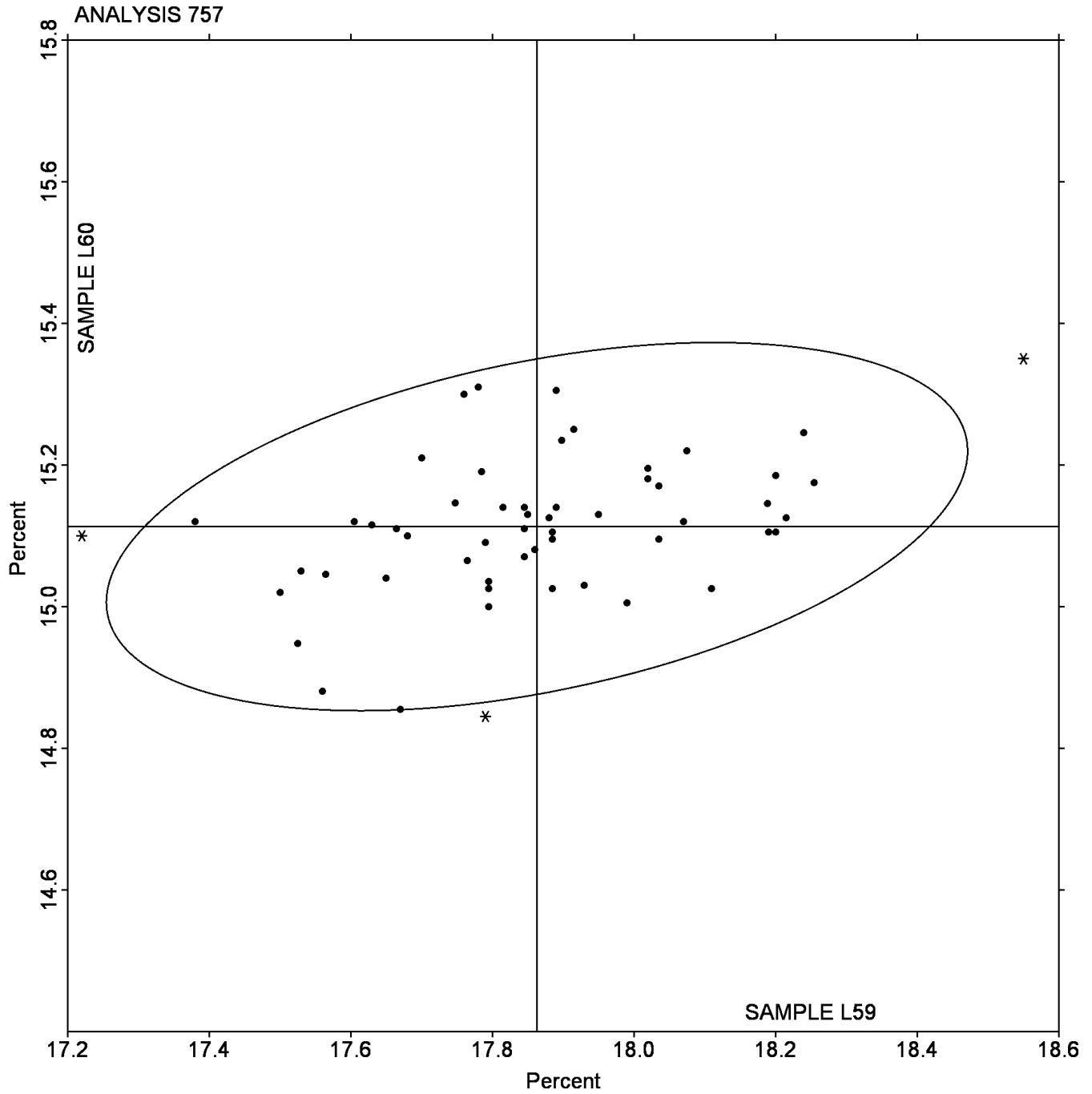
TTM8WC (X) - Low data for Sample L59 .

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 L59: 17.863 Percent Grand Mean Sample L60: 15.113 Percent



**Plastics Interlaboratory Testing Program
Analysis 770**

Tensile Stress at Yield, Film Samples - psi

WebCode	Data Flag	Sample B59			Sample B60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1VM6A6		2,409	123	0.51	2,698	68	0.18	IN
39V32B		2,281	-6	-0.02	2,607	-23	-0.06	IN
3YRW7J		2,194	-93	-0.38	2,573	-57	-0.15	IM
41X6N2		2,457	170	0.70	2,949	319	0.82	XX
43NRTR		2,351	65	0.27	2,867	237	0.61	IN
6VDZZR		2,434	147	0.61	2,877	248	0.64	TH
9RZJT5		2,495	208	0.86	2,887	257	0.66	IN
A5T1UG	X	943	-1,344	-5.56	880	-1,750	-4.50	XX
ASMKTZ		2,392	105	0.44	2,759	129	0.33	IM
EFPLLA		1,929	-358	-1.48	2,029	-601	-1.54	UC
H22EZ7		2,364	77	0.32	2,763	134	0.34	XX
HTYPLG	*	1,585	-702	-2.90	1,523	-1,106	-2.84	IN
KXLM2C		2,416	130	0.54	2,856	226	0.58	TH
RUNBNQ		2,429	142	0.59	2,912	282	0.73	XX
TM9H8L		2,490	203	0.84	2,800	171	0.44	IR
TPXZYK		2,392	105	0.43	2,830	201	0.52	IN
WE6ZCC		2,274	-12	-0.05	2,663	33	0.09	TY
WQ1SN4		2,357	70	0.29	2,773	144	0.37	TH
ZWVSY2		1,912	-375	-1.55	1,967	-663	-1.70	XX

Summary Statistics	
Grand Means	
2,286.7 psi	2,629.5 psi
Std Dev Btwn Labs	
241.9 psi	389.2 psi
Statistics based on 18 of 19 reporting participants	

Sample B59: LDPE & Sample B60: LDPE

Comments on assigned Data Flags for Test #770

A5T1UG (X) - Low data for all samples.

