

## Plastics Interlaboratory Testing Program

### Web Summary Report #90, 2nd Qtr 2014

[About CTS and the Plastics Interlaboratory Program](#)

[Key for Web Summary Report](#)

[Results Summary for this Report](#)

Analysis	Analysis Name	Analysis	Analysis Name
<a href="#">704</a>	<a href="#">Tensile Stress at Yield, Plastic Samples</a>	<a href="#">718</a>	<a href="#">Specific Gravity</a>
<a href="#">705</a>	<a href="#">Tensile Stress at Break, Plastic Samples</a>	<a href="#">755</a>	<a href="#">Moisture Content of Plastics</a>
<a href="#">706</a>	<a href="#">Percent Elongation at Yield, Plastic Samples</a>	<a href="#">757</a>	<a href="#">Ash Content in Thermoplastics</a>
<a href="#">708</a>	<a href="#">Modulus of Elasticity, Plastic Samples</a>	<a href="#">770</a>	<a href="#">Tensile Stress at Yield, Film Samples</a>
<a href="#">730</a>	<a href="#">Tensile Stress at Yield, ISO Plastic Samples</a>	<a href="#">771</a>	<a href="#">Tensile Stress at Break, Film Samples</a>
<a href="#">731</a>	<a href="#">Tensile Stress at Break, ISO Plastic Samples</a>	<a href="#">772</a>	<a href="#">Percent Elongation at Yield, Film Samples</a>
<a href="#">732</a>	<a href="#">Percent Strain at Yield, ISO Plastic Samples</a>	<a href="#">773</a>	<a href="#">Percent Elongation at Break, Film Samples</a>
<a href="#">734</a>	<a href="#">Modulus of Elasticity, ISO Plastic Samples</a>	<a href="#">774</a>	<a href="#">Thickness of Film Tensile Samples</a>
<a href="#">720</a>	<a href="#">Flexural Modulus</a>	<a href="#">775</a>	<a href="#">Secant Modulus at 1% Strain</a>
<a href="#">721</a>	<a href="#">Flexural Stress at 5% Strain</a>	<a href="#">776</a>	<a href="#">Secant Modulus at 2% Strain</a>
<a href="#">722</a>	<a href="#">Flexural Stress at Yield</a>	<a href="#">780</a>	<a href="#">Coefficient of Friction: Static</a>
<a href="#">736</a>	<a href="#">Flexural Modulus, ISO Plastic Samples</a>	<a href="#">781</a>	<a href="#">Coefficient of Friction: Kinetic</a>
<a href="#">737</a>	<a href="#">Flexural Stress at 3.5% Strain</a>	<a href="#">782</a>	<a href="#">Tear Resistance of Films</a>
<a href="#">738</a>	<a href="#">Flexural Stress at Yield</a>	<a href="#">785</a>	<a href="#">Optical Properties of Films - Percent Haze</a>
<a href="#">790</a>	<a href="#">Notched Izod Impact</a>	<a href="#">786</a>	<a href="#">Optical Properties of Films: % Transmittance</a>
<a href="#">792</a>	<a href="#">Notched Charpy Impact, ISO Plastic Samples</a>	<a href="#">791</a>	<a href="#">Notched Izod Impact (ISO)</a>
<a href="#">710</a>	<a href="#">Deflection Temp. Under Flexural Load (1.82 MPa)</a>		
<a href="#">711</a>	<a href="#">Deflection Temp. Under Flexural Load (0.455 MPa)</a>		
<a href="#">712</a>	<a href="#">Temp. of Deflection Under Flexural Load 1.80 MPa</a>		
<a href="#">715</a>	<a href="#">Vicat Softening Temperature (Rate A)</a>		
<a href="#">716</a>	<a href="#">Vicat Softening Temperature (Rate B)</a>		
<a href="#">750</a>	<a href="#">Flow Rates of Thermoplastics (2.16 kg load)</a>		

## About CTS and the Plastics Interlaboratory Program

Founded in 1971, Collaborative Testing Services, Inc. (CTS) is a privately-owned company that specializes in interlaboratory tests for a wide variety of industries, including rubber, plastics, fasteners and metals, containerboard, paper, color and wine, as well as proficiency tests for forensic laboratories. All of the tests are designed to assist organizations in achieving and maintaining quality control objectives. Labs from the U.S., as well as more than 80 countries currently participate in CTS programs.

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

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

For each test there is a summary of the statistics for the analysis and a graphical representation of the data. Also shown are notes concerning specific laboratory results, as well as significant findings related to instrument types or other testing variations. Refer to the KEY FOR SUMMARY REPORT for an explanation of terms and guidelines for interpreting the results.

For further information contact:

COLLABORATIVE TESTING SERVICES, INC.  
21331 Gentry Drive  
Sterling, VA 20166  
Phone: (571) 434-1925  
FAX: (571) 434-1937  
e-mail: [plastics@cts-interlab.com](mailto:plastics@cts-interlab.com)

Office Hours: 8:00 a.m. - 4:30 p.m. ET

## Key for Web Summary Report (Page 1 of 2)

<b>WebCode</b>	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.
<b>Lab Mean</b>	The average of the test results obtained by the participant.
<b>Grand Mean</b>	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.
<b>Difference from Grand Mean</b>	The difference of the LAB MEAN from the GRAND MEAN.
<b>Between-Lab Standard Deviation</b>	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).
<b>Comparative Performance Value</b>	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.
<b>Inst Code</b>	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.
<b>Data Flag</b>	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	<b>CAUTION</b> - 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	<b>STOP</b> - 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	<b>PROCEED</b> - 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 #90

## Plastics Interlaboratory Testing Program

---

### Analysis 704 - Tensile Stress at Yield

Material: HIPS	Sample F19	3,583.90	psi	3.57% COV
	Sample F20	4,193.27	psi	3.48% COV

### Analysis 705 - Tensile Stress at Break

Material: HIPS	Sample F19	3,939.28	psi	4.35% COV
	Sample F20	3,372.03	psi	4.86% COV

### Analysis 706 - Percent Elongation at Yield

Material: HIPS	Sample F19	1.6395	Percent	9.16% COV
	Sample F20	1.5565	Percent	7.88% COV

### Analysis 708 - Modulus of Elasticity

Material: HIPS	Sample F19	278.45	ksi	5.26% COV
	Sample F20	320.13	ksi	5.39% COV

### Analysis 730 - Tensile Stress at Yield, ISO Method

Material: ABS	Sample C19	48.513	MPa	1.73% COV
	Sample C20	48.457	MPa	1.71% COV

### Analysis 731 - Tensile Stress at Break, ISO Method

Material: ABS	Sample C19	34.760	MPa	5.36% COV
	Sample C20	34.624	MPa	5.01% COV

### Analysis 732 - Strain at Yield, ISO Method

Material: ABS	Sample C19	2.6794	Percent	2.60% COV
	Sample C20	2.6792	Percent	2.70% COV

### Analysis 734 - Modulus of Elasticity, ISO Method

Material: ABS	Sample C19	2,376.53	MPa	4.68% COV
	Sample C20	2,386.51	MPa	4.55% COV

### Analysis 720 - Flexural Modulus

Material: HIPS	Sample J19	319.19	ksi	5.43% COV
	Sample J20	326.86	ksi	5.31% COV

### Analysis 721 - Flexural Stress at 5% Strain

Material: HIPS	Sample J19	6,232.03	psi	3.67% COV
	Sample J20	6,285.04	psi	3.19% COV

### Analysis 722 - Flexural Stress at Yield

Material: HIPS	Sample J19	6,248.47	psi	3.40% COV
	Sample J20	6,321.25	psi	3.03% COV

### Analysis 736 - Flexural Modulus

Material: HIPS	Sample K19	2,134.06	MPa	3.04% COV
	Sample K20	2,134.52	MPa	3.05% COV

### Analysis 737 - Flexural Stress at 3.5% Strain

Material: HIPS	Sample K19	42.223	MPa	2.15% COV
	Sample K20	42.316	MPa	2.15% COV

# Results Summary for Web Summary Report #90

## Plastics Interlaboratory Testing Program

### Analysis 738 - Flexural Stress at Yield

Material: HIPS	Sample K19	42.412	MPa	2.18% COV
	Sample K20	42.517	MPa	2.25% COV

### Analysis 790 - Notched Izod Impact

Material: ABS/PC	Sample S19	8.5571	ft.lbf/in	12.5% COV
	Sample S20	8.4996	ft.lbf/in	11.9% COV

### Analysis 792 - Notched Charpy Impact

Material: HIPS	Sample M19	12.808	kJ/m <sup>2</sup>	4.85% COV
	Sample M20	12.828	kJ/m <sup>2</sup>	4.78% COV

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

Material: HIPS	Sample E19	78.941	Degrees C	1.41% COV
	Sample E20	79.009	Degrees C	1.45% COV

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

Material: PP	Sample G19	76.613	Degrees C	2.88% COV
	Sample G20	77.399	Degrees C	2.66% COV

### Analysis 712 - Temperature of Deflection (1.80 MPa)

Material: ABS/PC	Sample N19	78.864	Degrees C	1.27% COV
	Sample N20	79.110	Degrees C	1.42% COV

### Analysis 715 - Vicat Temperature (Rate A)

Material: ABS	Sample H19	105.45	Degrees C	0.817% COV
	Sample H20	105.40	Degrees C	0.818% COV

### Analysis 716 - Vicat Temperature (Rate B)

Material: ABS	Sample R19	106.93	Degrees C	1.02% COV
	Sample R20	106.86	Degrees C	1.01% COV

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

Material: PP	Sample X19	4.9884	grams/10 mins	7.50% COV
	Sample X20	4.9940	grams/10 mins	7.06% COV

### Analysis 718 - Specific Gravity

Material: HIPS	Sample T19	1.0295	sp gr 23/23 C	0.182% COV
	Sample T20	1.0325	sp gr 23/23 C	0.193% COV

### Analysis 757 - Ash Content

Material: PP	Sample L19	39.813	Percent	0.334% COV
	Sample L20	39.868	Percent	0.344% COV

### Analysis 770 - Tensile Stress at Yield, Films

Material: LDPE	Sample B19	1,631.47	psi	5.91% COV
	Sample B20	1,612.78	psi	5.74% COV

### Analysis 771 - Tensile Stress at Break, Films

Material: LDPE	Sample B19	3,051.88	psi	7.49% COV
	Sample B20	3,086.70	psi	7.02% COV

# Results Summary for Web Summary Report #90

## Plastics Interlaboratory Testing Program

### Analysis 772 - Elongation at Yield, Films

Material: LDPE	Sample B19	28.948	Percent	70.2% COV
	Sample B20	28.463	Percent	68.2% COV

### Analysis 773 - Elongation at Break, Films

Material: LDPE	Sample B19	755.47	Percent	25.5% COV
	Sample B20	781.59	Percent	26.5% COV

### Analysis 774 - Thickness of Film Specimens

Material: LDPE	Sample B19	3.9782	mils	2.18% COV
	Sample B20	3.9506	mils	1.87% COV

### Analysis 775 - Secant Modulus at 1% Strain

Material: LDPE	Sample B19	30,865.24	psi	9.09% COV
	Sample B20	31,081.41	psi	8.78% COV

### Analysis 776 - Secant Modulus at 2% Strain

Material: LDPE	Sample B19	26,203.78	psi	6.34% COV
	Sample B20	26,313.42	psi	6.56% COV

### Analysis 780 - Static Friction

Material: LDPE	Sample P19	0.13781	COF	34.6% COV
	Sample P20	0.13256	COF	32.7% COV

### Analysis 781 - Kinetic Friction

Material: LDPE	Sample P19	0.09798	COF	32.8% COV
	Sample P20	0.09069	COF	36.4% COV

### Analysis 782 - Tear Resistance of Film

Material: LDPE	Sample Q19	750.41	grams-force	10.3% COV
	Sample Q20	740.46	grams-force	12.5% COV

### Analysis 785 - Percent Haze

Material: LDPE	Sample D19	15.161	Percent	4.25% COV
	Sample D20	15.150	Percent	3.72% COV

### Analysis 786 - Total Transmittance

Material: LDPE	Sample D19	91.942	Percent	1.52% COV
	Sample D20	92.032	Percent	1.48% COV

### Analysis 755 - Moisture Content

Material: ABS	Sample Y19	0.17047	Percent	15.0% COV
	Sample Y20	0.17174	Percent	12.6% COV

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

WebCode	Data Flag	Sample F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2476QY		3,590.6	6.7	0.05	4,250.2	56.9	0.39
2FKBTE		3,653.0	69.1	0.54	4,293.2	99.9	0.68
2GALGL		3,400.6	-183.3	-1.43	4,008.6	-184.7	-1.26
2PK26A	X	4,181.4	597.5	4.67	4,284.6	91.3	0.63
2TLGXA		3,414.2	-169.7	-1.33	3,957.4	-235.9	-1.62
3Q2CXX		3,537.8	-46.1	-0.36	4,147.4	-45.9	-0.31
487DQZ	*	3,554.4	-29.5	-0.23	4,329.2	135.9	0.93
496MQV		3,706.5	122.6	0.96	4,337.4	144.1	0.99
4A4JNG	X	2,769.6	-814.3	-6.37	3,273.0	-920.3	-6.30
4GA6UF		3,645.4	61.5	0.48	4,273.2	79.9	0.55
4TLVVB	X	2,881.4	-702.5	-5.49	3,378.6	-814.7	-5.58
7BQYRE		3,391.0	-192.9	-1.51	3,921.9	-271.4	-1.86
7ELD37		3,890.0	306.1	2.39	4,514.0	320.7	2.20
8QD4MR		3,467.6	-116.3	-0.91	4,046.2	-147.1	-1.01
93L2W8		3,556.4	-27.5	-0.22	4,113.3	-80.0	-0.55
977R9G		3,600.8	16.9	0.13	4,233.3	40.0	0.27
9BGU4H		3,424.9	-159.0	-1.24	3,917.0	-276.3	-1.89
9MCKWD	X	3,801.0	217.1	1.70	4,200.2	6.9	0.05
A3PCJD		3,495.4	-88.5	-0.69	4,084.6	-108.7	-0.74
AK9ELJ		3,468.8	-115.1	-0.90	4,063.4	-129.9	-0.89
BDH2TP		3,810.8	226.9	1.77	4,458.8	265.5	1.82
BXFL9F		3,578.6	-5.3	-0.04	4,319.0	125.7	0.86
C7GRXZ		3,484.6	-99.3	-0.78	4,082.7	-110.6	-0.76
C7TGU6		3,541.9	-42.0	-0.33	4,155.7	-37.6	-0.26
CA2DCG		3,665.8	81.9	0.64	4,302.6	109.3	0.75
DDFJ8D		3,762.8	178.9	1.40	4,386.8	193.5	1.33
DGCNMX		3,734.4	150.5	1.18	4,398.0	204.7	1.40
DV66VX		3,562.2	-21.7	-0.17	4,031.5	-161.8	-1.11
EH7DLR		3,647.0	63.1	0.49	4,265.0	71.7	0.49
EJHZWU		3,541.4	-42.5	-0.33	4,170.0	-23.3	-0.16
EP49L6		3,520.0	-63.9	-0.50	4,164.6	-28.7	-0.20
F49UV6		3,520.7	-63.2	-0.49	4,174.3	-19.0	-0.13