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

Instrument Code List as Reported by the Labs

(IM) - Instru-Met Instruments

(IN) - Instron

(IR) - Instron with retrofit

(TH) - Thwing Albert

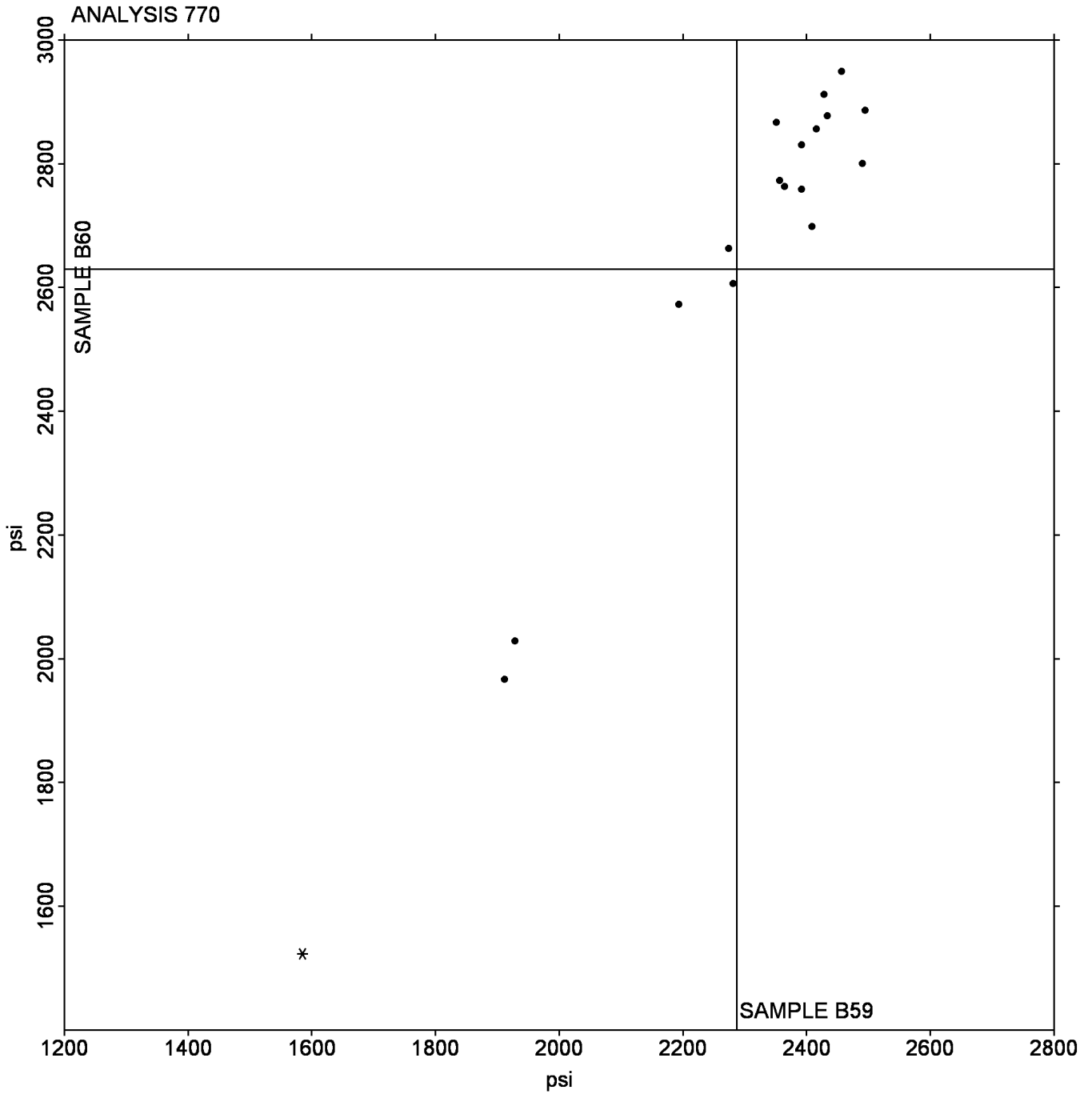
(TY) - Toyoseiki

(UC) - United

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B59: 2,286.72 psi Grand Mean Sample B60: 2,629.46 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 B59			Sample B60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3FC99W		3,918	-190	-0.53	4,364	-64	-0.15	TH
41K1FA		3,841	-267	-0.74	4,112	-316	-0.76	IN
52K72P		3,761	-347	-0.96	4,092	-336	-0.81	IN
5WHGY4		4,399	292	0.81	4,891	463	1.11	TY
5WL5C2		3,817	-291	-0.81	3,847	-581	-1.39	IN
5X5REH		4,353	245	0.68	4,566	138	0.33	XX
61BC44		3,186	-922	-2.56	3,912	-517	-1.24	UC
6UUPVJ		3,781	-327	-0.91	4,571	143	0.34	UC
ACSQBL		4,628	520	1.44	4,949	521	1.25	TH
AF18Y3		3,891	-217	-0.60	4,150	-278	-0.67	IN
BNKD1U		4,015	-93	-0.26	4,416	-12	-0.03	XX
DFDRWJ		4,579	471	1.31	4,972	544	1.31	TH
DSFWB3		3,987	-120	-0.33	4,607	179	0.43	IN
EUDA2U	*	4,281	173	0.48	3,607	-821	-1.97	IM
GNTT2G		4,552	444	1.23	4,578	150	0.36	IN
HQTSR9	X	2,060	-2,048	-5.68	2,286	-2,142	-5.14	XX
K4MM9Z		4,317	209	0.58	4,664	236	0.57	IN
KDV1B1		3,958	-149	-0.41	4,149	-279	-0.67	IN
QN2TH9	X	7,910	3,802	10.55	8,401	3,973	9.54	SH
UDYFMK		3,960	-148	-0.41	4,802	374	0.90	IR
UGF5ZN		4,578	471	1.31	4,803	374	0.90	HO
UPY667		3,990	-118	-0.33	3,883	-545	-1.31	XX
W2B7NG		4,551	443	1.23	5,122	694	1.67	IN
ZCJJPL		4,028	-80	-0.22	4,360	-68	-0.16	IM

Summary Statistics	
Grand Means	
4,107.7 psi	4,428.1 psi
Std Dev Btwn Labs	
360.5 psi	416.7 psi
Statistics based on 22 of 24 reporting participants	

Sample B59: LDPE & Sample B60: LDPE

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

Comments on assigned Data Flags for Test #771

HQTSR9 (X) - Low data for all samples.

QN2TH9 (X) - High data for all samples.

Instrument Code List as Reported by the Labs

(HO) - Hounsfield Instruments

(IM) - Instru-Met Instruments

(IN) - Instron

(IR) - Instron with retrofit

(SH) - Shimadzu

(TH) - Thwing Albert

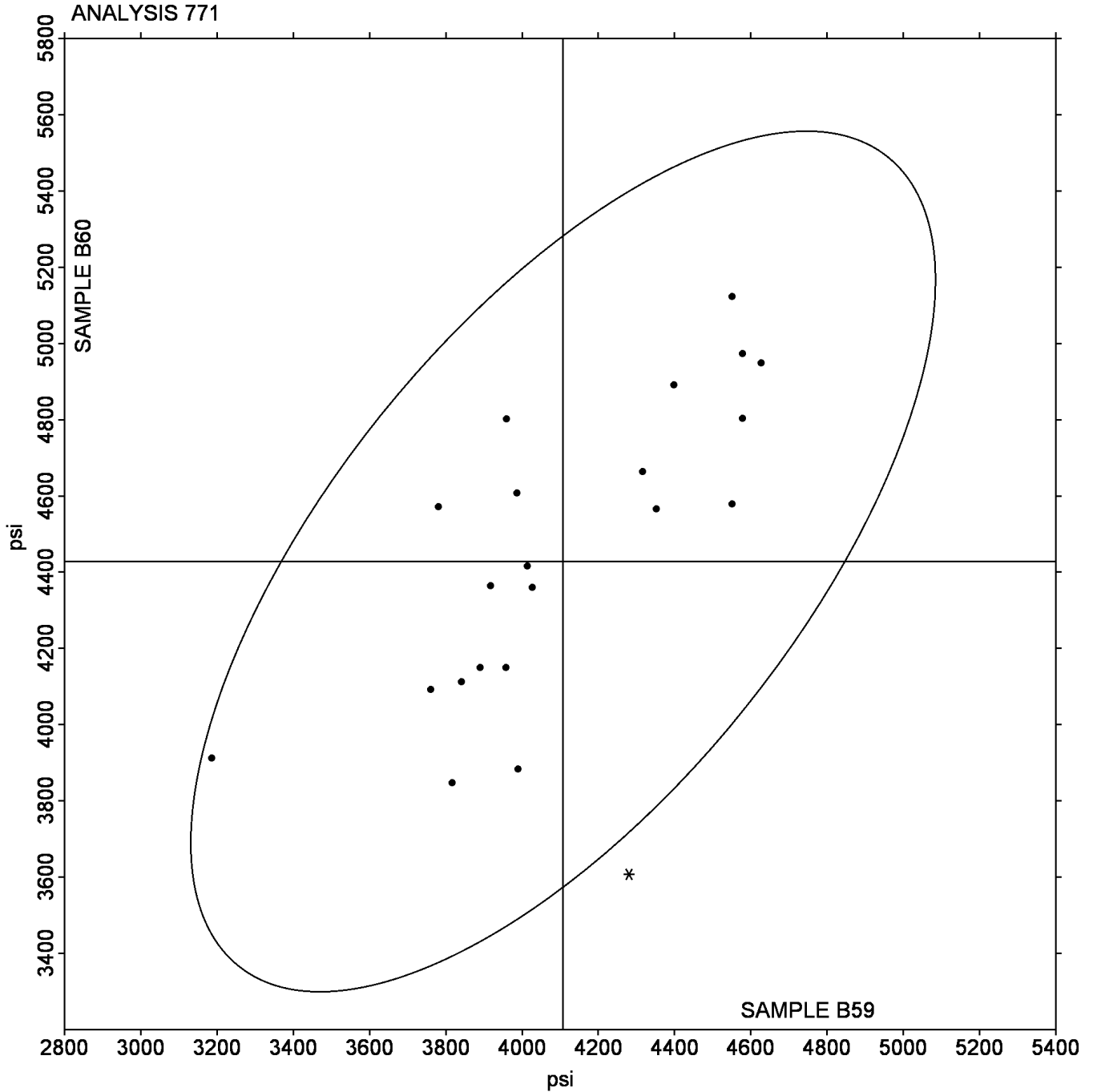
(TY) - Toyoseiki

(UC) - United

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B59: 4,107.70 psi Grand Mean Sample B60: 4,428.11 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 B59			Sample B60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2XYEZA		122.08	42.01	1.30	150.87	59.91	1.56	IN
2ZD28W		8.53	-71.54	-2.22	8.43	-82.53	-2.15	IN
573M58		71.00	-9.07	-0.28	84.68	-6.28	-0.16	IN
C2FKH8		62.89	-17.18	-0.53	74.94	-16.02	-0.42	IM
CHWH32		98.70	18.63	0.58	114.77	23.81	0.62	IN
D21R65		79.42	-0.65	-0.02	80.73	-10.23	-0.27	IN
DH5HAA		88.00	7.93	0.25	96.50	5.54	0.14	XX
HLUFV9	X	1.81	-78.25	-2.43	2.23	-88.73	-2.31	XX
L3VRJA		86.93	6.86	0.21	100.30	9.34	0.24	IN
LA1B9D		94.76	14.69	0.46	105.71	14.75	0.38	TH
P76P4F		108.40	28.33	0.88	118.60	27.64	0.72	XX
QVECDN		98.51	18.44	0.57	120.45	29.49	0.77	IR
WTKCJC		88.94	8.87	0.28	95.18	4.22	0.11	IM
Z3PRPF		96.41	16.34	0.51	106.24	15.28	0.40	XX
ZS8USQ		16.35	-63.72	-1.98	16.09	-74.87	-1.95	UC

Summary Statistics			
Grand Means	80.066	Percent	90.964
			Percent
Std Dev Btwn Labs	32.204	Percent	38.425
			Percent
Statistics based on 14 of 15 reporting participants			

Sample B59: LDPE & Sample B60: LDPE

Comments on assigned Data Flags for Test #772

HLUFV9 (X) - Low data for all samples.

Instrument Code List as Reported by the Labs

(IM) - Instru-Met Instruments

(IN) - Instron

(IR) - Instron with retrofit

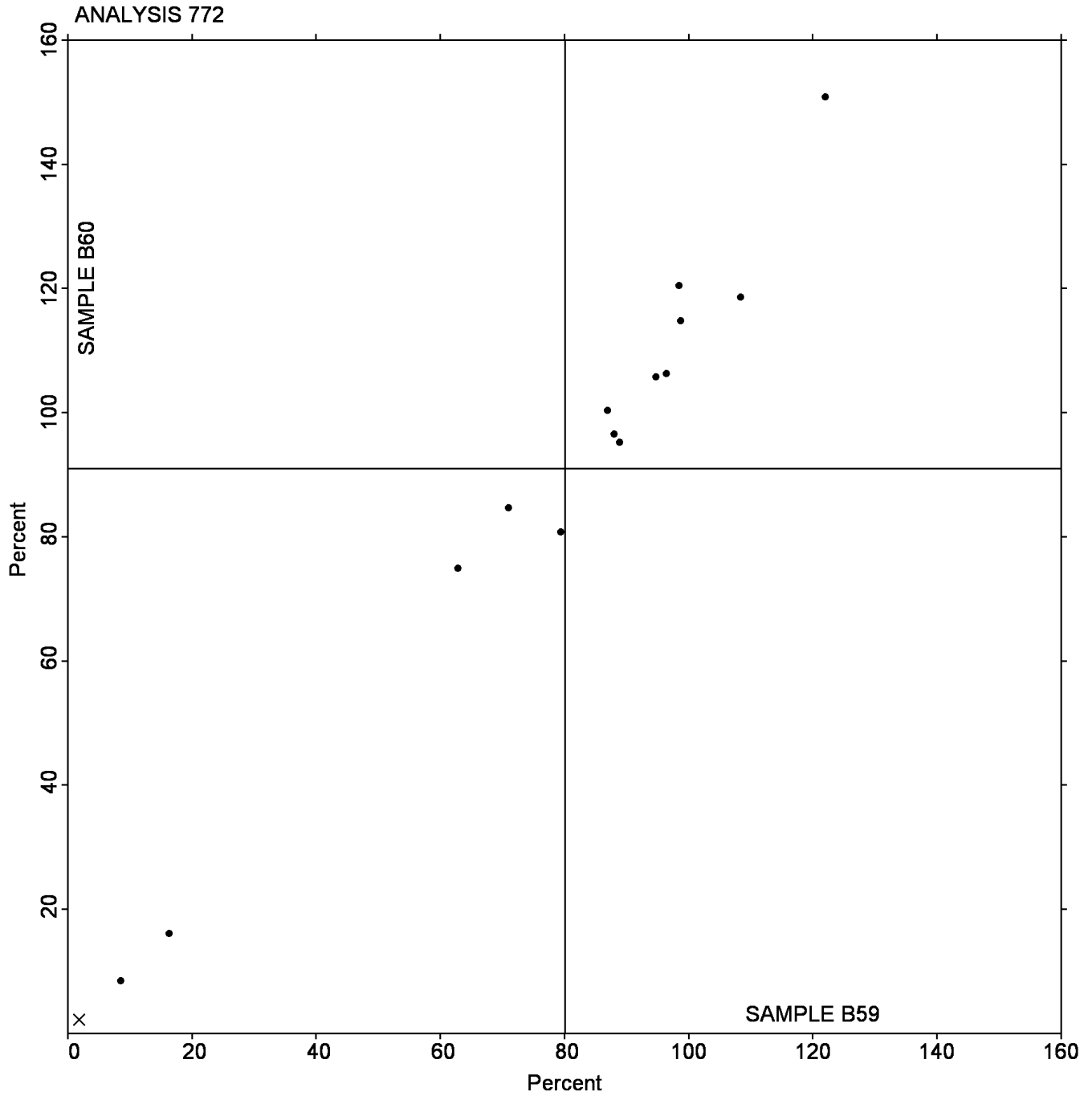
(TH) - Thwing Albert

(UC) - United

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B59: 80.066 Percent Grand Mean Sample B60: 90.964 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 B59			Sample B60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1BCD2C		743.2	104.4	1.13	644.0	83.4	0.81	IN
2P3XCE		659.6	20.8	0.22	573.9	13.3	0.13	IN
4UZK2K		699.7	60.9	0.66	625.5	64.9	0.63	XX
5REBKR		657.4	18.6	0.20	527.1	-33.5	-0.33	IN
9BXLGM		592.1	-46.7	-0.50	504.1	-56.5	-0.55	TH
AHEHGU		725.4	86.6	0.93	610.1	49.5	0.48	XX
BLUCSK		659.9	21.1	0.23	568.9	8.3	0.08	TH
DE67EA		649.8	11.0	0.12	572.9	12.3	0.12	XX
E59VDD		646.4	7.6	0.08	585.7	25.1	0.24	IN
F34QFJ		724.2	85.4	0.92	636.3	75.7	0.74	TH
FJDXQ1		545.9	-92.8	-1.00	465.3	-95.4	-0.93	HO
FUACMB		441.0	-197.7	-2.13	410.5	-150.2	-1.47	XX
G9KGNW	*	627.3	-11.5	-0.12	722.8	162.2	1.58	IR
HN3TAQ		550.4	-88.4	-0.95	559.1	-1.5	-0.02	XX
KJQW9S		487.8	-151.0	-1.63	411.8	-148.8	-1.45	IN
N2AUZ9		623.1	-15.7	-0.17	526.0	-34.6	-0.34	IN
SUER28		536.2	-102.5	-1.11	397.2	-163.5	-1.60	XX
TC4J9J		860.6	221.8	2.39	813.2	252.6	2.47	XX
THYSZQ		569.9	-68.9	-0.74	471.5	-89.2	-0.87	IN
VA9W5Z		747.4	108.6	1.17	602.9	42.3	0.41	XX
WQL1NC		663.3	24.5	0.26	439.0	-121.6	-1.19	IM
X7PQZ2		623.2	-15.6	-0.17	659.2	98.6	0.96	SH
XHZ5KN		657.4	18.6	0.20	567.9	7.3	0.07	IM

Summary Statistics			
Grand Means	638.75	Percent	560.64
			Percent
Std Dev Btwn Labs	92.73	Percent	102.42
			Percent
Statistics based on 23 of 23 reporting participants			

Sample B59: LDPE & Sample B60: LDPE

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

Instrument Code List as Reported by the Labs

(HO) - Hounsfield Instruments

(IM) - Instru-Met Instruments

(IN) - Instron

(IR) - Instron with retrofit

(SH) - Shimadzu

(TH) - Thwing Albert

(XX) - Instrument manufacturer not specified by lab

**Plastics Interlaboratory Testing Program
Analysis 774**

Thickness of Film Tensile Samples - mils

WebCode	Data Flag	Sample B59			Sample B60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
13YJWH		1.9660	-0.0057	-0.08	1.8930	-0.0428	-0.83	XX
1UXDJE		1.9810	0.0093	0.13	1.9470	0.0112	0.22	XX
26C414		1.9800	0.0083	0.12	1.9400	0.0042	0.08	XX
3CK819		2.0120	0.0403	0.58	1.9580	0.0222	0.43	XX
3T3YBN		2.0400	0.0683	0.98	1.9700	0.0342	0.66	XX
75JNPN		1.9900	0.0183	0.26	1.8950	-0.0408	-0.79	XX
A13P95		1.9400	-0.0317	-0.46	1.8600	-0.0758	-1.46	XX
A7YLK3		1.8600	-0.1117	-1.61	1.8800	-0.0558	-1.08	XX
ANM47B		1.8661	-0.1056	-1.52	1.9213	-0.0146	-0.28	XX
CDRS5F		2.0250	0.0533	0.77	1.9350	-0.0008	-0.02	XX
CVCCLZ		1.9500	-0.0217	-0.31	1.9000	-0.0358	-0.69	XX
FRYUUF		2.0280	0.0563	0.81	1.9800	0.0442	0.85	XX
H23V5X		1.8937	-0.0780	-1.12	1.8622	-0.0736	-1.42	XX
L6TC4L		2.0000	0.0283	0.41	1.9800	0.0442	0.85	XX
L9F86Y		1.9060	-0.0657	-0.95	1.8930	-0.0428	-0.83	XX
LHY1QH		1.9685	-0.0032	-0.05	1.9685	0.0327	0.63	XX
LT6LH3	X	1.5700	-0.4017	-5.78	1.4300	-0.5058	-9.75	XX
NFAFPQ		2.0450	0.0733	1.05	2.0100	0.0742	1.43	XX
RA4MY5		1.9200	-0.0517	-0.74	1.8500	-0.0858	-1.66	XX
SP464F		1.9961	0.0243	0.35	1.9921	0.0563	1.09	XX
U9KE8L		2.0450	0.0733	1.05	1.9850	0.0492	0.95	XX
UKX29D		2.0000	0.0283	0.41	2.0000	0.0642	1.24	XX
UY2XED		2.0100	0.0383	0.55	1.9740	0.0382	0.74	XX
V7TYR5		1.9410	-0.0307	-0.44	1.8580	-0.0778	-1.50	XX
VDQZK4		1.9914	0.0196	0.28	1.9870	0.0512	0.99	XX
X9P3YM		2.1190	0.1473	2.12	2.0030	0.0672	1.30	XX
YYDND1	*	1.7913	-0.1804	-2.59	1.8898	-0.0461	-0.89	XX

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

Summary Statistics	
Grand Means	
1.97174 mils	1.93584 mils
Std Dev Btwn Labs	
0.06956 mils	0.05186 mils
Statistics based on 26 of 27 reporting participants	