## Analysis 704

## Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
F7HVWV		3,522.5	-61.4	-0.48	4,213.4	20.1	0.14
FDKTL4	*	3,911.8	327.9	2.56	4,449.2	255.9	1.75
FNJMWF		3,601.0	17.1	0.13	4,209.8	16.5	0.11
FZADHB		3,570.9	-13.0	-0.10	4,153.9	-39.3	-0.27
GJALRJ		3,564.2	-19.7	-0.15	4,090.8	-102.5	-0.70
HZBEQW		3,511.0	-72.9	-0.57	4,166.8	-26.5	-0.18
J8NT4J		3,622.0	38.1	0.30	4,238.4	45.1	0.31
L7NAFP		3,707.2	123.3	0.96	4,375.5	182.3	1.25
L7R4ZX	*	3,198.4	-385.5	-3.01	3,758.6	-434.7	-2.98
L82MY Y	X	3,828.0	244.1	1.91	3,150.6	-1,042.7	-7.14
LKHN6R	X	3,714.7	130.8	1.02	4,532.6	339.4	2.32
LTAN73		3,710.8	126.9	0.99	4,362.8	169.5	1.16
NYNX2D		3,644.8	60.9	0.48	4,250.4	57.1	0.39
PFK7JA		3,682.8	98.9	0.77	4,339.4	146.1	1.00
PQ74LM		3,323.8	-260.1	-2.03	3,922.0	-271.3	-1.86
PVE4QP		3,584.2	0.3	0.00	4,265.6	72.3	0.50
QBNC7J		3,645.8	61.9	0.48	4,219.8	26.5	0.18
QEQ69W		3,631.5	47.6	0.37	4,254.3	61.0	0.42
QHYB86		3,467.0	-116.9	-0.91	3,946.2	-247.0	-1.69
R8RWHN		3,672.1	88.2	0.69	4,249.4	56.1	0.38
TB9LLD	*	3,740.0	156.1	1.22	4,196.0	2.7	0.02
UE6DP4	X	3,696.4	112.5	0.88	3,701.9	-491.3	-3.37
UEXFWT		3,669.5	85.6	0.67	4,261.2	68.0	0.47
UP322W		3,695.8	111.9	0.87	4,324.0	130.7	0.90
UUTV2T		3,734.6	150.7	1.18	4,355.8	162.5	1.11
UZMARD		3,555.7	-28.2	-0.22	4,196.9	3.6	0.02
VDUJED		3,502.2	-81.7	-0.64	4,097.6	-95.7	-0.66
WE3FFL		3,461.0	-122.9	-0.96	4,085.4	-107.9	-0.74
WVAH9Q	X	4,105.6	521.7	4.08	4,303.4	110.1	0.75
WZAT93		3,691.2	107.3	0.84	4,259.2	66.0	0.45
XAY94L		3,608.6	24.7	0.19	4,229.3	36.1	0.25
XQXBLY		3,487.1	-96.7	-0.76	4,134.7	-58.6	-0.40

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

WebCode	Data Flag	Sample F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XTVRX8		3,412.2	-171.7	-1.34	4,029.6	-163.7	-1.12
YH2M23		3,484.4	-99.5	-0.78	4,103.2	-90.1	-0.62
YUFFV4		3,466.0	-117.9	-0.92	4,114.0	-79.3	-0.54
YUNP6T		3,690.0	106.1	0.83	4,276.2	82.9	0.57
YWUFBJ	X	2,824.4	-759.5	-5.94	3,409.2	-784.1	-5.37
ZH72F8		3,677.9	94.0	0.73	4,196.6	3.3	0.02
ZKFKTY		3,623.4	39.5	0.31	4,264.6	71.3	0.49
ZV4HKL		3,546.8	-37.1	-0.29	4,186.0	-7.3	-0.05

**Summary Statistics**

Grand Means

3,583.90 psi

4,193.27 psi

Std Dev Btwn Labs

127.92 psi

145.99 psi

Statistics based on 63 of 72 reporting participants

Sample F19: HIPS &amp; Sample F20: HIPS

**Comments on assigned Data Flags for Test #704**

2PK26A (X) - Inconsistent in testing between samples, data for Sample F19 are high. Also Inconsistent in testing within Sample F19.

4A4JNG (X) - Data for both samples are low.

4TLVVB (X) - Data for both samples are low. Also Inconsistent in testing within Sample F20.

9MCKWD (X) - Inconsistent in testing between samples and inconsistent in testing within Sample F20.

L82MY Y (X) - Inconsistent in testing between samples, data for Sample F20 are low. Also Inconsistent in testing within both samples.

LKH N6R (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

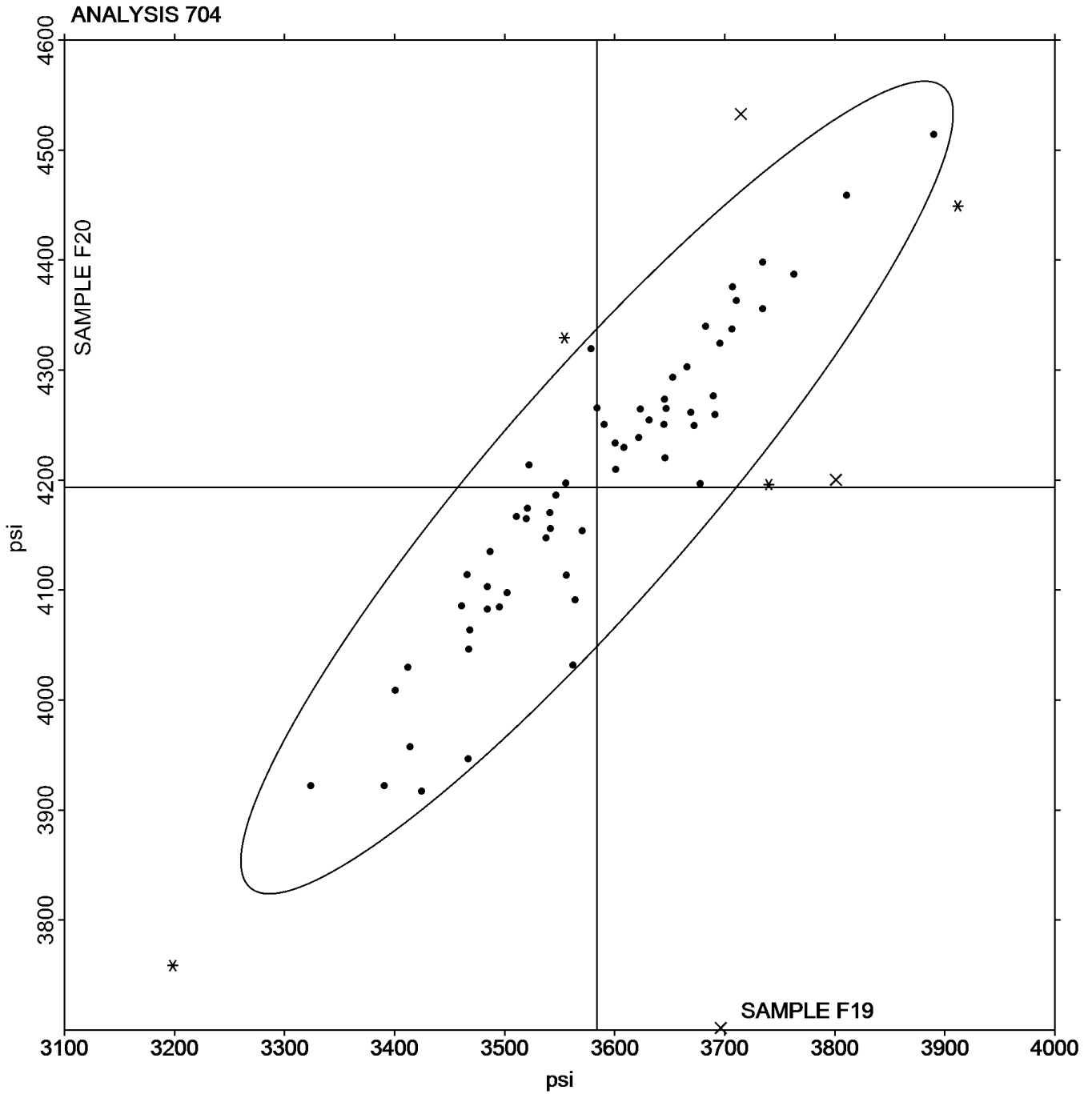
UE6DP4 (X) - Inconsistent in testing between samples, data for Sample F20 are low. Also Inconsistent in testing within both samples.

WVAH9Q (X) - Inconsistent in testing between samples, data for Sample F19 are high. Also Inconsistent in testing within Sample F19.

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

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

Grand Mean Sample F19: 3,583.90 psi    Grand Mean Sample F20: 4,193.27 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 F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2476QY		3,919.8	-19.5	-0.11	3,350.4	-21.6	-0.13
2FKBTE		3,949.4	10.1	0.06	3,566.6	194.6	1.19
2GALGL		3,926.4	-12.9	-0.08	3,271.6	-100.4	-0.61
2TLGXA		3,948.0	8.7	0.05	3,303.6	-68.4	-0.42
3Q2CXX		3,910.2	-29.1	-0.17	3,242.8	-129.2	-0.79
487DQZ		3,933.4	-5.9	-0.03	3,577.2	205.2	1.25
496MQV		4,051.3	112.0	0.65	3,509.1	137.0	0.84
4A4JNG	*	3,689.6	-249.7	-1.46	2,954.8	-417.2	-2.55
4GA6UF		3,802.0	-137.3	-0.80	3,402.4	30.4	0.19
4TLVVB		3,631.8	-307.5	-1.80	3,114.8	-257.2	-1.57
7BQYRE		3,704.3	-235.0	-1.37	3,161.9	-210.2	-1.28
7ELD37		4,180.0	240.7	1.41	3,502.0	130.0	0.79
8QD4MR		3,654.0	-285.3	-1.67	3,279.2	-92.8	-0.57
93L2W8		3,889.9	-49.3	-0.29	3,318.5	-53.5	-0.33
977R9G		4,000.9	61.6	0.36	3,459.7	87.6	0.53
9BGU4H		3,925.5	-13.7	-0.08	3,305.4	-66.6	-0.41
9MCKWD		4,081.8	142.5	0.83	3,561.4	189.4	1.16
A3PCJD		3,807.6	-131.7	-0.77	3,273.0	-99.1	-0.60
AK9ELJ		3,918.7	-20.6	-0.12	3,284.0	-88.1	-0.54
BDH2TP		4,157.7	218.4	1.28	3,639.9	267.9	1.63
BXFL9F		3,915.2	-24.1	-0.14	3,501.8	129.8	0.79
C7GRXZ		3,585.8	-353.5	-2.06	3,042.8	-329.2	-2.01
C7TGU6		4,020.8	81.5	0.48	3,334.2	-37.9	-0.23
CA2DCG		4,008.2	68.9	0.40	3,373.6	1.6	0.01
DDFJ8D		4,168.8	229.5	1.34	3,583.8	211.8	1.29
DV66VX		4,104.9	165.6	0.97	3,380.3	8.3	0.05
EH7DLR		4,099.6	160.3	0.94	3,416.2	44.2	0.27
EJHZWU		3,931.4	-7.9	-0.05	3,433.0	61.0	0.37
EP49L6		4,102.6	163.3	0.95	3,459.2	87.2	0.53
F49UV6		3,999.7	60.5	0.35	3,461.0	89.0	0.54
F7HVWV		3,969.4	30.1	0.18	3,446.4	74.4	0.45
FNJMWF		4,053.0	113.7	0.66	3,425.6	53.6	0.33

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

WebCode	Data Flag	Sample F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FZADHB		3,707.2	-232.1	-1.36	3,248.9	-123.2	-0.75
GJALRJ		3,964.8	25.5	0.15	3,418.2	46.2	0.28
J8NT4J		3,991.0	51.7	0.30	3,447.4	75.4	0.46
L7NAFP		3,949.1	9.8	0.06	3,451.1	79.0	0.48
L7R4ZX	*	3,520.7	-418.6	-2.44	2,966.1	-406.0	-2.48
L82MY Y	X	3,836.4	-102.9	-0.60	4,094.4	722.4	4.41
LKHN6R		4,078.9	139.6	0.82	3,658.1	286.1	1.75
LTAN73		4,191.8	252.5	1.47	3,543.6	171.6	1.05
NYNX2D		4,037.2	97.9	0.57	3,425.6	53.6	0.33
PFK7JA		4,006.2	66.9	0.39	3,433.4	61.4	0.37
PQ74LM		3,813.6	-125.7	-0.73	3,371.4	-0.6	0.00
PVE4QP		3,981.0	41.7	0.24	3,456.0	84.0	0.51
QBNC7J		3,884.2	-55.1	-0.32	3,358.0	-14.0	-0.09
QEQ69W		4,104.0	164.7	0.96	3,389.6	17.5	0.11
QHYB86		3,979.3	40.0	0.23	3,439.2	67.1	0.41
R8RWHN		3,829.3	-110.0	-0.64	3,296.4	-75.6	-0.46
RH28JE		3,957.9	18.6	0.11	3,320.3	-51.7	-0.32
UE6DP4	X	3,019.8	-919.5	-5.37	2,983.1	-389.0	-2.37
UEXFWT		4,037.9	98.6	0.58	3,678.2	306.2	1.87
UP322W		4,039.4	100.1	0.58	3,469.2	97.2	0.59
UUTV2T		4,145.6	206.3	1.20	3,477.6	105.6	0.64
UZMARD		3,996.2	56.9	0.33	3,439.3	67.3	0.41
WE3FFL	*	3,509.6	-429.7	-2.51	3,079.8	-292.2	-1.78
WZAT93		4,121.8	182.5	1.07	3,419.2	47.2	0.29
XAY94L		3,950.9	11.6	0.07	3,376.5	4.5	0.03
XTVRX8		3,580.0	-359.3	-2.10	3,086.0	-286.0	-1.74
YH2M23		3,972.6	33.3	0.19	3,346.0	-26.0	-0.16
YUFFV4		3,998.0	58.7	0.34	3,212.0	-160.0	-0.98
YUNP6T		4,162.0	222.7	1.30	3,510.6	138.6	0.85
YWUFBJ	*	3,544.6	-394.7	-2.30	2,927.0	-445.0	-2.71
ZH72F8		4,114.2	174.9	1.02	3,329.5	-42.5	-0.26
ZKFKTY		4,039.0	99.7	0.58	3,455.2	83.2	0.51

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

WebCode	Data Flag	Sample F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ZV4HKL		3,925.2	-14.1	-0.08	3,472.4	100.4	0.61

**Summary Statistics**

Grand Means

3,939.28 psi

3,372.03 psi

Std Dev Btwn Labs

171.26 psi

163.92 psi

Statistics based on 63 of 65 reporting participants

Sample F19: HIPS &amp; Sample F20: HIPS

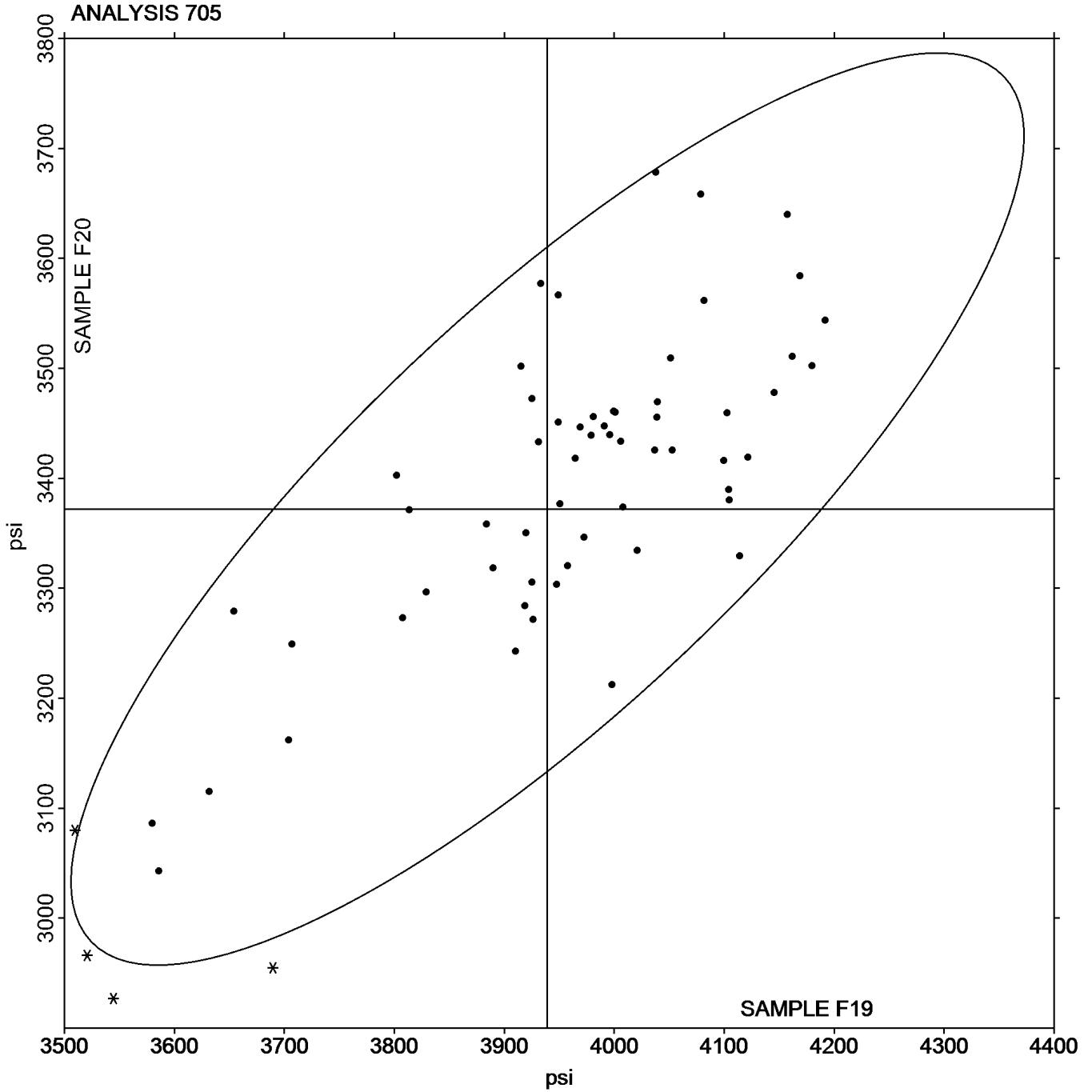
**Comments on assigned Data Flags for Test #705**

L82MY (X) - Inconsistent in testing between samples, data for Sample F20 are high.

UE6DP4 (X) - Inconsistent in testing between samples, data for Sample F19 are low.

Analysis 705  
Tensile Stress at Break - psi

Grand Mean Sample F19: 3,939.28 psi    Grand Mean Sample F20: 3,372.03 psi



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

## Analysis 706

## Percent Elongation at Yield - Percent

WebCode	Data Flag	Sample F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2476QY		1.576	-0.064	-0.42	1.528	-0.028	-0.23
2FKBTE		1.716	0.076	0.51	1.620	0.064	0.52
2PK26A		1.656	0.016	0.11	1.562	0.006	0.04
2TLGXA		1.370	-0.270	-1.80	1.404	-0.152	-1.24
3Q2CXX		1.692	0.052	0.35	1.588	0.032	0.26
487DQZ	*	2.070	0.430	2.87	1.794	0.238	1.94
4A4JNG	*	1.296	-0.344	-2.29	1.202	-0.354	-2.89
4GA6UF		1.742	0.102	0.68	1.650	0.094	0.76
4TLVVB	*	1.350	-0.290	-1.93	1.244	-0.312	-2.55
7BQYRE		1.540	-0.100	-0.66	1.510	-0.046	-0.38
7ELD37		1.668	0.028	0.19	1.602	0.046	0.37
8QD4MR		1.680	0.040	0.27	1.500	-0.056	-0.46
93L2W8		1.678	0.038	0.26	1.730	0.174	1.41
977R9G	X	0.808	-0.832	-5.54	0.608	-0.948	-7.73
9BGU4H	X	0.520	-1.120	-7.46	0.600	-0.956	-7.80
9MCKWD		1.408	-0.232	-1.54	1.394	-0.162	-1.32
A3PCJD		1.632	-0.008	-0.05	1.542	-0.014	-0.12
AK9ELJ		1.934	0.294	1.96	1.698	0.142	1.15
BDH2TP		1.568	-0.072	-0.48	1.560	0.004	0.03
BXFL9F		1.510	-0.130	-0.86	1.486	-0.070	-0.57
C7GRXZ		1.654	0.014	0.10	1.568	0.012	0.09
C7TGU6		1.658	0.018	0.12	1.586	0.030	0.24
CA2DCG		1.638	-0.002	-0.01	1.582	0.026	0.21
DDFJ8D		1.776	0.136	0.91	1.716	0.160	1.30
DGCNMX		1.626	-0.014	-0.09	1.578	0.022	0.18
EH7DLR	X	45.040	43.400	289.13	26.800	25.244	205.75
EJHZWU		1.576	-0.064	-0.42	1.578	0.022	0.18
EP49L6		1.664	0.024	0.16	1.426	-0.130	-1.06
F49UV6	X	4.000	2.360	15.73	4.000	2.444	19.92
F7HVWV	X	98.596	96.956	645.92	65.796	64.240	523.58
FDKTL4		1.660	0.020	0.14	1.600	0.044	0.35
FNJMWF		1.848	0.208	1.39	1.700	0.144	1.17



## Analysis 706

## Percent Elongation at Yield - Percent

WebCode	Data Flag	Sample F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FZADHB		1.740	0.100	0.67	1.620	0.064	0.52
GJALRJ		1.902	0.262	1.75	1.642	0.086	0.70
HZBEQW		1.528	-0.112	-0.74	1.466	-0.090	-0.74
J8NT4J		1.720	0.080	0.54	1.640	0.084	0.68
L7NAFP		1.660	0.020	0.14	1.604	0.048	0.39
L7R4ZX	X	2.614	0.974	6.49	2.338	0.782	6.37
LKHN6R		1.644	0.004	0.03	1.590	0.034	0.27
LTAN73		1.706	0.066	0.44	1.626	0.070	0.57
NYNX2D		1.782	0.142	0.95	1.772	0.216	1.76
PVE4QP		1.608	-0.032	-0.21	1.568	0.012	0.09
QBNC7J		1.624	-0.016	-0.10	1.574	0.018	0.14
QEQ69W		1.678	0.038	0.26	1.580	0.024	0.19
R8RWHN		1.717	0.077	0.51	1.608	0.052	0.42
UE6DP4		1.456	-0.183	-1.22	1.491	-0.065	-0.53
UEXFWT	*	1.642	0.002	0.02	1.376	-0.180	-1.47
UP322W		1.682	0.042	0.28	1.586	0.030	0.24
UUTV2T		1.668	0.028	0.19	1.604	0.048	0.39
UZMARD	X	1.162	-0.478	-3.18	1.068	-0.488	-3.98
VDUJED		1.660	0.020	0.14	1.534	-0.022	-0.18
WE3FFL	X	21.202	19.562	130.33	7.830	6.274	51.13
WVAH9Q	X	60.820	59.180	394.26	46.500	44.944	366.31
XAY94L		1.506	-0.134	-0.89	1.466	-0.090	-0.74
XTVRX8		1.570	-0.070	-0.46	1.454	-0.102	-0.84
YUNP6T		1.700	0.060	0.40	1.640	0.084	0.68
YWUFBJ	*	1.194	-0.446	-2.97	1.208	-0.348	-2.84
ZH72F8		1.692	0.052	0.35	1.600	0.044	0.35
ZKFKTY		1.652	0.012	0.08	1.564	0.008	0.06
ZV4HKL		1.698	0.058	0.39	1.620	0.064	0.52

## Analysis 706

## Percent Elongation at Yield - Percent

## Summary Statistics

Grand Means

1.6395 Percent

1.5565 Percent

Std Dev Btwn Labs

0.1501 Percent

0.1227 Percent

Statistics based on 51 of 60 reporting participants

Sample F19: HIPS &amp; Sample F20: HIPS

**Comments on assigned Data Flags for Test #706**

977R9G (X) - Data for both samples are low.

9BGU4H (X) - Data for both samples are low.

EH7DLR (X) - Extremely high data for all samples. Also Inconsistent in testing within both samples.

F49UV6 (X) - Data for both samples are high.

F7HVWV (X) - Extremely high data for all samples. Also Inconsistent in testing within both samples.

L7R4ZX (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

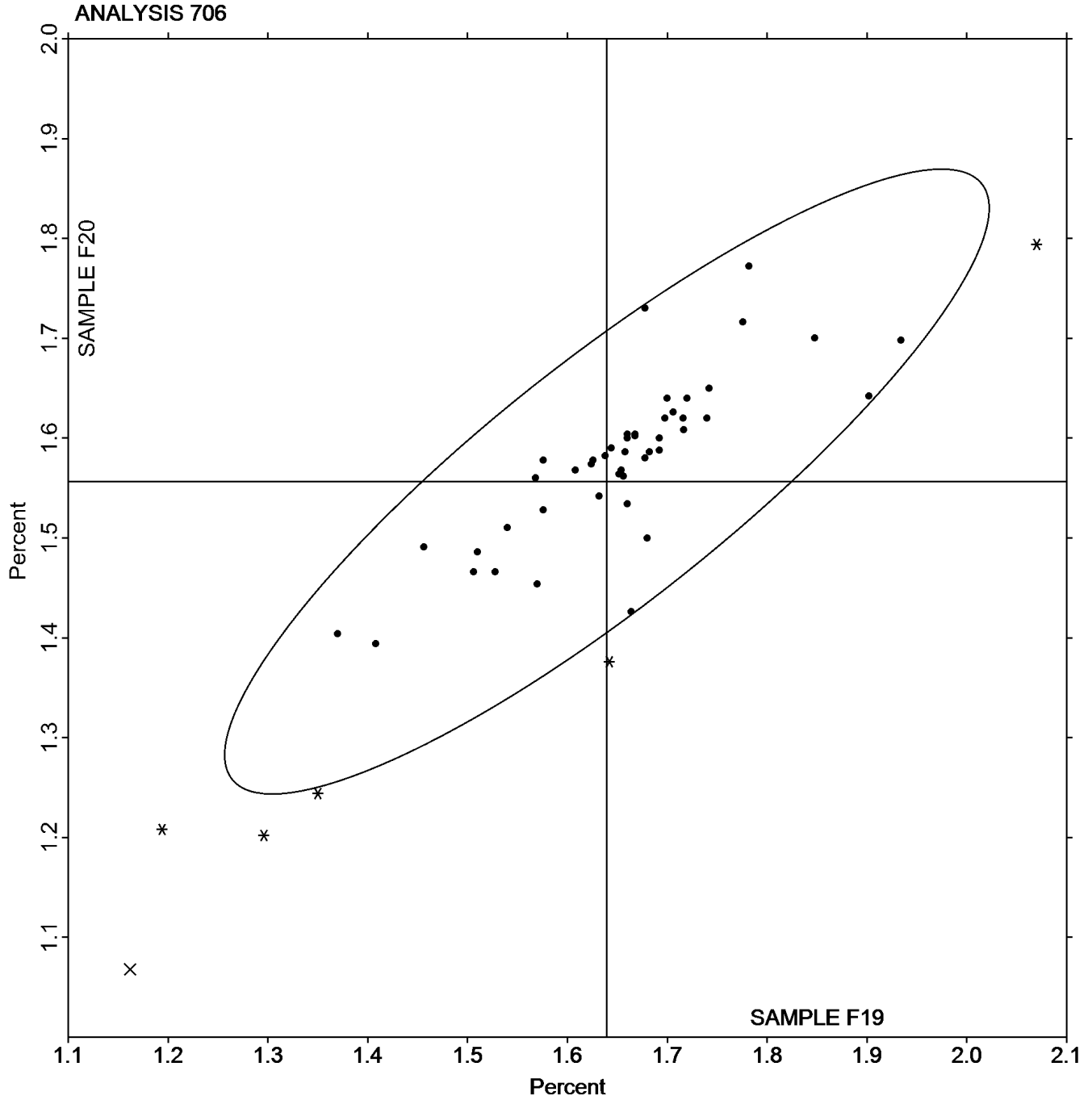
UZMARD (X) - Data for both samples are low.

WE3FFL (X) - Extremely high data for all samples. Also Inconsistent in testing within both samples.

WVAH9Q (X) - Extremely high data for all samples. Also Inconsistent in testing within both samples.

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

Grand Mean Sample F19: 1.6395 Percent    Grand Mean Sample F20: 1.5565 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 F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2476QY		268.96	-9.49	-0.65	311.40	-8.73	-0.51
2FKBTE		277.10	-1.35	-0.09	321.44	1.31	0.08
2TLGXA		273.84	-4.61	-0.31	317.22	-2.91	-0.17
3Q2CXX		272.30	-6.15	-0.42	316.12	-4.01	-0.23
487DQZ		248.20	-30.25	-2.07	287.80	-32.33	-1.87
4GA6UF		274.34	-4.11	-0.28	313.00	-7.13	-0.41
4TLVVB		267.86	-10.59	-0.72	297.06	-23.07	-1.34
7BQYRE		260.49	-17.96	-1.23	299.07	-21.06	-1.22
7ELD37		283.00	4.55	0.31	317.00	-3.13	-0.18
8QD4MR		277.00	-1.45	-0.10	318.80	-1.33	-0.08
93L2W8	X	260.49	-17.96	-1.23	268.90	-51.23	-2.97
977R9G	X	351.65	73.20	5.00	328.94	8.80	0.51
9BGU4H	X	687.26	408.81	27.91	652.55	332.42	19.25
9MCKWD		289.72	11.27	0.77	343.76	23.63	1.37
A3PCJD		282.27	3.83	0.26	320.88	0.75	0.04
AK9ELJ	X	35.67	-242.78	-16.57	275.80	-44.34	-2.57
BDH2TP		293.85	15.40	1.05	336.06	15.92	0.92
C7GRXZ		270.44	-8.01	-0.55	309.20	-10.94	-0.63
C7TGU6		283.81	5.36	0.37	321.99	1.85	0.11
CA2DCG		288.84	10.39	0.71	329.34	9.21	0.53
DGCNMX		291.43	12.98	0.89	334.56	14.43	0.84
EH7DLR	*	286.95	8.50	0.58	316.41	-3.72	-0.22
EJHZWU		261.36	-17.09	-1.17	303.26	-16.87	-0.98
F49UV6	*	317.61	39.16	2.67	363.49	43.35	2.51
F7HVWV	X	101.06	-177.39	-12.11	114.94	-205.19	-11.88
FDKTL4		268.40	-10.05	-0.69	308.74	-11.39	-0.66
FNJMWF		261.40	-17.05	-1.16	302.92	-17.21	-1.00
FZADHB	X	281.38	2.93	0.20	289.21	-30.92	-1.79
GJALRJ	X	253.13	-25.32	-1.73	328.05	7.92	0.46
HZBEQW		302.14	23.69	1.62	344.46	24.33	1.41
J8NT4J		269.04	-9.41	-0.64	311.92	-8.21	-0.48
L7NAFP		284.15	5.70	0.39	322.40	2.27	0.13

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

WebCode	Data Flag	Sample F19			Sample F20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LKHN6R		286.46	8.01	0.55	340.30	20.17	1.17
LTAN73		294.78	16.33	1.11	347.64	27.51	1.59
NYNX2D		279.14	0.69	0.05	318.72	-1.41	-0.08
PVE4QP		285.70	7.25	0.49	322.16	2.03	0.12
QBNC7J		278.74	0.29	0.02	315.38	-4.75	-0.28
QEQ69W		276.42	-2.03	-0.14	313.26	-6.88	-0.40
R8RWHN		301.36	22.91	1.56	355.37	35.24	2.04
TB9LLD		275.10	-3.35	-0.23	321.36	1.23	0.07
UE6DP4	X	317.29	38.84	2.65	301.72	-18.41	-1.07
UEXFWT		254.31	-24.14	-1.65	293.94	-26.20	-1.52
UUTV2T		271.46	-6.99	-0.48	314.18	-5.95	-0.34
VDUJED		268.90	-9.55	-0.65	308.14	-11.99	-0.69
WE3FFL		293.37	14.92	1.02	342.07	21.94	1.27
XAY94L		273.14	-5.31	-0.36	311.75	-8.39	-0.49
XTVRX8		297.94	19.49	1.33	339.22	19.09	1.11
YUNP6T		257.60	-20.85	-1.42	304.00	-16.13	-0.93
YWUFBJ	X	314.04	35.59	2.43	310.48	-9.65	-0.56
ZH72F8		253.06	-25.39	-1.73	291.59	-28.55	-1.65
ZKFKTY		297.72	19.27	1.32	342.10	21.97	1.27
ZV4HKL		273.62	-4.83	-0.33	316.22	-3.91	-0.23

Summary Statistics	
Grand Means	278.449 ksi      320.132 ksi
Std Dev Btwn Labs	14.648 ksi      17.266 ksi
Statistics based on 43 of 52 reporting participants	

Sample F19: HIPS & Sample F20: HIPS

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

---

**Comments on assigned Data Flags for Test #708**

93L2W8 (X) - Inconsistent in testing between samples, data for Sample F20 are low.

977R9G (X) - Inconsistent in testing between samples, data for Sample F19 are high. Also Inconsistent in testing within Sample F20.

9BGU4H (X) - Data for both samples are high. Also Inconsistent in testing within Sample F19.

AK9ELJ (X) - Inconsistent in testing between samples, data for Sample F19 are low.

F7HVWV (X) - Data for both samples are low.