Sample B59: LDPE & **Sample B60:** LDPE

Comments on assigned Data Flags for Test #774

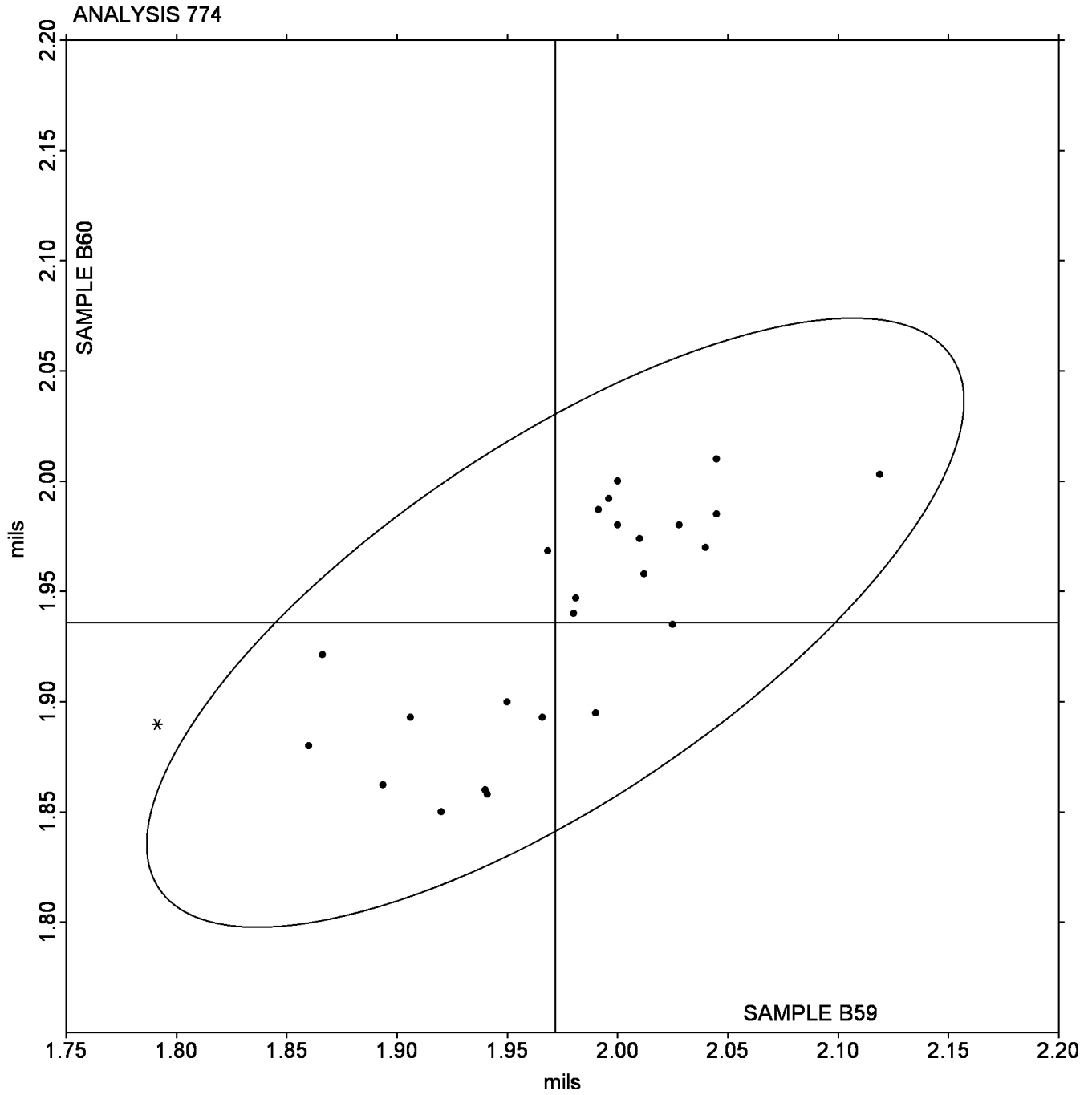
LT6LH3 (X) - Low data for all samples.

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 B59: 1.9717 mils Grand Mean Sample B60: 1.9358 mils



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 775**

Secant Modulus at 1% Strain - psi

WebCode	Data Flag	Sample B59			Sample B60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3396E9		35,669	2,385	1.07	34,443	1,347	0.61	IN
3LNGBF		36,298	3,013	1.36	36,262	3,167	1.43	IN
6R1KLD		32,848	-437	-0.20	33,978	883	0.40	IM
8HN8J1		35,302	2,018	0.91	34,975	1,880	0.85	IM
P3BTN2	X	9,744	-23,541	-10.61	10,700	-22,396	-10.14	XX
P4YLR6		32,376	-909	-0.41	32,053	-1,042	-0.47	IN
Q7QQRH		32,380	-904	-0.41	31,940	-1,155	-0.52	UC
SCADFK		29,495	-3,790	-1.71	29,334	-3,762	-1.70	IN
VETS5B		33,906	621	0.28	34,082	987	0.45	IN
ZAJ88D		31,288	-1,997	-0.90	30,790	-2,305	-1.04	IN

Summary Statistics

Grand Means

33,284.5 psi

33,095.2 psi

Std Dev Btwn Labs

2,219.4 psi

2,208.3 psi

Statistics based on 9 of 10 reporting participants

Sample B59: LDPE & **Sample B60:** LDPE

Comments on assigned Data Flags for Test #775

P3BTN2 (X) - Low data for all samples.

Instrument Code List as Reported by the Labs

(IM) - Instru-Met Instruments

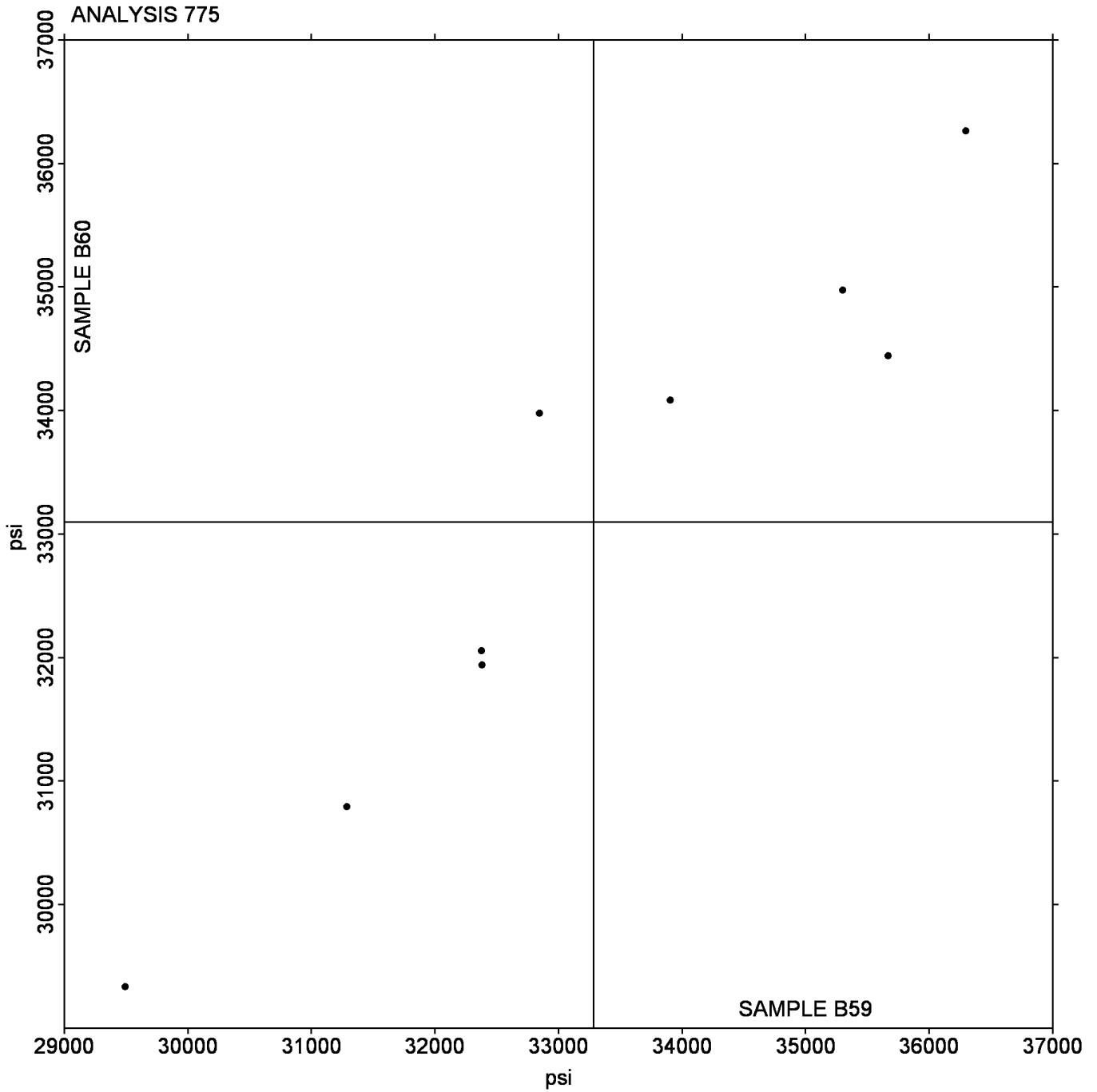
(IN) - Instron

(UC) - United

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 775
Secant Modulus at 1% Strain - psi

Grand Mean Sample B59: 33,284.48 psi Grand Mean Sample B60: 33,095.23 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 776**

Secant Modulus at 2% Strain - psi

WebCode	Data Flag	Sample B59			Sample B60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
372CF4		29,672	1,111	0.76	29,695	947	0.59	IM
6C1962		27,950	-611	-0.42	27,760	-988	-0.62	UC
6C7QR1		29,098	537	0.37	29,414	666	0.42	IN
ER4QZF		28,245	-316	-0.22	28,438	-311	-0.19	IN
UKHFKP		28,759	198	0.14	29,960	1,211	0.76	IM
Y8F4SK		31,060	2,500	1.71	31,170	2,421	1.51	IN
Z32WUC		27,488	-1,073	-0.73	27,227	-1,522	-0.95	IN
Z4VAXR	X	7,541	-21,020	-14.39	9,258	-19,490	-12.18	XX
ZWA5CC		26,216	-2,345	-1.61	26,325	-2,423	-1.51	IN

Summary Statistics	
Grand Means	
28,560.8 psi	28,748.4 psi
Std Dev Btwn Labs	
1,460.7 psi	1,600.5 psi
Statistics based on 8 of 9 reporting participants	

Sample B59: LDPE & Sample B60: LDPE

Comments on assigned Data Flags for Test #776

Z4VAXR (X) - Low data for all samples.