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

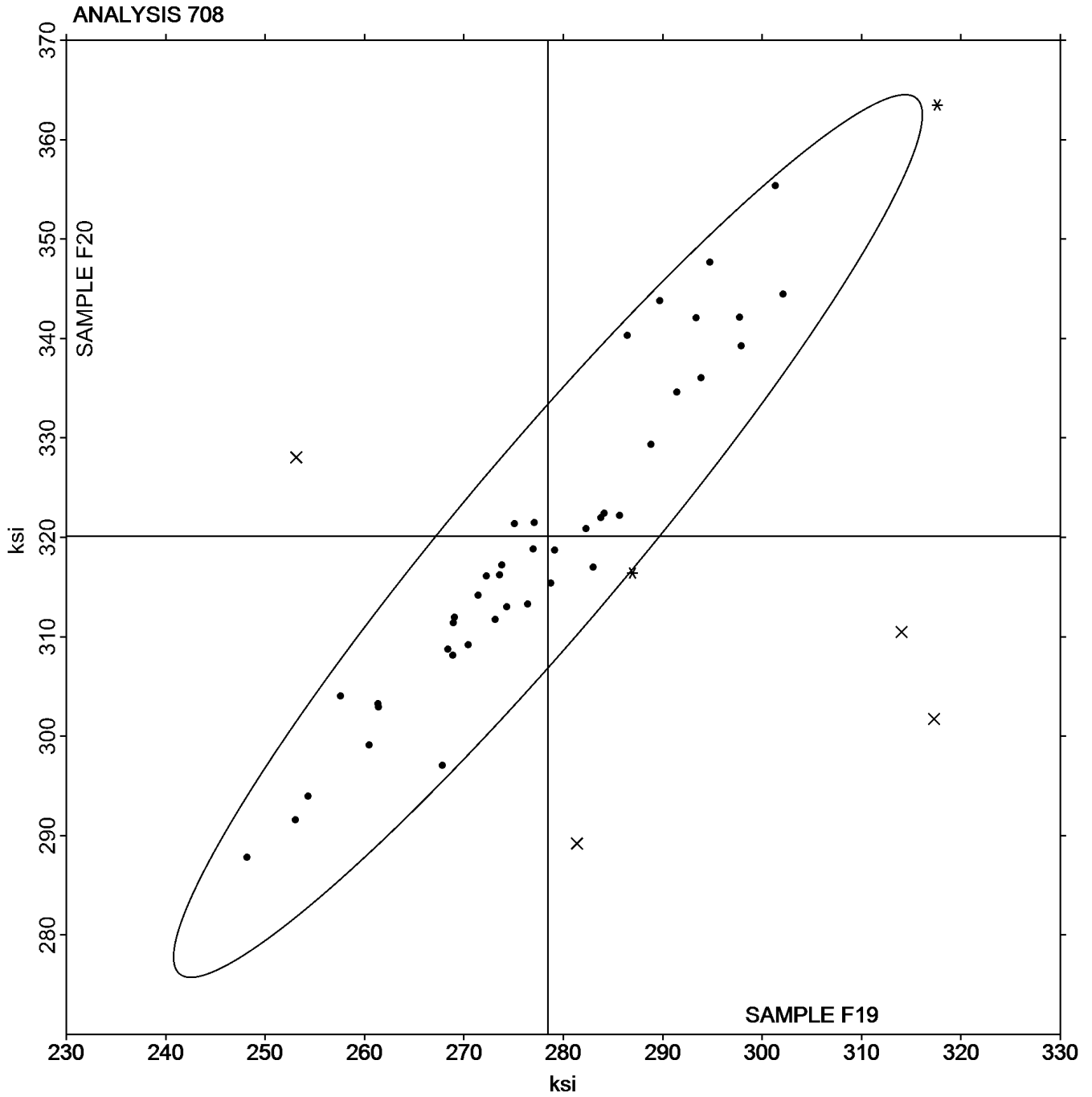
GJALRJ (X) - Inconsistent in testing between samples and inconsistent in testing within Sample F20.

UE6DP4 (X) - Inconsistent in testing between samples.

YWUFBJ (X) - Inconsistent in testing between samples.

Plastics Interlaboratory Testing Program  
Analysis 708  
Modulus of Elasticity - ksi

Grand Mean Sample F19: 278.45 ksi    Grand Mean Sample F20: 320.13 ksi



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 730**  
**Tensile Stress at Yield - MPa**

WebCode	Data Flag	Sample C19			Sample C20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2FKBTE		47.79	-0.73	-0.87	48.07	-0.39	-0.47
2PK26A		48.88	0.37	0.44	48.61	0.16	0.19
3JVXDA		48.74	0.23	0.27	48.90	0.45	0.54
3KMKKF		49.86	1.35	1.60	49.80	1.34	1.62
3LNAC6		49.12	0.61	0.73	49.30	0.85	1.02
3Q2CXX		47.67	-0.84	-1.01	47.80	-0.65	-0.79
4WDTGM		49.80	1.29	1.53	49.64	1.19	1.43
64PBH7		47.25	-1.27	-1.51	47.03	-1.43	-1.72
67DYNE		48.92	0.41	0.49	48.92	0.46	0.56
683T6B		47.77	-0.74	-0.88	47.44	-1.02	-1.23
6HFXAK		47.19	-1.32	-1.57	47.38	-1.07	-1.30
7CJBRV		46.47	-2.04	-2.43	46.60	-1.86	-2.24
7ELD37	*	51.00	2.49	2.96	51.00	2.54	3.07
7NCEQ7		49.30	0.79	0.94	49.17	0.71	0.86
7TPZPP		48.15	-0.36	-0.43	48.29	-0.17	-0.20
7WMFAL		48.16	-0.35	-0.42	48.14	-0.32	-0.38
8XV336	X	48.98	0.46	0.55	47.86	-0.59	-0.71
8YBHME		47.57	-0.94	-1.12	47.15	-1.31	-1.58
A8ZUQ8	X	45.70	-2.81	-3.34	43.85	-4.61	-5.56
BPXUKE	*	49.36	0.85	1.01	48.56	0.10	0.12
BQMV9W		49.11	0.60	0.71	49.29	0.83	1.00
CK48NY		49.10	0.59	0.70	49.04	0.58	0.70
D6VLQV		48.43	-0.09	-0.10	48.26	-0.19	-0.24
DMGYPB		48.25	-0.26	-0.31	48.49	0.04	0.04
DY8WAR	*	50.02	1.50	1.79	49.21	0.75	0.91
EVUM6J		48.24	-0.27	-0.33	48.24	-0.21	-0.26
F66PFJ		48.67	0.16	0.19	48.98	0.52	0.63
FL996T		48.43	-0.09	-0.10	48.42	-0.03	-0.04
HHZHRJ		48.64	0.13	0.15	48.30	-0.16	-0.19
JH88A9		48.49	-0.03	-0.03	48.48	0.03	0.03
JQQJNL		48.39	-0.12	-0.15	48.37	-0.09	-0.10
L7NAFP		48.80	0.29	0.34	48.76	0.30	0.36



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

WebCode	Data Flag	Sample C19			Sample C20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LTAN73		48.93	0.42	0.50	49.51	1.05	1.27
LXPWTZ		48.79	0.28	0.33	48.42	-0.03	-0.04
MTEQYH		48.21	-0.30	-0.36	48.18	-0.27	-0.33
P79NQV		49.24	0.73	0.86	49.42	0.96	1.16
PD7GLH		47.60	-0.91	-1.09	47.98	-0.48	-0.57
PU8T3H		49.15	0.64	0.76	48.87	0.41	0.49
QCZL2F		49.05	0.54	0.64	48.92	0.47	0.56
QEQ69W		49.30	0.79	0.94	49.17	0.72	0.86
QKKGW3		46.94	-1.57	-1.87	46.58	-1.88	-2.26
RLEA3R		47.15	-1.36	-1.62	47.69	-0.76	-0.92
RPK6NF		48.83	0.32	0.38	48.84	0.38	0.46
TZD89X		48.42	-0.09	-0.11	48.52	0.06	0.08
UMZJD6		50.46	1.95	2.32	50.38	1.92	2.32
W6F7PT		48.35	-0.16	-0.20	48.02	-0.44	-0.53
WEY2LX		48.32	-0.19	-0.23	48.36	-0.09	-0.11
WHA9T6		48.47	-0.04	-0.05	48.18	-0.28	-0.34
WZAT93		48.63	0.12	0.14	48.83	0.38	0.45
XAY94L		47.49	-1.02	-1.22	47.36	-1.10	-1.32
XD72AU		48.31	-0.20	-0.24	48.13	-0.33	-0.39
XGEB4A		48.15	-0.37	-0.44	48.10	-0.36	-0.43
XNJNBT		48.36	-0.15	-0.18	47.76	-0.69	-0.84
YUFFV4		48.08	-0.43	-0.52	47.80	-0.66	-0.79
YVUEUX	X	46.96	-1.55	-1.85	48.54	0.08	0.10
YW6RMP		47.91	-0.61	-0.72	47.96	-0.50	-0.60
ZBZVHB		48.02	-0.49	-0.58	48.27	-0.18	-0.22
ZFUCUW		48.52	0.01	0.01	48.22	-0.24	-0.29
ZH72F8		48.47	-0.04	-0.05	48.45	0.00	0.00

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

---

Summary Statistics	
Grand Means	
48.513 MPa	48.457 MPa
Std Dev Btwn Labs	
0.840 MPa	0.830 MPa
Statistics based on 56 of 59 reporting participants	

Sample C19: ABS & Sample C20: ABS

**Comments on assigned Data Flags for Test #730**

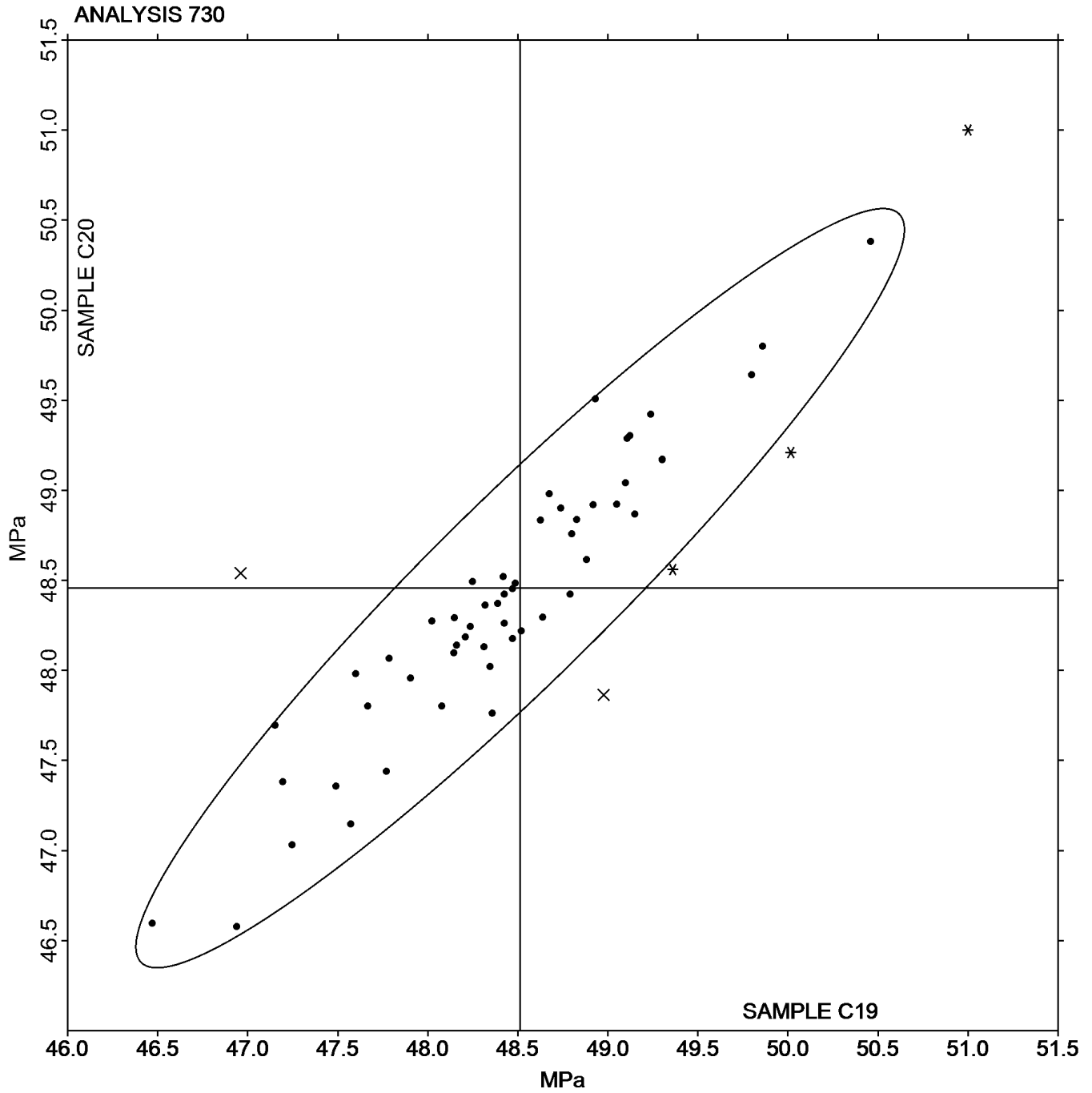
8XV336 (X) - Inconsistent in testing between samples.

A8ZUQ8 (X) - Data for both samples are low. Also Inconsistent in testing within both samples.

YVUEUX (X) - Inconsistent in testing between samples.

Analysis 730  
Tensile Stress at Yield - MPa

Grand Mean Sample C19: 48.513 MPa    Grand Mean Sample C20: 48.457 MPa



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

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

WebCode	Data Flag	Sample C19			Sample C20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2FKBTE	*	33.87	-0.89	-0.48	35.76	1.13	0.65
3JVXDA		37.30	2.54	1.36	37.38	2.76	1.59
3KMKKF		36.14	1.38	0.74	36.06	1.44	0.83
3LNAC6		31.87	-2.89	-1.55	32.04	-2.58	-1.49
3Q2CXX		34.91	0.15	0.08	34.82	0.20	0.11
4WDTGM		34.30	-0.46	-0.25	34.48	-0.14	-0.08
67DYNE		33.12	-1.64	-0.88	33.82	-0.80	-0.46
6HFXAK		34.87	0.11	0.06	34.31	-0.31	-0.18
7CJBRV		34.32	-0.44	-0.24	34.90	0.28	0.16
7ELD37		37.80	3.04	1.63	36.40	1.78	1.02
7NCEQ7		32.96	-1.80	-0.97	33.02	-1.61	-0.93
7TPZPP		35.12	0.36	0.19	34.44	-0.18	-0.11
7WMFAL		33.72	-1.04	-0.56	33.62	-1.00	-0.58
8XV336		35.52	0.76	0.41	34.23	-0.39	-0.23
8YBHME		37.03	2.27	1.22	38.04	3.41	1.97
A8ZUQ8	*	30.38	-4.38	-2.35	30.04	-4.58	-2.64
BPXUKE		37.34	2.58	1.38	37.02	2.40	1.38
CK48NY		35.90	1.14	0.61	35.90	1.28	0.74
D6VLQV		33.92	-0.84	-0.45	34.06	-0.56	-0.32
DMGYPB		34.28	-0.48	-0.26	33.83	-0.80	-0.46
DY8WAR		36.03	1.27	0.68	35.92	1.29	0.75
EVUM6J		38.94	4.18	2.24	38.50	3.88	2.24
F66PFJ		35.54	0.78	0.42	35.66	1.03	0.60
FL996T		34.47	-0.29	-0.16	34.86	0.23	0.14
HHZHRJ		34.48	-0.28	-0.15	34.02	-0.60	-0.35
JH88A9		35.92	1.16	0.62	34.80	0.18	0.10
JQQJNL		34.32	-0.44	-0.24	34.13	-0.49	-0.28
L7NAFP		33.16	-1.60	-0.86	33.38	-1.25	-0.72
LTAN73		34.54	-0.22	-0.12	35.30	0.67	0.39
MTEQYH		36.05	1.29	0.69	34.95	0.33	0.19
PD7GLH		35.06	0.30	0.16	35.68	1.06	0.61
QCZL2F		34.74	-0.02	-0.01	33.81	-0.81	-0.47