Instrument Code List as Reported by the Labs

(IM) - Instru-Met Instruments

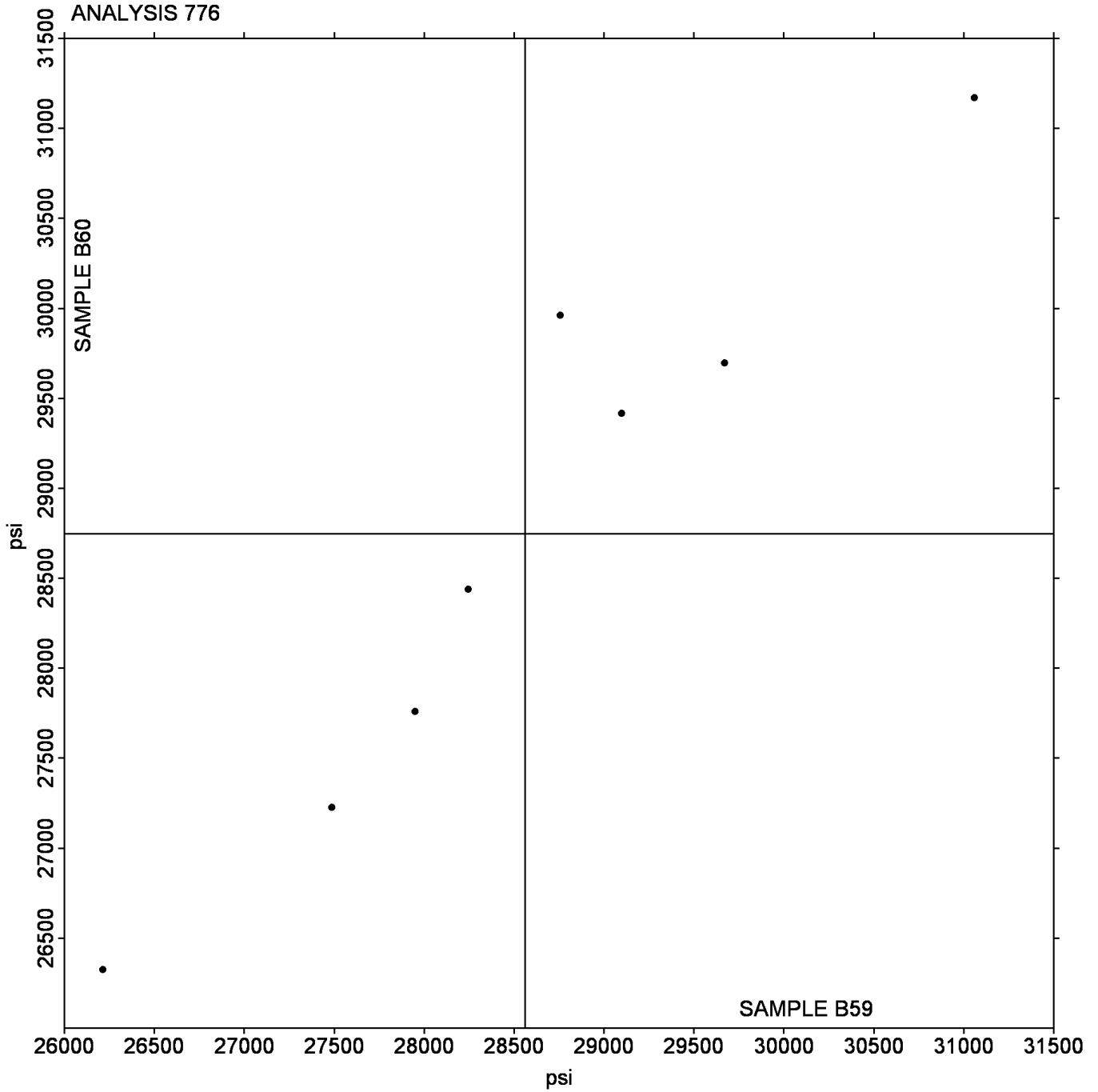
(IN) - Instron

(UC) - United

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program
Analysis 776
Secant Modulus at 2% Strain - psi

Grand Mean Sample B59: 28,560.79 psi Grand Mean Sample B60: 28,748.44 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 P59			Sample P60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3WXDLJ		0.2472	0.0380	0.98	0.2480	0.0695	1.28	XX
4MWP1		0.1824	-0.0268	-0.69	0.1890	0.0105	0.19	TH
5SFK53		0.1760	-0.0332	-0.86	0.1560	-0.0225	-0.42	XX
72VQZR		0.2280	0.0188	0.48	0.1960	0.0175	0.32	XX
73KM2H		0.1279	-0.0813	-2.10	0.0894	-0.0891	-1.65	IG
7ZXS2R		0.2100	0.0008	0.02	0.1780	-0.0005	-0.01	SA
ADQET3		0.2368	0.0276	0.71	0.2286	0.0501	0.93	TN
B1V2XX		0.1920	-0.0172	-0.44	0.1640	-0.0145	-0.27	KA
B5WCGJ		0.2158	0.0066	0.17	0.2376	0.0591	1.09	IS
GPEH72		0.1882	-0.0210	-0.54	0.1740	-0.0045	-0.08	TH
L68QGW		0.1576	-0.0516	-1.33	0.1216	-0.0569	-1.05	TM
N85EV4		0.2392	0.0300	0.77	0.1518	-0.0267	-0.49	TH
RDGMJK		0.1576	-0.0516	-1.33	0.1366	-0.0419	-0.77	TH
RZW7FL		0.2444	0.0352	0.91	0.1852	0.0067	0.12	TH
V1DUZA		0.2472	0.0380	0.98	0.1562	-0.0223	-0.41	TN
V8GJ9U		0.1782	-0.0310	-0.80	0.1598	-0.0187	-0.35	CH
VSAMN9		0.1860	-0.0232	-0.60	0.1550	-0.0235	-0.43	DY
WMKFT8		0.2452	0.0360	0.93	0.2128	0.0343	0.63	MS
Z5YRTN		0.2568	0.0476	1.23	0.2256	0.0471	0.87	UT
ZTATGC		0.2746	0.0654	1.69	0.3098	0.1313	2.43	IG
ZZ2LYC		0.2022	-0.0070	-0.18	0.0742	-0.1043	-1.93	TN

Summary Statistics			
Grand Means	0.20920	COF	0.17853
			COF
Std Dev Btwn Labs	0.03877	COF	0.05413
			COF
Statistics based on 21 of 21 reporting participants			

Sample P59: LDPE & Sample P60: LDPE

Plastics Interlaboratory Testing Program
Analysis 780
Coefficient of Static Friction

Instrument Code List as Reported by the Labs

(CH) - ChemInstruments AR-1000

(IG) - Instron

(KA) - Kayeness Inc.

(SA) - Shimadzu Autograph AG 2000 A

(TM) - TMI Slip and Friction Tester Model 98

(UT) - United Testing Systems (model not specified)