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

WebCode	Data Flag	Sample C19			Sample C20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
QEQ69W		33.89	-0.87	-0.47	33.88	-0.75	-0.43
QKKGW3		36.46	1.70	0.91	35.95	1.33	0.77
RLEA3R		32.10	-2.66	-1.43	32.21	-2.41	-1.39
RPK6NF		36.39	1.63	0.87	35.89	1.26	0.73
TZD89X		32.10	-2.66	-1.43	31.78	-2.84	-1.64
UMZJD6		36.02	1.26	0.68	35.48	0.86	0.49
W6F7PT		34.71	-0.05	-0.03	34.55	-0.08	-0.04
WEY2LX		32.01	-2.75	-1.47	32.10	-2.53	-1.46
WHA9T6	*	39.52	4.76	2.55	38.24	3.61	2.08
WZAT93		34.55	-0.21	-0.11	33.72	-0.90	-0.52
X8FYC9	X	51.12	16.36	8.78	51.06	16.44	9.48
XAY94L		32.50	-2.26	-1.21	32.77	-1.86	-1.07
XD72AU		33.32	-1.44	-0.77	34.11	-0.52	-0.30
XGEB4A	*	37.33	2.57	1.38	35.35	0.73	0.42
XNJNBT		31.75	-3.01	-1.62	31.11	-3.51	-2.03
YVUEUX		34.66	-0.10	-0.05	35.56	0.94	0.54
YW6RMP		33.50	-1.26	-0.68	34.84	0.22	0.13
ZBZVHB		35.18	0.42	0.22	34.14	-0.49	-0.28
ZFUCUW		33.30	-1.46	-0.78	32.90	-1.72	-0.99
ZH72F8		35.55	0.79	0.43	36.05	1.42	0.82

Summary Statistics	
Grand Means	34.760 MPa                      34.624 MPa
Stnd Dev Btwn Labs	1.863 MPa                              1.734 MPa
Statistics based on 51 of 52 reporting participants	

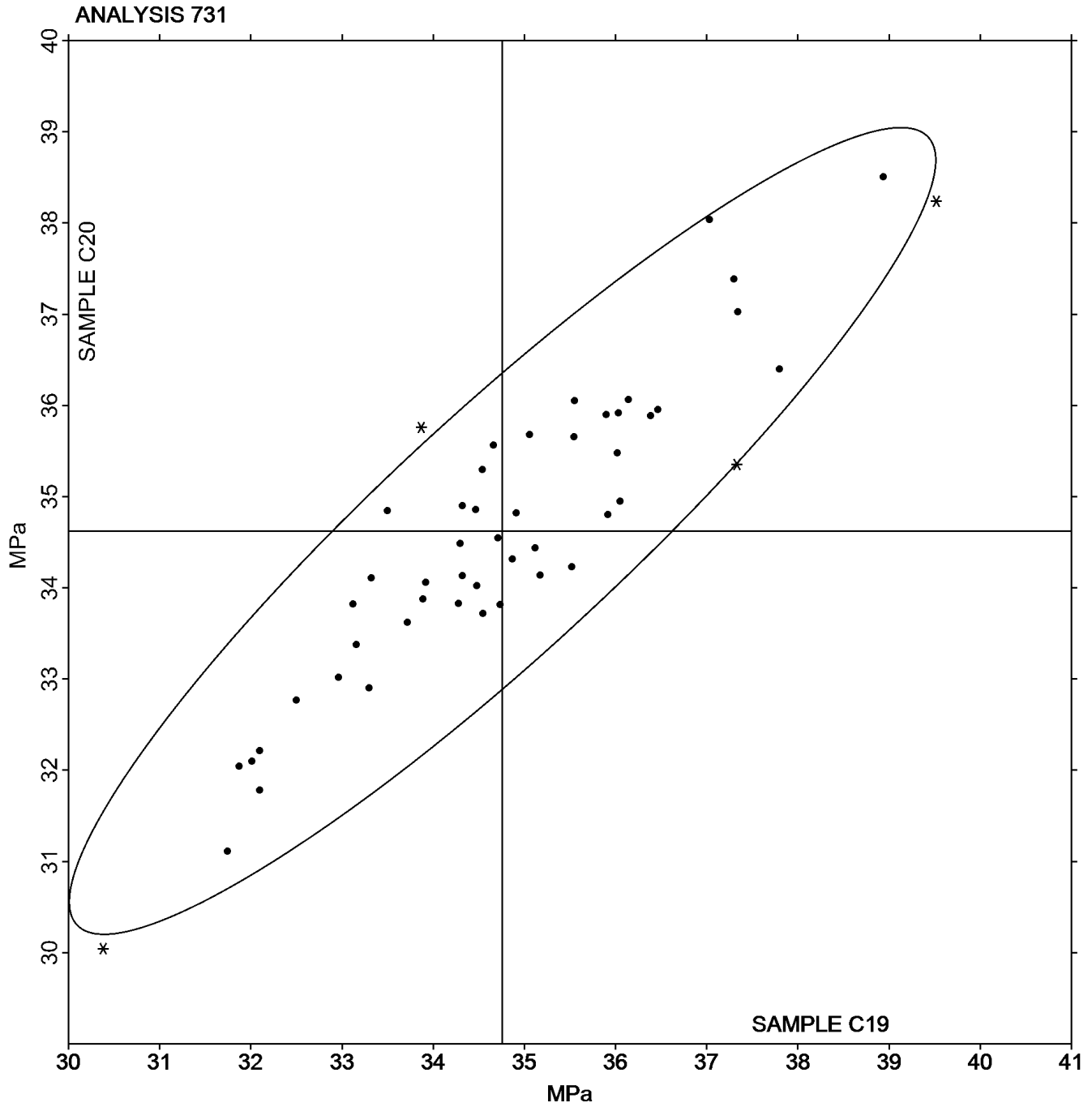
Sample C19: ABS & Sample C20: ABS

**Comments on assigned Data Flags for Test #731**

X8FYC9 (X) - Data for both samples are high.

Analysis 731  
Tensile Stress at Break - MPa

Grand Mean Sample C19: 34.760 MPa    Grand Mean Sample C20: 34.624 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 C19			Sample C20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2FKBTE		2.684	0.005	0.07	2.682	0.003	0.04
2PK26A		2.604	-0.075	-1.08	2.562	-0.117	-1.62
3JVXDA		2.640	-0.039	-0.56	2.626	-0.053	-0.73
3KMKKF		2.722	0.043	0.61	2.740	0.061	0.84
3LNAC6		2.618	-0.061	-0.88	2.612	-0.067	-0.93
3Q2CXX		2.550	-0.130	-1.86	2.561	-0.118	-1.63
4WDTGM		2.794	0.115	1.64	2.780	0.101	1.39
64PBH7		2.550	-0.129	-1.85	2.540	-0.139	-1.92
67DYNE		2.620	-0.059	-0.85	2.620	-0.059	-0.82
6HFXAK		2.760	0.081	1.16	2.764	0.085	1.17
7CJBRV		2.740	0.061	0.87	2.754	0.075	1.03
7ELD37		2.736	0.057	0.81	2.758	0.079	1.09
7NCEQ7		2.704	0.025	0.35	2.696	0.017	0.23
7TPZPP		2.578	-0.101	-1.45	2.616	-0.063	-0.88
7WMFAL		2.700	0.021	0.30	2.700	0.021	0.29
8XV336		2.728	0.049	0.70	2.626	-0.053	-0.73
8YBHME		2.753	0.074	1.06	2.804	0.125	1.72
A8ZUQ8	X	4.138	1.459	20.90	4.028	1.349	18.63
BPXUKE		2.664	-0.015	-0.22	2.608	-0.071	-0.98
BQMV9W		2.668	-0.011	-0.16	2.644	-0.035	-0.49
CK48NY		2.684	0.005	0.07	2.686	0.007	0.09
D6VLQV		2.585	-0.094	-1.35	2.678	-0.001	-0.02
DMGYPB		2.706	0.027	0.38	2.704	0.025	0.34
DY8WAR	X	2.814	0.135	1.93	2.664	-0.015	-0.21
EVUM6J		2.672	-0.007	-0.11	2.674	-0.005	-0.07
F66PFJ	X	2.468	-0.211	-3.03	2.846	0.167	2.30
FL996T		2.778	0.099	1.41	2.738	0.059	0.81
HHZHRJ		2.688	0.009	0.12	2.684	0.005	0.07
JH88A9		2.636	-0.043	-0.62	2.634	-0.045	-0.62
JQQJNL		2.642	-0.037	-0.54	2.646	-0.033	-0.46
L7NAFP		2.702	0.023	0.32	2.684	0.005	0.07
LTAN73		2.686	0.007	0.09	2.734	0.055	0.76

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

WebCode	Data Flag	Sample C19			Sample C20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
MTEQYH	X	2.442	-0.237	-3.40	2.358	-0.321	-4.44
PD7GLH		2.612	-0.067	-0.97	2.626	-0.053	-0.73
PU8T3H		2.756	0.077	1.10	2.738	0.059	0.82
QCZL2F		2.834	0.155	2.22	2.850	0.171	2.36
QEQ69W		2.702	0.023	0.32	2.708	0.029	0.40
QKKGW3		2.610	-0.069	-0.99	2.682	0.003	0.04
RLEA3R		2.572	-0.107	-1.54	2.660	-0.019	-0.27
RPK6NF		2.573	-0.106	-1.52	2.542	-0.138	-1.90
TZD89X		2.720	0.041	0.58	2.620	-0.059	-0.82
UMZJD6		2.620	-0.059	-0.85	2.700	0.021	0.29
W6F7PT		2.812	0.133	1.90	2.818	0.139	1.92
WEY2LX		2.740	0.061	0.87	2.748	0.069	0.95
WHA9T6		2.636	-0.043	-0.62	2.588	-0.091	-1.26
XAY94L		2.590	-0.089	-1.28	2.582	-0.097	-1.34
XD72AU		2.678	-0.001	-0.02	2.608	-0.071	-0.98
XGEB4A		2.742	0.063	0.90	2.686	0.007	0.09
XNJBNT		2.648	-0.031	-0.45	2.692	0.013	0.18
YVUEUX	X	2.760	0.081	1.16	2.920	0.241	3.33
ZBZVHB		2.718	0.039	0.55	2.740	0.061	0.84
ZFUCUW		2.724	0.045	0.64	2.714	0.035	0.48
ZH72F8		2.730	0.051	0.73	2.744	0.065	0.90

Summary Statistics			
Grand Means	2.6794	Percent	2.6792
Std Dev Btwn Labs	0.0698	Percent	0.0724
Statistics based on 48 of 53 reporting participants			

Sample C19: ABS & Sample C20: ABS



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

---

**Comments on assigned Data Flags for Test #732**

A8ZUQ8 (X) - Data for both samples are high. Also Inconsistent in testing within Sample C20.

DY8WAR (X) - Inconsistent in testing between samples.

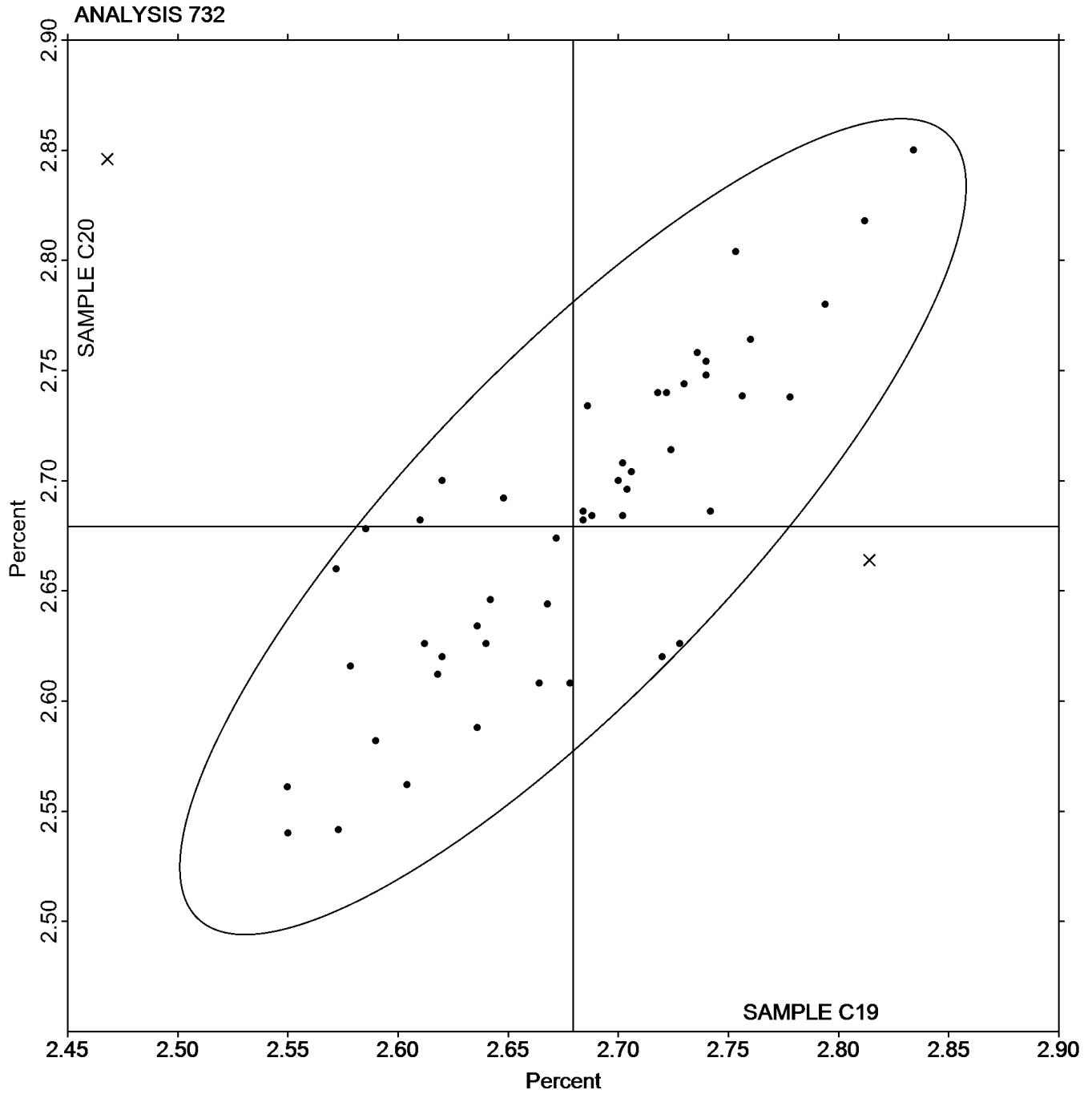
F66PFJ (X) - Inconsistent in testing between samples, data for Sample C19 are low. Also Inconsistent in testing within Sample C20.

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

YVUEUX (X) - Inconsistent in testing between samples, data for Sample C20 are high. Also Inconsistent in testing within both samples.

Analysis 732  
Percent Strain at Yield

Grand Mean Sample C19: 2.6794 Percent    Grand Mean Sample C20: 2.6792 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 C19			Sample C20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2FKBTE		2,336	-40	-0.36	2,348	-38	-0.35
3JVXDA		2,445	69	0.62	2,471	85	0.78
3KMKKF		2,356	-21	-0.18	2,345	-42	-0.38
3LNAC6		2,570	193	1.73	2,557	171	1.57
3Q2CXX		2,515	138	1.24	2,513	126	1.17
4WDTGM		2,307	-70	-0.62	2,305	-82	-0.75
64PBH7		2,436	59	0.53	2,420	33	0.31
67DYNE		2,337	-40	-0.36	2,344	-43	-0.39
6HFXAK	X	2,284	-93	-0.83	2,156	-230	-2.12
7CJBRV		2,179	-197	-1.77	2,210	-177	-1.63
7ELD37		2,351	-25	-0.23	2,345	-42	-0.38
7NCEQ7		2,390	14	0.12	2,380	-7	-0.06
7TPZPP		2,380	4	0.03	2,387	0	0.00
7WMFAL		2,378	1	0.01	2,366	-21	-0.19
8XV336		2,444	68	0.61	2,402	16	0.15
8YBHME		2,279	-97	-0.87	2,286	-100	-0.92
A8ZUQ8	X	1,561	-815	-7.32	1,506	-880	-8.11
BPXUKE		2,219	-158	-1.41	2,218	-168	-1.55
BQMV9W		2,525	148	1.33	2,541	154	1.42
CK48NY		2,470	93	0.84	2,470	84	0.77
D6VLQV		2,394	17	0.15	2,489	102	0.94
DMGYPB		2,427	50	0.45	2,375	-11	-0.10
DY8WAR		2,405	29	0.26	2,374	-13	-0.12
EVUM6J		2,346	-31	-0.27	2,431	45	0.41
F66PFJ	X	2,163	-214	-1.92	2,320	-67	-0.61
FL996T		2,243	-134	-1.20	2,193	-194	-1.79
HHZHRJ		2,391	14	0.13	2,398	12	0.11
JH88A9		2,292	-84	-0.76	2,264	-122	-1.13
JQQJNL		2,370	-7	-0.06	2,415	29	0.27
L7NAFP		2,377	1	0.01	2,394	7	0.07
LTAN73		2,635	259	2.32	2,650	264	2.43
MTEQYH		2,643	267	2.40	2,657	271	2.50

**Plastics Interlaboratory Testing Program**  
**Analysis 734**  
**Modulus of Elasticity - MPa**

WebCode	Data Flag	Sample C19			Sample C20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PD7GLH		2,231	-146	-1.31	2,316	-71	-0.65
PU8T3H		2,344	-32	-0.29	2,335	-52	-0.48
QCZL2F		2,603	226	2.03	2,549	162	1.50
QEQ69W		2,384	8	0.07	2,391	5	0.04
QKKGW3		2,281	-96	-0.86	2,261	-125	-1.15
RLEA3R		2,269	-107	-0.96	2,268	-118	-1.09
RPK6NF		2,361	-16	-0.14	2,383	-4	-0.03
TZD89X		2,426	49	0.44	2,490	103	0.95
UMZJD6		2,593	216	1.94	2,586	199	1.84
W6F7PT		2,167	-209	-1.88	2,202	-184	-1.70
WEY2LX		2,340	-37	-0.33	2,346	-41	-0.37
WHA9T6		2,331	-45	-0.41	2,329	-57	-0.53
X8FYC9		2,376	-1	-0.01	2,401	15	0.14
XAY94L		2,303	-73	-0.66	2,310	-77	-0.71
XD72AU		2,396	19	0.17	2,466	79	0.73
XGEB4A		2,364	-12	-0.11	2,425	39	0.36
XNJNBT	X	2,468	91	0.82	2,344	-42	-0.39
YVUEUX	*	2,162	-215	-1.93	2,252	-135	-1.24
ZBZVHB		2,349	-28	-0.25	2,357	-30	-0.28
ZFUCUW		2,345	-31	-0.28	2,343	-43	-0.40
ZH72F8		2,382	5	0.05	2,379	-8	-0.07

Summary Statistics	
Grand Means	2,376.5 MPa                      2,386.5 MPa
Std Dev Btwn Labs	111.3 MPa                              108.5 MPa
Statistics based on 49 of 53 reporting participants	

Sample C19: ABS & Sample C20: ABS

Plastics Interlaboratory Testing Program  
Analysis 734  
Modulus of Elasticity - MPa

---

**Comments on assigned Data Flags for Test #734**

6HFXAK (X) - Inconsistent in testing between samples.

A8ZUQ8 (X) - Data for both samples are low.

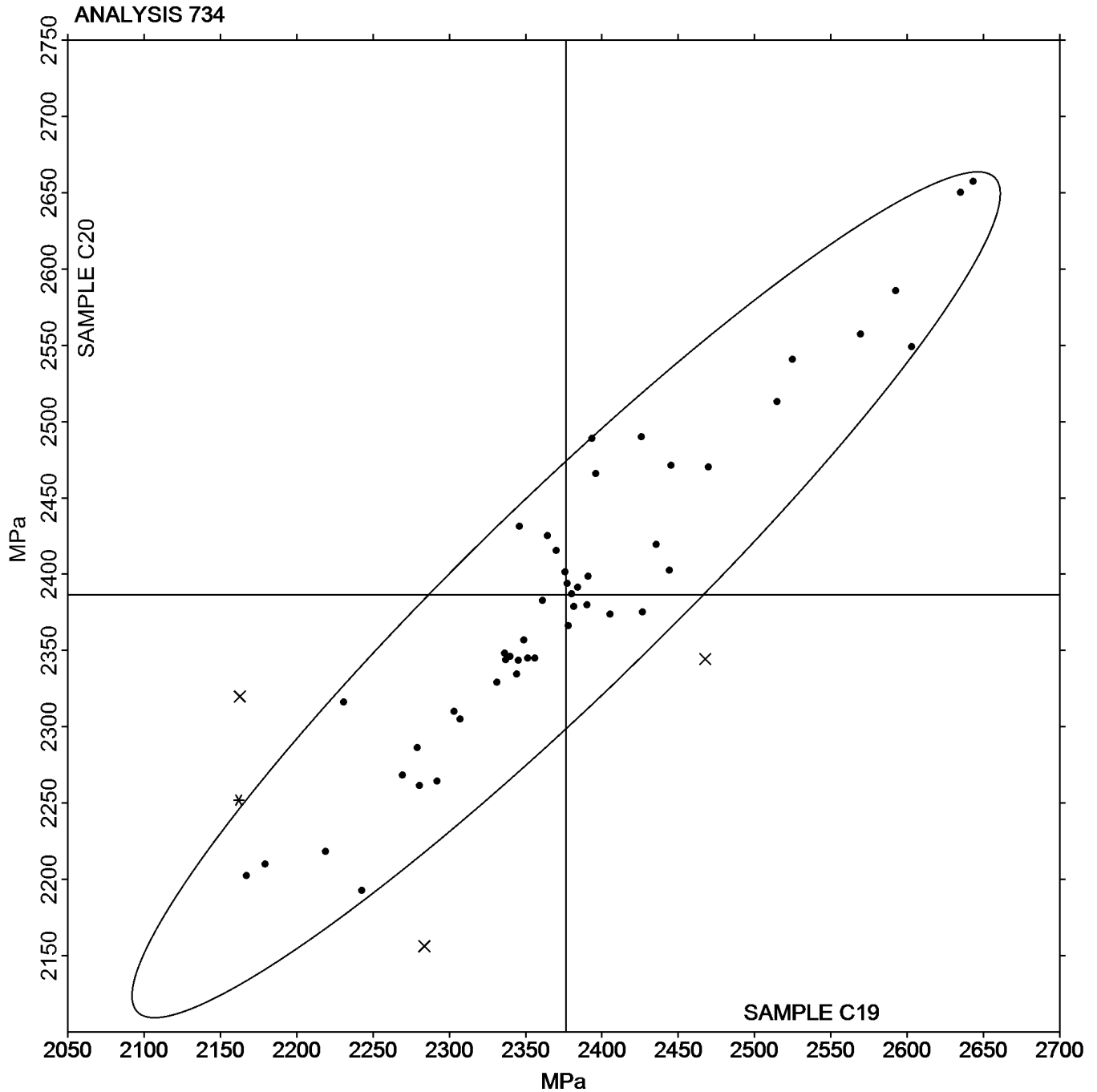
F66PFJ (X) - Inconsistent in testing between samples and inconsistent in testing within Sample C20.

XNJNBT (X) - Inconsistent in testing between samples.

Analysis 734

Modulus of Elasticity - MPa

Grand Mean Sample C19: 2,376.53 MPa    Grand Mean Sample C20: 2,386.51 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 J19			Sample J20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2476QY	X	314.9	-4.3	-0.25	340.9	14.1	0.81
2FKBTE		322.8	3.6	0.21	329.8	3.0	0.17
2GALGL	*	274.4	-44.8	-2.58	290.3	-36.6	-2.11
2PK26A		357.2	38.0	2.19	365.3	38.4	2.21
2TLGXA		335.0	15.8	0.91	344.6	17.7	1.02
3LNAC6		338.9	19.7	1.14	352.0	25.2	1.45
3Q2CXX		317.0	-2.2	-0.13	320.6	-6.3	-0.36
487DQZ		296.8	-22.4	-1.29	306.6	-20.3	-1.17
49GBU3		332.1	12.9	0.74	338.8	11.9	0.69
4A4JNG		311.2	-8.0	-0.46	314.0	-12.9	-0.74
4GA6UF		329.7	10.5	0.60	336.1	9.2	0.53
4MCWU4		323.7	4.6	0.26	324.6	-2.3	-0.13
4TLVVB		334.1	14.9	0.86	338.5	11.6	0.67
683T6B		294.2	-25.0	-1.44	301.1	-25.8	-1.48
6HZQ3X		303.4	-15.7	-0.91	312.8	-14.1	-0.81
7ELD37		319.4	0.2	0.01	325.0	-1.9	-0.11
8QD4MR		342.2	23.0	1.33	351.9	25.0	1.44
9BGU4H		291.6	-27.6	-1.59	302.3	-24.6	-1.42
9JZZHJ		315.8	-3.4	-0.20	328.4	1.5	0.09
9MCKWD	*	287.8	-31.4	-1.81	285.3	-41.5	-2.39
A3PCJD		292.2	-27.0	-1.56	299.6	-27.2	-1.57
BDH2TP		349.3	30.1	1.74	356.5	29.7	1.71
C7GRXZ		335.9	16.7	0.96	343.1	16.2	0.94
C7TGU6		338.1	18.9	1.09	342.4	15.5	0.89
CA2DCG		327.4	8.2	0.47	336.7	9.9	0.57
DBHCB4		313.0	-6.2	-0.36	315.2	-11.7	-0.67
DDE23K		308.2	-11.0	-0.63	317.8	-9.1	-0.52
DDFJ8D		332.7	13.5	0.78	337.3	10.5	0.60
DGCNMX	X	379.1	60.0	3.46	393.3	66.4	3.83
EJHZWU		320.3	1.1	0.06	332.2	5.4	0.31
EP49L6		309.4	-9.8	-0.57	316.1	-10.7	-0.62
F49UV6		317.8	-1.4	-0.08	329.9	3.0	0.17

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

WebCode	Data Flag	Sample J19			Sample J20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FDKTL4		333.6	14.4	0.83	348.8	21.9	1.26
FNJMWF		333.4	14.2	0.82	334.7	7.9	0.45
FZADHB		326.7	7.5	0.43	335.6	8.7	0.50
GJALRJ		311.4	-7.8	-0.45	320.6	-6.3	-0.36
HZBEQW		352.6	33.4	1.93	354.7	27.9	1.61
J8NT4J		326.9	7.7	0.45	335.3	8.4	0.49
KZKQD3		321.1	1.9	0.11	329.1	2.2	0.13
L7NAFP		325.6	6.4	0.37	334.6	7.7	0.45
LTAN73		340.3	21.1	1.22	345.5	18.7	1.08
MGRV6H	*	297.6	-21.6	-1.25	295.3	-31.6	-1.82
NYNX2D		329.8	10.7	0.61	338.0	11.2	0.64
PD7GLH		308.5	-10.7	-0.62	318.2	-8.7	-0.50
PFK7JA		308.5	-10.7	-0.62	320.4	-6.5	-0.37
PQ74LM		311.1	-8.0	-0.46	326.8	-0.1	-0.01
PZJKUF		314.0	-5.2	-0.30	320.8	-6.1	-0.35
QBNC7J		330.9	11.8	0.68	339.7	12.8	0.74
QEQ69W		328.6	9.4	0.54	337.2	10.4	0.60
QHVB86		308.2	-10.9	-0.63	314.5	-12.4	-0.71
QKKGW3	*	294.7	-24.5	-1.41	292.8	-34.1	-1.96
TB9LLD		324.7	5.5	0.32	334.3	7.4	0.43
UP322W		340.6	21.4	1.24	345.3	18.4	1.06
UUTV2T		335.5	16.3	0.94	341.8	14.9	0.86
UZMARD		305.0	-14.2	-0.82	311.7	-15.2	-0.88
VDUJED		307.8	-11.3	-0.66	319.6	-7.3	-0.42
WHA9T6		327.2	8.0	0.46	341.2	14.4	0.83
WZAT93		343.5	24.4	1.41	347.9	21.1	1.21
XAY94L		301.9	-17.3	-1.00	313.4	-13.5	-0.77
XTVRX8		314.8	-4.4	-0.25	323.2	-3.7	-0.21
YUFFV4	*	300.1	-19.0	-1.10	320.5	-6.3	-0.36
YW6RMP		314.3	-4.9	-0.28	321.0	-5.9	-0.34
YWUFBJ		320.8	1.6	0.09	323.8	-3.1	-0.18
YXKNWF		329.7	10.5	0.60	332.8	5.9	0.34



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

WebCode	Data Flag	Sample J19			Sample J20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ZH72F8		282.3	-36.9	-2.13	291.3	-35.6	-2.05
ZKFKTY		309.1	-10.1	-0.58	318.4	-8.4	-0.49
ZV4HKL		315.0	-4.1	-0.24	322.8	-4.1	-0.24

**Summary Statistics**

Grand Means

319.19 ksi

326.86 ksi

Std Dev Btwn Labs

17.32 ksi

17.36 ksi

Statistics based on 65 of 67 reporting participants

Sample J19: HIPS &amp; Sample J20: HIPS

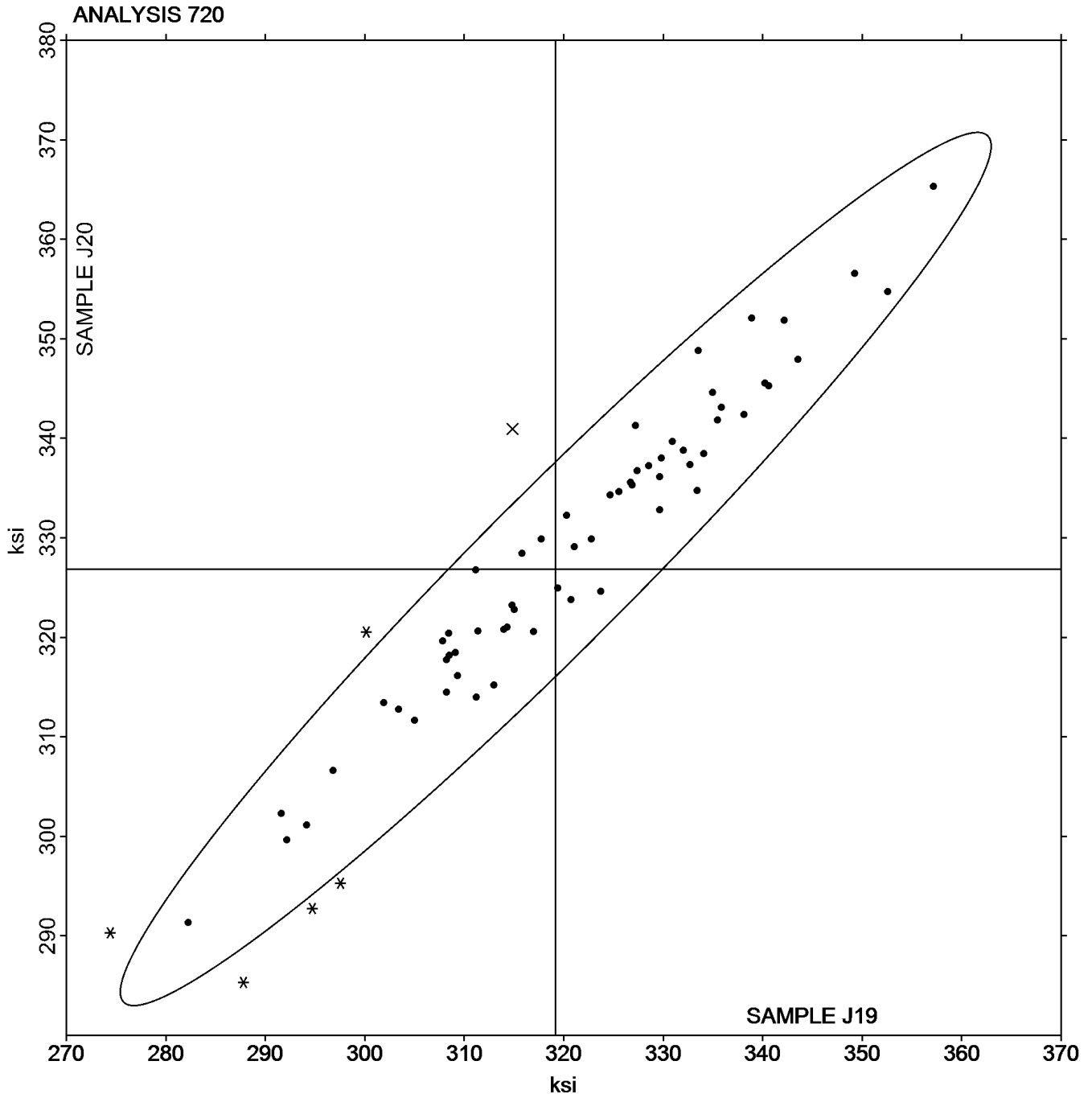
**Comments on assigned Data Flags for Test #720**