(DY) - Dynisco Model D1055

(IS) - Instron Model 5565

(MS) - MTS Sintech

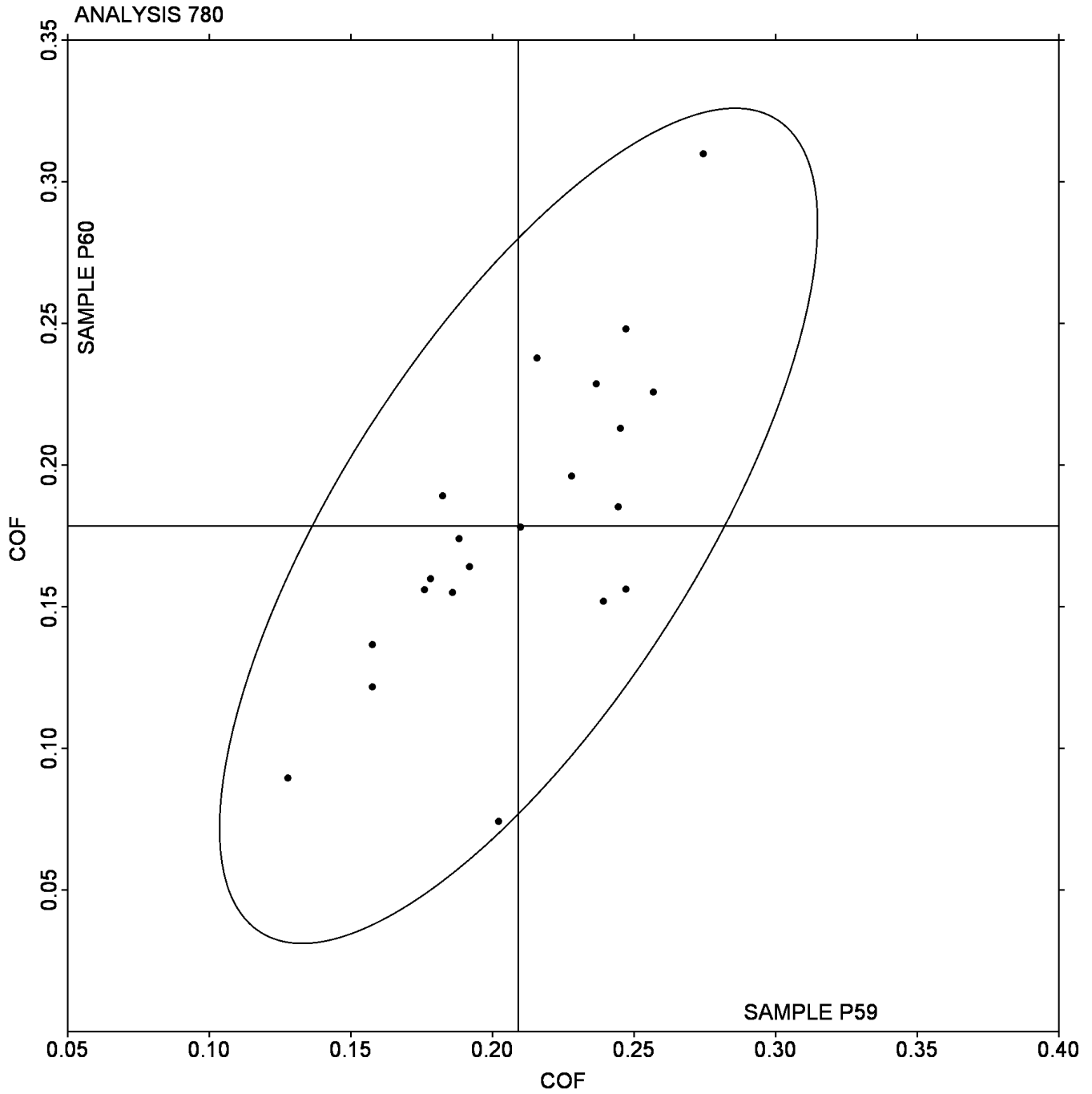
(TH) - Thwing Albert Friction/Peel Tester Model 225-1

(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 P59: 0.20920 COF Grand Mean Sample P60: 0.17853 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 P59			Sample P60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
1VKSCC		0.1882	0.0388	1.33	0.1742	0.0575	1.80	TN
3RT1VL		0.1172	-0.0322	-1.10	0.0930	-0.0237	-0.74	CH
7GFJTA		0.1434	-0.0060	-0.21	0.1100	-0.0067	-0.21	TM
7NNW3U		0.1424	-0.0070	-0.24	0.0950	-0.0217	-0.68	TN
D5FA2T		0.1440	-0.0054	-0.19	0.1120	-0.0047	-0.15	XX
DB978X		0.1212	-0.0282	-0.97	0.0966	-0.0201	-0.63	TH
G5T95N		0.1890	0.0396	1.35	0.1266	0.0099	0.31	MS
JTHBV4		0.1732	0.0238	0.81	0.1088	-0.0079	-0.25	UT
KU6JLD		0.1460	-0.0034	-0.12	0.1140	-0.0027	-0.08	SA
LEFRXX		0.1394	-0.0100	-0.34	0.1154	-0.0013	-0.04	DY
MJZHWZ		0.1514	0.0020	0.07	0.1122	-0.0045	-0.14	TH
NAF9JG		0.1298	-0.0196	-0.67	0.1082	-0.0085	-0.27	TH
NCGXNY		0.1768	0.0274	0.94	0.1608	0.0441	1.38	XX
PUUDB6		0.1592	0.0098	0.33	0.1450	0.0283	0.89	IS
QSF86F		0.1838	0.0344	1.18	0.1128	-0.0039	-0.12	TN
SJ54C8		0.0799	-0.0696	-2.38	0.0441	-0.0726	-2.28	IG
TJNARQ		0.1218	-0.0276	-0.95	0.0942	-0.0225	-0.71	TH
UYFWGX		0.1432	-0.0062	-0.21	0.1096	-0.0071	-0.22	TH
W2QTZ4		0.1896	0.0402	1.37	0.1850	0.0683	2.14	IG

Summary Statistics			
Grand Means	0.14945	COF	0.11671
			COF
Std Dev Btwn Labs	0.02922	COF	0.03191
			COF
Statistics based on 19 of 19 reporting participants			

Sample P59: LDPE & Sample P60: LDPE

Plastics Interlaboratory Testing Program
Analysis 781
Coefficient of Kinetic Friction

Instrument Code List as Reported by the Labs

(CH) - ChemInstruments AR-1000

(DY) - Dynisco Model D1055

(IG) - Instron

(IS) - Instron Model 5565

(MS) - MTS Sintech

(SA) - Shimadzu Autograph AG 2000 A

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

(TM) - TMI Slip and Friction Tester Model 98

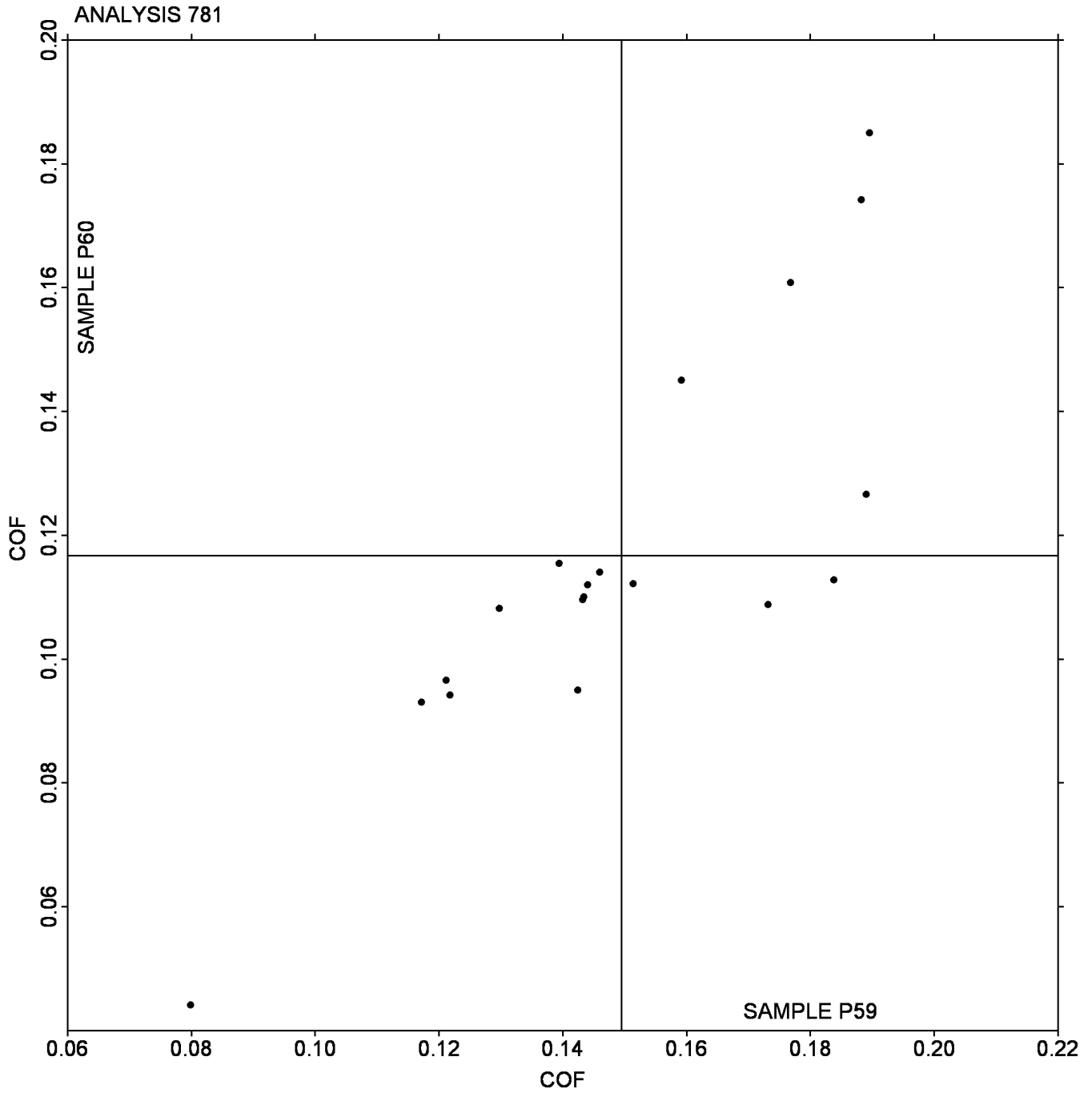
(TN) - TMI #32-06

(UT) - United Testing Systems (model not specified)

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

Plastics Interlaboratory Testing Program
Analysis 781
Coefficient of Kinetic Friction