2476QY (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

DGCNMX (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

Plastics Interlaboratory Testing Program  
Analysis 720  
Flexural Modulus- ksi

Grand Mean Sample J19: 319.19 ksi    Grand Mean Sample J20: 326.86 ksi



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

## Analysis 721

## Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J19			Sample J20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2476QY		6,031	-201	-0.88	6,063	-222	-1.11
2FKBTE		6,450	218	0.96	6,474	189	0.94
2TLGXA		6,332	100	0.44	6,342	57	0.29
3LNAC6		6,506	274	1.20	6,631	346	1.72
3Q2CXX		6,154	-78	-0.34	6,175	-110	-0.55
487DQZ		6,083	-149	-0.65	6,238	-47	-0.24
4A4JNG		6,262	30	0.13	6,210	-75	-0.38
4GA6UF		6,196	-36	-0.16	6,254	-31	-0.15
4MCWU4		5,959	-273	-1.19	6,115	-170	-0.85
4TLVVB		6,370	138	0.60	6,351	66	0.33
6HZQ3X		6,010	-222	-0.97	6,126	-159	-0.79
7ELD37		6,185	-47	-0.21	6,290	5	0.02
8QD4MR		6,476	244	1.07	6,567	282	1.41
9MCKWD		5,930	-302	-1.32	5,926	-359	-1.79
A3PCJD		6,547	315	1.38	6,524	239	1.19
C7GRXZ		6,327	95	0.41	6,412	127	0.63
C7TGU6		6,356	124	0.54	6,263	-22	-0.11
DBHCB4		6,257	25	0.11	6,228	-57	-0.29
DDE23K		6,179	-53	-0.23	6,289	4	0.02
DDFJ8D		6,422	190	0.83	6,418	133	0.66
EJHZWU		6,136	-96	-0.42	6,238	-47	-0.23
EP49L6		6,259	27	0.12	6,349	64	0.32
F49UV6		6,089	-143	-0.63	6,231	-54	-0.27
FNJMWf		6,417	185	0.81	6,410	125	0.62
FZADHB		5,987	-245	-1.07	6,176	-109	-0.54
GJALRJ	*	5,607	-625	-2.73	5,846	-439	-2.19
HZBEQW		6,664	432	1.89	6,484	199	0.99
J8NT4J		6,408	176	0.77	6,427	142	0.71
KZKQD3		6,280	48	0.21	6,307	22	0.11
L7NAFP		6,206	-26	-0.11	6,316	31	0.16
LTAN73	*	6,666	434	1.90	6,787	502	2.50
MGRV6H		6,383	151	0.66	6,235	-50	-0.25

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

WebCode	Data Flag	Sample J19			Sample J20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PD7GLH		6,431	199	0.87	6,562	277	1.38
PFK7JA	*	6,040	-192	-0.84	6,360	75	0.37
PZJKUF		5,840	-392	-1.71	5,882	-403	-2.01
QHYB86		5,957	-275	-1.20	6,005	-280	-1.40
QKKGW3		6,344	112	0.49	6,222	-63	-0.31
TB9LLD		6,283	51	0.22	6,353	68	0.34
UP322W		6,469	237	1.03	6,428	143	0.71
UUTV2T		6,630	398	1.74	6,643	358	1.79
UZMARD		6,127	-106	-0.46	6,186	-99	-0.50
VDUJED		6,385	153	0.67	6,257	-28	-0.14
WHA9T6		6,222	-10	-0.04	6,221	-64	-0.32
XAY94L		5,883	-349	-1.53	6,063	-222	-1.11
XTVRX8		5,866	-366	-1.60	5,896	-389	-1.94
YWUFBJ		6,278	46	0.20	6,425	140	0.70
YXKNWF		6,317	85	0.37	6,426	141	0.70
ZH72F8		5,981	-251	-1.10	6,041	-244	-1.22
ZKFKTY	X	5,918	-314	-1.37	5,700	-585	-2.92
ZV4HKL		6,181	-51	-0.22	6,296	11	0.05

Summary Statistics			
Grand Means	6,232.0	psi	6,285.0
Std Dev Btwn Labs	228.7	psi	200.6
			Statistics based on 49 of 50 reporting participants

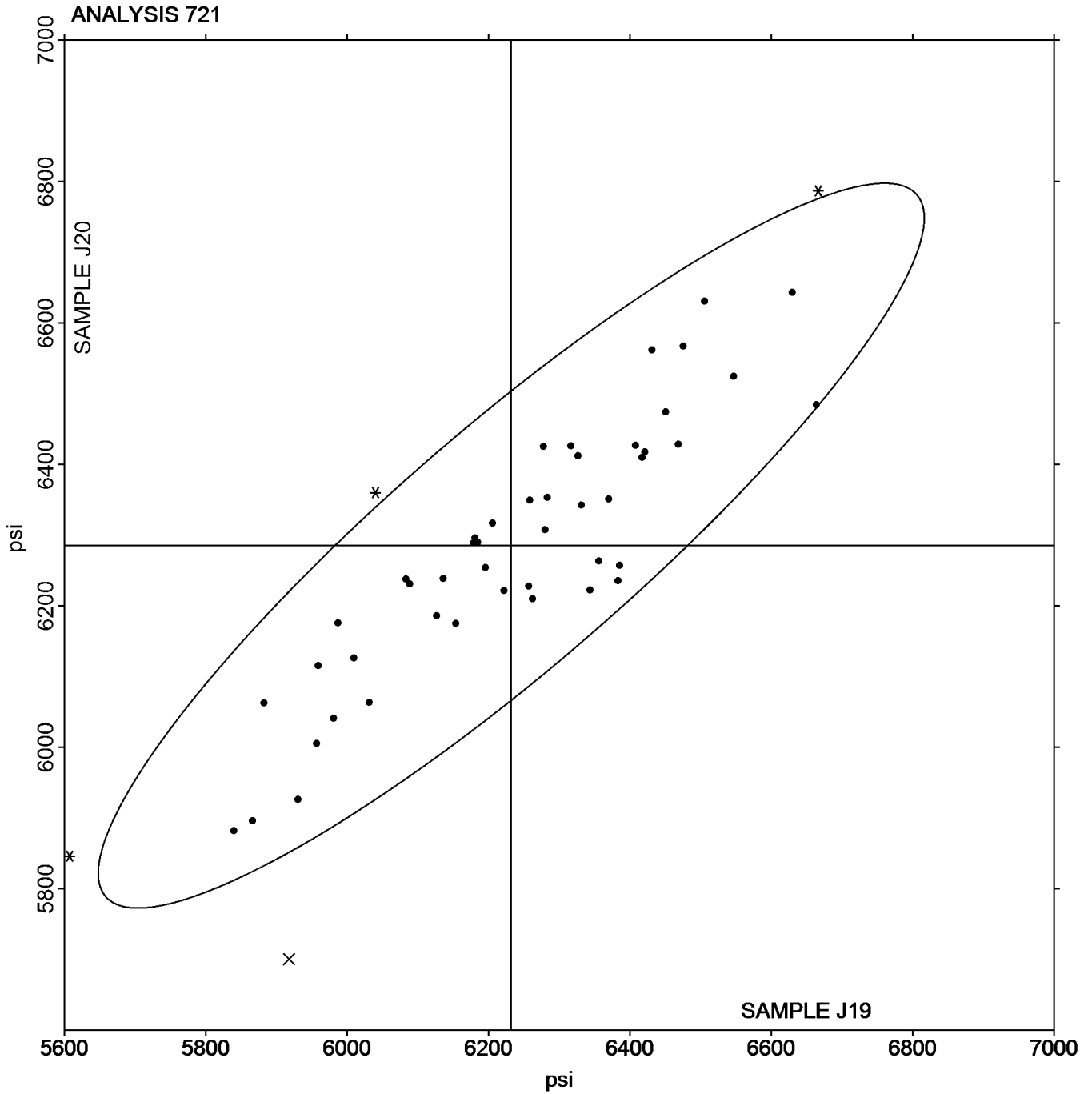
Sample J19: HIPS & Sample J20: HIPS

**Comments on assigned Data Flags for Test #721**

ZKFKTY (X) - Inconsistent in testing between samples, data for Sample J20 are low.

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

Grand Mean Sample J19: 6,232.03 psi    Grand Mean Sample J20: 6,285.04 psi



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

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

WebCode	Data Flag	Sample J19			Sample J20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2476QY		6,296	48	0.23	6,340	19	0.10
2FKBTE		6,465	217	1.02	6,483	162	0.85
2PK26A		6,528	279	1.32	6,684	363	1.90
2TLGXA		6,356	107	0.50	6,361	40	0.21
3LNAC6		6,512	264	1.24	6,638	317	1.66
3Q2CXX		6,167	-82	-0.38	6,187	-134	-0.70
49GBU3		6,251	3	0.01	6,332	11	0.06
4A4JNG		6,288	39	0.19	6,236	-86	-0.45
4GA6UF		6,224	-24	-0.12	6,310	-11	-0.06
4MCWU4		6,315	67	0.31	6,259	-63	-0.33
4TLVVB	X	6,068	-180	-0.85	5,739	-582	-3.04
6HZQ3X		6,052	-196	-0.93	6,202	-119	-0.62
7ELD37		6,172	-77	-0.36	6,287	-34	-0.18
8QD4MR		6,446	198	0.93	6,525	204	1.06
9BGU4H		5,880	-369	-1.74	5,952	-369	-1.93
9JZZHJ		6,114	-134	-0.63	6,344	23	0.12
9MCKWD		5,918	-331	-1.56	5,924	-398	-2.08
A3PCJD		6,592	344	1.62	6,609	288	1.50
BDH2TP		6,459	211	0.99	6,498	176	0.92
C7GRXZ		6,345	96	0.45	6,446	124	0.65
C7TGU6		6,411	162	0.76	6,353	31	0.16
CA2DCG		6,189	-59	-0.28	6,335	14	0.07
DBHCB4		6,286	37	0.18	6,236	-85	-0.45
DDE23K		6,196	-52	-0.25	6,309	-12	-0.06
DDFJ8D		6,438	190	0.89	6,480	159	0.83
DGCNMX	X	6,944	696	3.28	7,069	748	3.91
EJHZWU		6,144	-105	-0.49	6,242	-80	-0.42
F49UV6		6,089	-159	-0.75	6,231	-90	-0.47
FNJMWF		6,433	184	0.87	6,420	99	0.52
FZADHB		6,048	-200	-0.94	6,271	-50	-0.26
GJALRJ	*	5,669	-579	-2.73	5,914	-407	-2.13
HZBEQW	X	6,796	548	2.58	6,496	175	0.91

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

WebCode	Data Flag	Sample J19			Sample J20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
J8NT4J		6,425	177	0.83	6,456	135	0.71
KZKQD3		6,280	32	0.15	6,307	-14	-0.07
L7NAFP		6,228	-20	-0.10	6,344	23	0.12
LTAN73	*	6,670	422	1.99	6,795	474	2.48
MGRV6H		6,268	20	0.09	6,283	-38	-0.20
PD7GLH		6,448	200	0.94	6,588	266	1.39
PFK7JA	X	5,940	-308	-1.45	6,380	59	0.31
PQ74LM	X	5,949	-300	-1.41	6,521	200	1.04
PZJKUF		5,924	-324	-1.53	6,022	-299	-1.56
QBNC7J		6,430	182	0.86	6,358	36	0.19
QEQ69W		6,391	142	0.67	6,385	63	0.33
QHYB86		5,779	-470	-2.21	5,986	-335	-1.75
QKKGW3		6,367	119	0.56	6,318	-3	-0.02
TB9LLD		6,415	167	0.78	6,434	113	0.59
UZMARD		6,180	-69	-0.32	6,259	-63	-0.33
WHA9T6		6,153	-95	-0.45	6,192	-129	-0.67
WZAT93		6,375	127	0.60	6,467	146	0.76
XAY94L		5,941	-308	-1.45	6,141	-180	-0.94
XTVRX8		5,920	-328	-1.55	6,018	-303	-1.58
YWUFBJ		6,305	57	0.27	6,454	133	0.69
YXKNWF		6,351	103	0.48	6,421	100	0.52
ZH72F8		6,072	-176	-0.83	6,065	-256	-1.34
ZKFKTY	X	5,990	-258	-1.22	5,839	-483	-2.52
ZV4HKL		6,219	-29	-0.14	6,360	39	0.20

Summary Statistics	
Grand Means	6,248.5 psi      6,321.3 psi
Std Dev Btwn Labs	212.2 psi      191.4 psi
Statistics based on 50 of 56 reporting participants	

Sample J19: HIPS & Sample J20: HIPS

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

---

**Comments on assigned Data Flags for Test #722**

4TLVVB (X) - Inconsistent in testing between samples, data for Sample J20 are low.

DGCNMX (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

HZBEQW (X) - Inconsistent in testing between samples.

PFK7JA (X) - Inconsistent in testing between samples and inconsistent in testing within Sample J19.

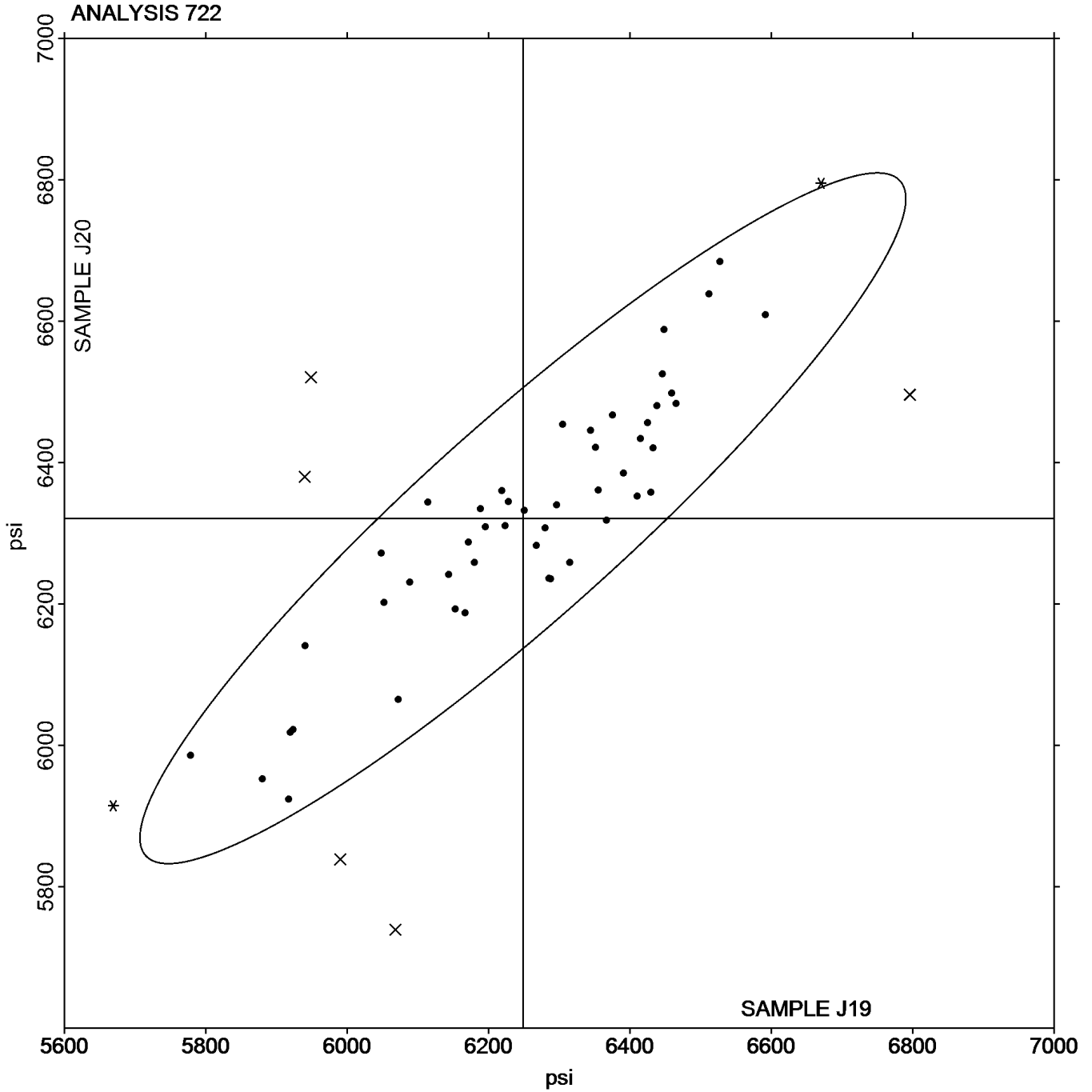
PQ74LM (X) - Inconsistent in testing between samples and inconsistent in testing within Sample J20.