Grand Mean Sample P59: 0.14945 COF Grand Mean Sample P60: 0.11671 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 Q59			Sample Q60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
4SLEB4		92.1	14.7	0.68	58.4	13.6	1.06	TE
543HB1		53.4	-24.0	-1.11	36.6	-8.2	-0.64	XX
82URH9		81.6	4.2	0.19	52.7	7.9	0.61	TF
9ADYDK		117.0	39.6	1.83	60.9	16.1	1.25	TE
C5HLH5		100.1	22.7	1.05	64.4	19.6	1.52	TE
HT7DEM		55.2	-22.2	-1.03	36.0	-8.8	-0.69	TE
K1HEPF		85.0	7.6	0.35	41.0	-3.8	-0.30	EM
M8A925	X	3.8	-73.6	-3.40	2.5	-42.4	-3.30	EM
PY3YVW		62.2	-15.2	-0.70	32.0	-12.8	-1.00	TH
U2UJS4		54.7	-22.7	-1.05	33.4	-11.4	-0.89	LO
ULFHR7		72.8	-4.6	-0.21	32.9	-11.9	-0.93	TM

Summary Statistics	
Grand Means	
77.41 grams-force	44.84 grams-force
Std Dev Btwn Labs	
21.64 grams-force	12.84 grams-force
Statistics based on 10 of 11 reporting participants	

Sample Q59: LDPE & Sample Q60: LDPE

Comments on assigned Data Flags for Test #782

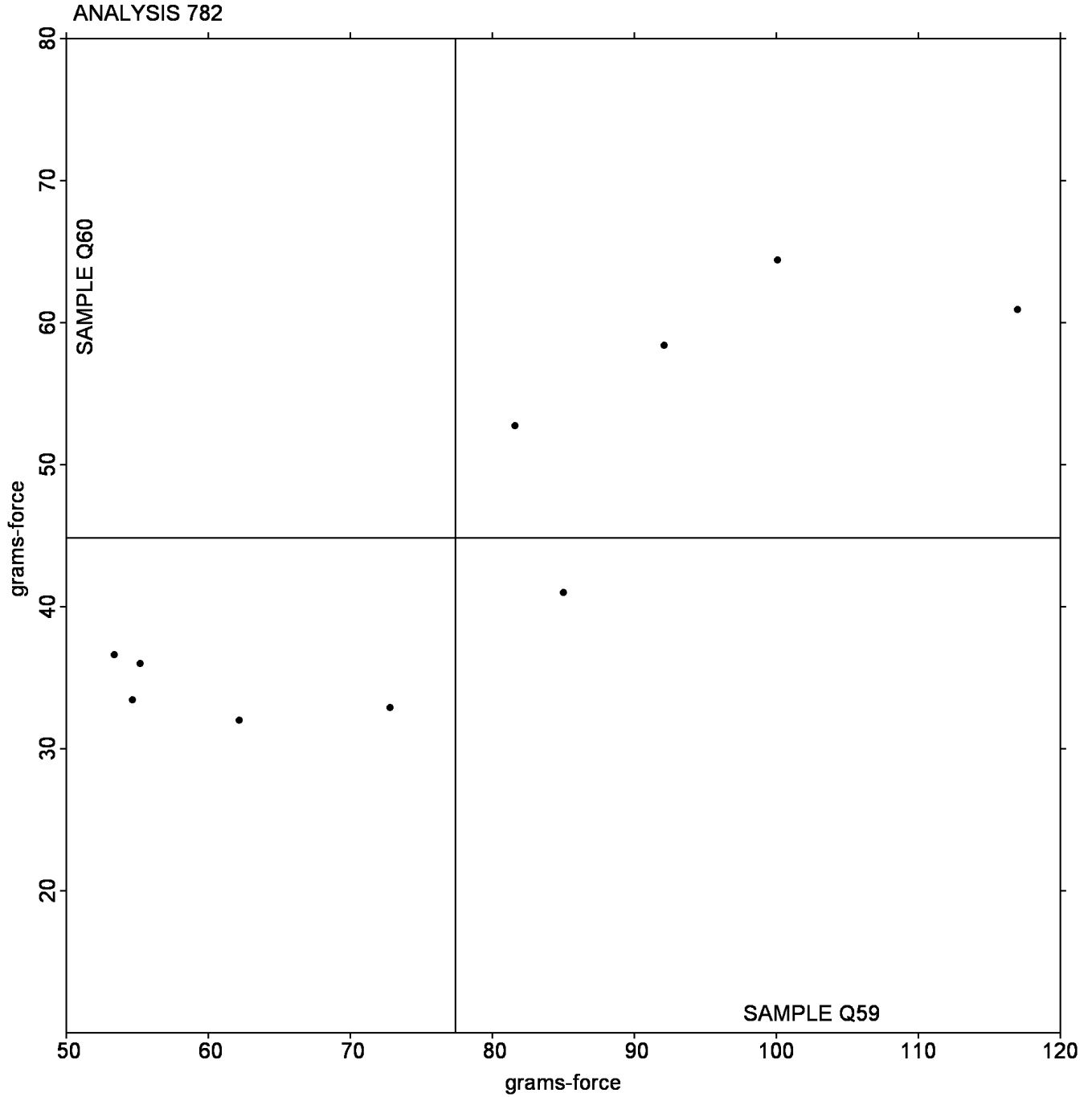
M8A925 (X) - Low data for all samples.

Instrument Code List as Reported by the Labs

- | | |
|---|------------------------------------|
| (EM) - Elmendorf Tear Tester | (LO) - Lorentzen & Wettre Model II |
| (TE) - Thwing-Albert Pro Tear | (TF) - Thwing-Albert Model 60-1500 |
| (TH) - Thwing-Albert Model 60-16 | (TM) - TMI No. 83-1100 |
| (XX) - Instrument make/model not specified by lab | |

Plastics Interlaboratory Testing Program
Analysis 782
Tear Resistance of Films

Grand Mean Sample Q59: 77.406 grams-force Grand Mean Sample Q60: 44.837 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 D59			Sample D60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
16D3T6		15.566	0.336	0.27	8.149	0.075	0.12	MA
35DS11		16.100	0.870	0.70	8.471	0.397	0.62	BJ
3GH9X3		15.575	0.345	0.28	8.220	0.146	0.23	BJ
3NCY2E		15.500	0.270	0.22	8.375	0.301	0.47	XX
51UWF2		15.425	0.195	0.16	7.921	-0.153	-0.24	BJ
6WHRE7		16.438	1.207	0.97	8.911	0.837	1.30	BJ
71L6A8		15.238	0.007	0.01	7.836	-0.238	-0.37	BJ
8KX9MC		15.850	0.620	0.50	8.258	0.184	0.29	BJ
913WSK		16.535	1.305	1.05	8.680	0.606	0.94	BT
9UGY3W	*	11.674	-3.556	-2.86	6.043	-2.031	-3.16	XX
BKG7B3		14.160	-1.070	-0.86	7.791	-0.283	-0.44	HL
BQ9AGD		16.163	0.932	0.75	8.374	0.300	0.47	BJ
D9Z3TN		13.919	-1.311	-1.05	7.711	-0.363	-0.56	BH
DBR297		13.288	-1.943	-1.56	7.393	-0.681	-1.06	BH
EKK5U1		13.545	-1.685	-1.35	7.378	-0.696	-1.08	HC
GZJN3Q		14.529	-0.701	-0.56	7.371	-0.703	-1.09	HL
HEUGEZ		15.413	0.182	0.15	8.298	0.224	0.35	BJ
LGCR53		16.888	1.657	1.33	8.283	0.209	0.32	BJ
NMK4PS		15.613	0.382	0.31	8.078	0.004	0.01	BJ
NUM9G2		15.913	0.682	0.55	8.628	0.554	0.86	BJ
YUFYJS		16.150	0.920	0.74	8.953	0.879	1.37	BJ
ZEKXML		15.588	0.357	0.29	8.506	0.432	0.67	MA

Summary Statistics			
Grand Means	15.2302	Percent	8.0739
			Percent
Std Dev Btwn Labs	1.2440	Percent	0.6432
			Percent
Statistics based on 22 of 22 reporting participants			

Sample D59: LDPE & Sample D60: LDPE

Plastics Interlaboratory Testing Program
Analysis 785
Percent Haze of Film

Instrument Code List as Reported by the Labs

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

(BJ) - BYK-Gardner Haze-Gard Plus

(BT) - BYK Gardner TCS Plus Spectrophotometer

(HC) - Hunterlab ColorQuest

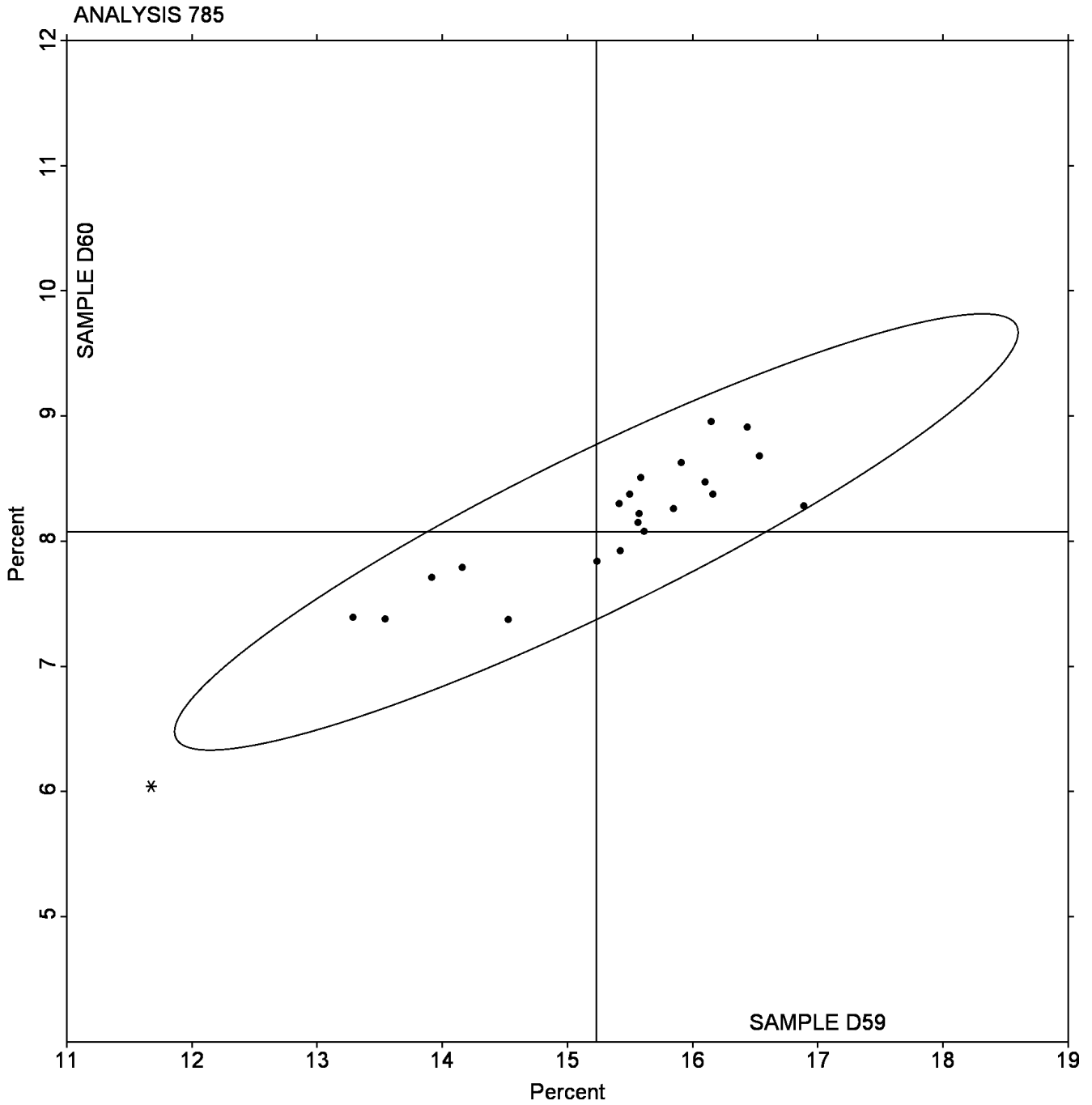
(HL) - Hunterlab Ultrascan XE

(MA) - Macbeth 7000A

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

Plastics Interlaboratory Testing Program
Analysis 785
Percent Haze of Film

Grand Mean Sample D59: 15.230 Percent Grand Mean Sample D60: 8.0739 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 786**

Total Luminous transmittance of film

WebCode	Data Flag	Sample D59			Sample D60			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
76LV47		94.54	1.40	1.16	94.44	1.30	1.22	BJ
8GYRRC		94.60	1.46	1.21	94.41	1.28	1.19	BJ
8NAX4A		93.25	0.11	0.09	93.30	0.16	0.15	XX
914YRG		93.25	0.11	0.09	93.39	0.25	0.23	BJ
95V4TE		94.14	1.00	0.82	94.06	0.93	0.86	BJ
C365QZ		90.51	-2.63	-2.18	90.97	-2.17	-2.03	HL
G3SYRZ		93.85	0.71	0.59	93.88	0.74	0.69	BJ
GG6X9Z		93.36	0.22	0.18	93.41	0.28	0.26	BJ
HFKS46		93.60	0.46	0.38	93.58	0.44	0.41	BJ
HH3JSJ		92.23	-0.92	-0.76	92.50	-0.64	-0.60	BH
HJDDEA		93.35	0.21	0.17	92.73	-0.41	-0.39	BT
LF7D5U		94.84	1.70	1.41	94.22	1.08	1.01	HC
M2TATQ		94.01	0.87	0.72	94.08	0.94	0.88	BJ
MC7GES		92.99	-0.15	-0.13	92.85	-0.29	-0.27	BJ
RVGRSE		93.11	-0.03	-0.02	93.69	0.55	0.51	XX
TVL6VC		90.97	-2.17	-1.80	91.44	-1.70	-1.59	HL
UKJWA9		91.96	-1.18	-0.98	91.91	-1.22	-1.14	BJ
V1BK3Q		91.99	-1.15	-0.96	91.63	-1.51	-1.41	MA

Summary Statistics			
Grand Means	93.142	Percent	93.137
			Percent
Std Dev Btwn Labs	1.207	Percent	1.070
			Percent
Statistics based on 18 of 18 reporting participants			

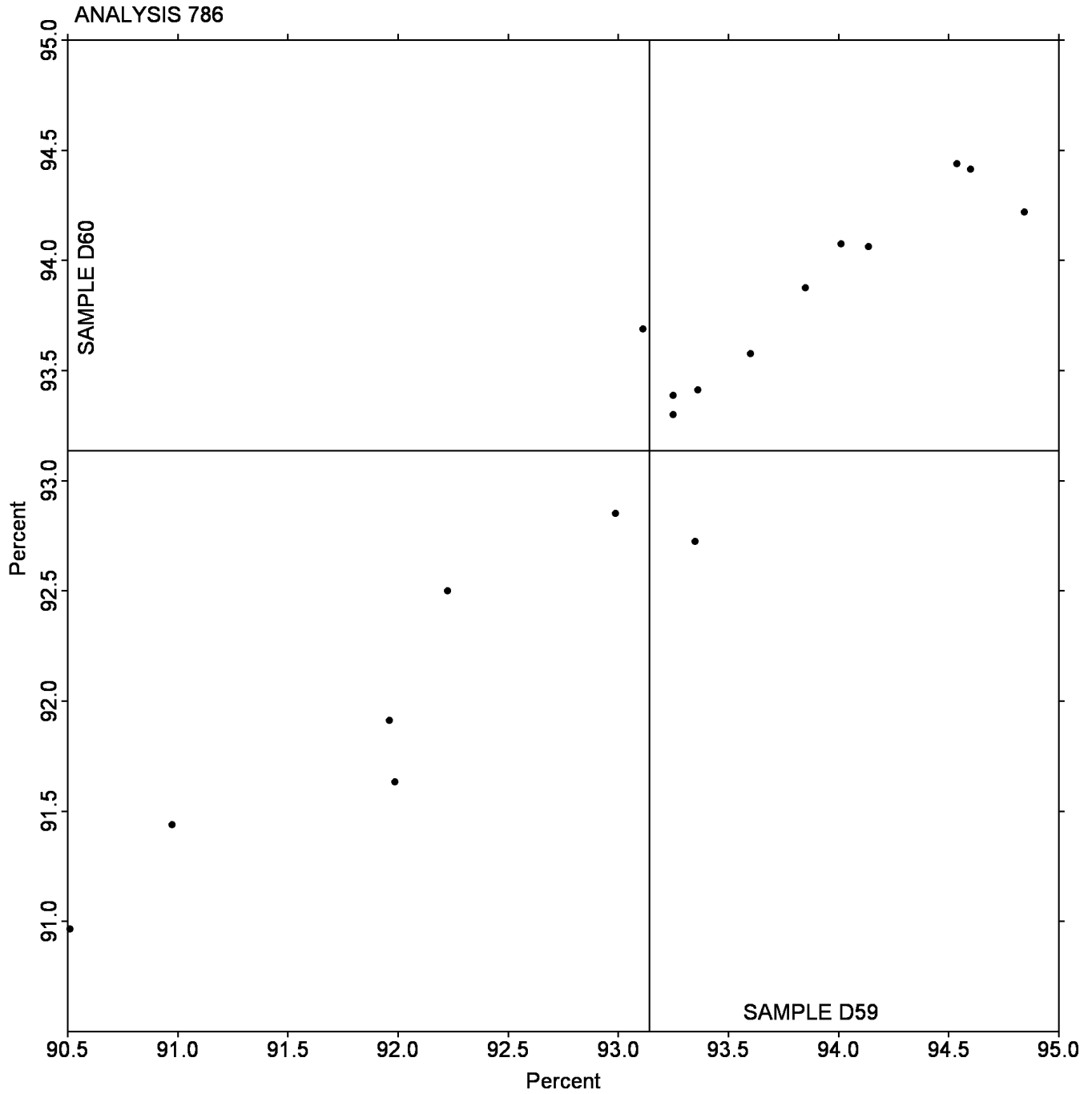
Sample D59: LDPE & Sample D60: LDPE

Instrument Code List as Reported by the Labs

- | | |
|--|-----------------------------------|
| (BH) - BYK-Gardner/Pacific Scientific Model XL-211 | (BJ) - BYK-Gardner Haze-Gard Plus |
| (BT) - BYK Gardner TCS Plus Spectrophotometer | (HC) - Hunterlab ColorQuest |
| (HL) - Hunterlab Ultrascan XE | (MA) - Macbeth 7000A |
| (XX) - Instrument make/model not specified by lab | |

Plastics Interlaboratory Testing Program
Analysis 786
Total Luminous transmittance of film

Grand Mean Sample D59: 93.142 Percent Grand Mean Sample D60: 93.137 Percent



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