ZKFKTY (X) - Inconsistent in testing between samples.



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

Grand Mean Sample J19: 6,248.47 psi    Grand Mean Sample J20: 6,321.25 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 K19			Sample K20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2FKBTE		2,005	-129	-1.99	1,999	-136	-2.08
2PK26A		2,212	78	1.20	2,214	79	1.21
3JVXDA		2,135	1	0.02	2,116	-18	-0.28
3KMKKF		2,131	-3	-0.05	2,131	-3	-0.05
3LNAC6		2,210	76	1.16	2,210	75	1.16
3Q2CXX		2,218	84	1.29	2,215	80	1.23
4WDTGM		2,123	-11	-0.16	2,139	4	0.06
64PBH7		2,081	-53	-0.82	2,095	-40	-0.61
67DYNE		2,099	-35	-0.54	2,110	-24	-0.37
6AHA9A		2,145	11	0.17	2,151	16	0.25
6HFXAK		2,062	-72	-1.11	2,059	-75	-1.16
7CJBRV		2,153	19	0.29	2,150	16	0.24
7ELD37		2,112	-22	-0.34	2,117	-17	-0.26
7NCEQ7	*	1,942	-192	-2.96	1,947	-188	-2.88
7WMFAL	X	1,418	-716	-11.03	1,426	-709	-10.87
BPXUKE		2,194	60	0.93	2,170	36	0.55
BQMV9W		2,094	-40	-0.62	2,110	-25	-0.38
CK48NY		2,183	49	0.76	2,183	49	0.75
D6VLQV		2,176	42	0.65	2,200	65	1.00
EVUM6J		2,217	83	1.28	2,231	97	1.49
F66PFJ		2,169	35	0.54	2,178	43	0.67
FL996T		2,075	-59	-0.91	2,083	-52	-0.79
HHZHRJ		2,158	24	0.36	2,150	16	0.24
JH88A9		2,146	12	0.18	2,148	13	0.20
JQQJNL		2,153	19	0.29	2,158	23	0.35
L7NAFP		2,050	-84	-1.29	2,049	-85	-1.31
LTAN73		2,202	68	1.05	2,176	42	0.64
MTEQYH		2,223	89	1.37	2,244	109	1.68
P79NQV	X	2,391	257	3.96	2,403	268	4.12
PU8T3H		2,036	-98	-1.51	2,044	-91	-1.39
QCZL2F		2,150	16	0.25	2,156	22	0.34
QEK6V8		2,026	-108	-1.66	2,030	-104	-1.60

**Plastics Interlaboratory Testing Program  
Analysis 736  
Flexural Modulus - MPa**

WebCode	Data Flag	Sample K19			Sample K20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
QEQ69W		2,115	-19	-0.29	2,145	10	0.15
RPK6NF		2,149	15	0.22	2,136	1	0.02
UTTEK3		2,168	34	0.53	2,158	23	0.36
W6F7PT		2,116	-18	-0.28	2,111	-24	-0.36
WHA9T6	X	2,046	-88	-1.36	2,108	-26	-0.40
WZAT93		2,218	84	1.30	2,217	83	1.27
X8FYC9		2,136	2	0.03	2,122	-13	-0.20
XAY94L		2,158	24	0.38	2,127	-7	-0.11
YVUEUX	X	2,236	102	1.57	2,094	-41	-0.62
ZBZVHB		2,173	39	0.59	2,178	44	0.67
ZFUCUW		2,065	-69	-1.07	2,043	-92	-1.41
ZH72F8		2,184	50	0.78	2,179	45	0.69

Summary Statistics			
Grand Means	2,134.1 MPa	2,134.5 MPa	
Std Dev Btwn Labs	64.9 MPa	65.2 MPa	
Statistics based on 40 of 44 reporting participants			

Sample K19: HIPS & Sample K20: HIPS

**Comments on assigned Data Flags for Test #736**

7WMFAL (X) - Data for both samples are low.

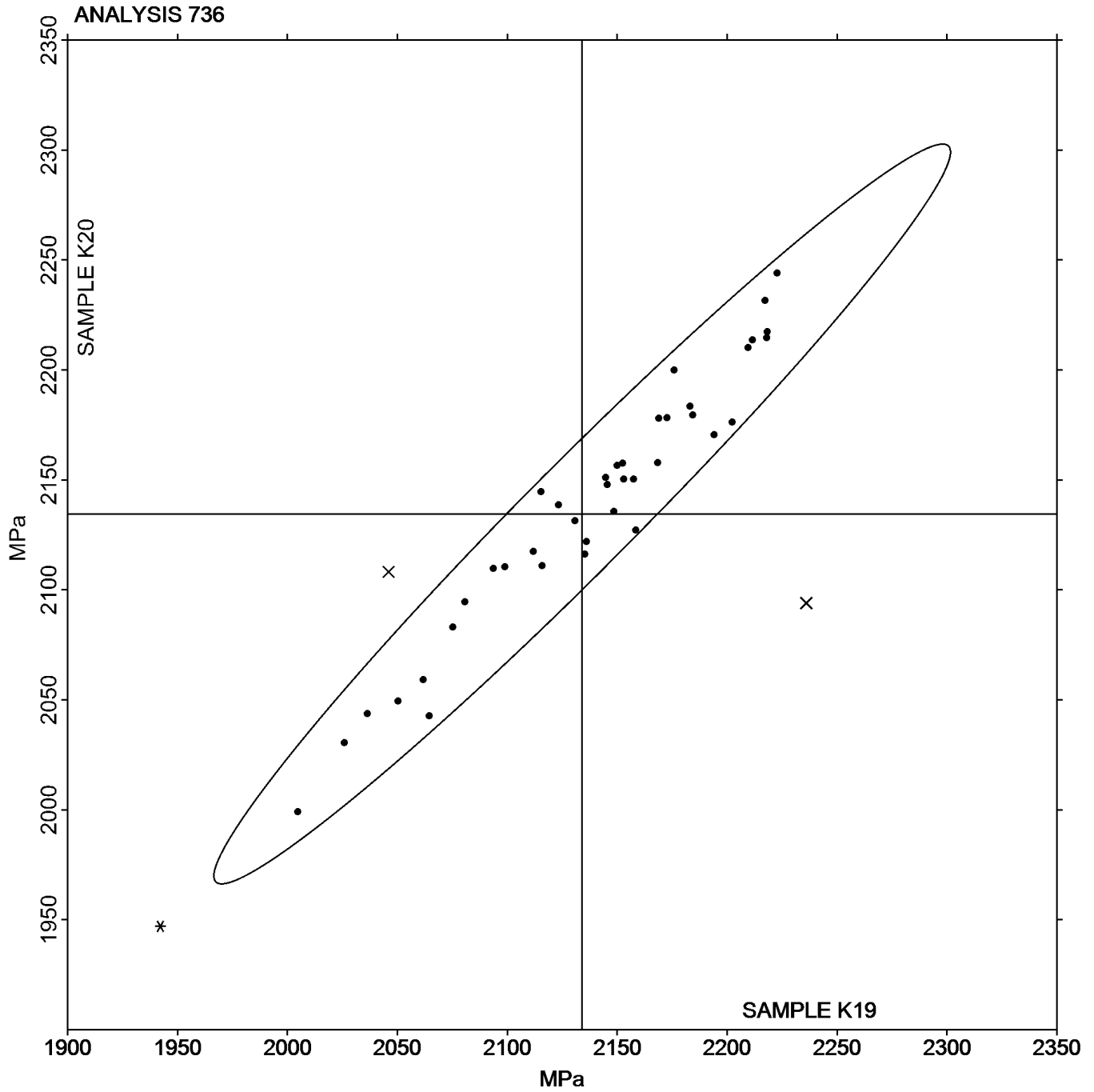
P79NQV (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

WHA9T6 (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

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

Plastics Interlaboratory Testing Program  
Analysis 736  
Flexural Modulus - MPa

Grand Mean Sample K19: 2,134.06 MPa    Grand Mean Sample K20: 2,134.52 MPa



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

## Analysis 737

## Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K19			Sample K20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2FKBTE		40.62	-1.61	-1.77	41.06	-1.25	-1.38
3JVXDA		42.11	-0.11	-0.12	41.97	-0.34	-0.38
3KMKKF		44.08	1.86	2.05	44.12	1.80	1.98
3LNAC6		43.48	1.26	1.38	43.40	1.08	1.19
3Q2CXX		42.22	0.00	0.00	42.35	0.03	0.04
4WDTGM		43.22	1.00	1.10	43.45	1.13	1.24
64PBH7		42.07	-0.15	-0.17	41.94	-0.37	-0.41
67DYNE		40.26	-1.96	-2.16	40.56	-1.76	-1.93
6AHA9A		42.66	0.43	0.48	42.82	0.51	0.56
6HFXAK		40.51	-1.71	-1.89	40.73	-1.59	-1.75
7CJBRV		42.09	-0.13	-0.15	42.38	0.06	0.07
7ELD37		42.74	0.52	0.57	42.61	0.29	0.32
7NCEQ7		42.09	-0.14	-0.15	41.71	-0.61	-0.67
7WMFAL		44.07	1.85	2.04	44.25	1.93	2.13
BQMV9W		42.50	0.28	0.30	42.71	0.39	0.43
CK48NY		42.31	0.08	0.09	42.34	0.02	0.02
EVUM6J		42.16	-0.06	-0.07	42.22	-0.10	-0.11
F66PFJ		43.41	1.19	1.31	43.50	1.18	1.30
FL996T		42.37	0.15	0.16	42.56	0.24	0.26
HHZHRJ		41.59	-0.63	-0.70	41.53	-0.79	-0.87
JH88A9		41.87	-0.35	-0.38	41.90	-0.42	-0.46
JQQJNL		42.28	0.05	0.06	42.41	0.10	0.11
L7NAFP		42.48	0.25	0.28	42.42	0.11	0.12
LTAN73		42.44	0.22	0.24	42.74	0.43	0.47
MTEQYH		40.63	-1.59	-1.76	40.76	-1.56	-1.71
QCZL2F		41.84	-0.38	-0.42	42.05	-0.27	-0.29
QEQ69W		42.35	0.13	0.14	42.49	0.18	0.20
RPK6NF		42.47	0.25	0.28	42.97	0.65	0.72
UTTEK3		41.60	-0.62	-0.69	41.87	-0.44	-0.49
W6F7PT		43.30	1.08	1.19	43.34	1.03	1.13
WHA9T6		41.80	-0.42	-0.47	41.92	-0.40	-0.44
X8FYC9	X	38.41	-3.81	-4.20	38.57	-3.75	-4.12

## Analysis 737

## Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K19			Sample K20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XAY94L		42.60	0.38	0.42	42.60	0.28	0.31
YVUEUX	*	40.88	-1.34	-1.48	40.48	-1.84	-2.02
ZBZVHB		42.33	0.11	0.12	42.30	-0.01	-0.01
ZFUCUW		42.38	0.16	0.17	42.60	0.28	0.31
ZH72F8	X	43.32	1.10	1.21	42.35	0.03	0.04

## Summary Statistics

Grand Means

42.223 MPa

42.316 MPa

Std Dev Btwn Labs

0.907 MPa

0.909 MPa

Statistics based on 35 of 37 reporting participants

Sample K19: HIPS &amp; Sample K20: HIPS

**Comments on assigned Data Flags for Test #737**

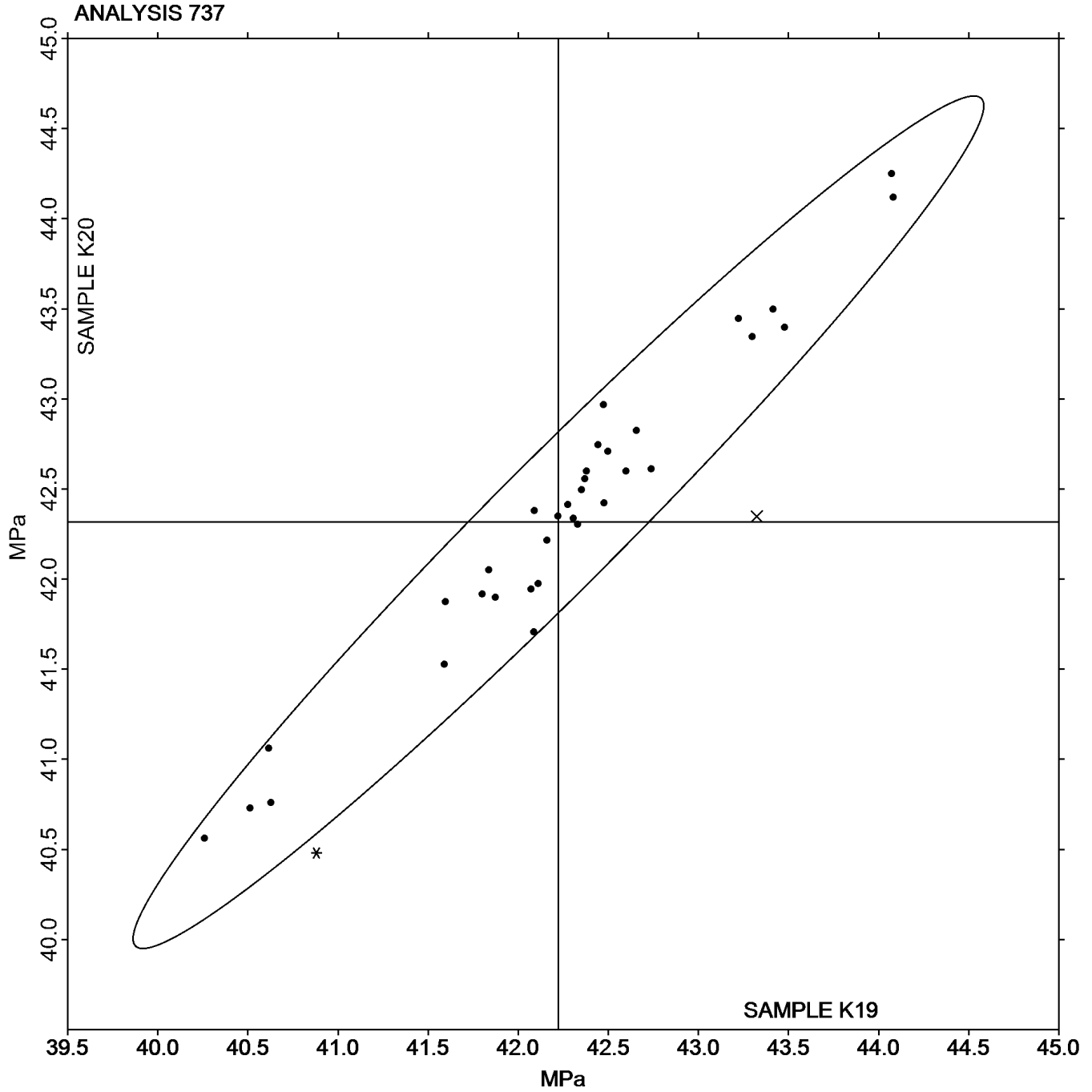
X8FYC9 (X) - Data for both samples are low. Also Inconsistent in testing within both samples.

ZH72F8 (X) - Inconsistent in testing between samples.

Analysis 737

Flexural Stress at 3.5% Strain - MPa

Grand Mean Sample K19: 42.223 MPa    Grand Mean Sample K20: 42.316 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 K19			Sample K20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2FKBTE		40.86	-1.55	-1.68	41.42	-1.10	-1.15
2PK26A		42.87	0.46	0.50	42.70	0.19	0.19
3JVXDA		42.24	-0.17	-0.18	42.06	-0.46	-0.48
3KMKKF		44.30	1.89	2.04	44.36	1.84	1.93
3LNAC6		43.60	1.19	1.29	43.55	1.03	1.08
3Q2CXX		42.26	-0.15	-0.17	42.37	-0.15	-0.15
67DYNE		40.36	-2.05	-2.22	40.64	-1.88	-1.97
6AHA9A		42.73	0.32	0.35	42.93	0.42	0.44
6HFXAK		40.56	-1.85	-2.01	40.77	-1.74	-1.83
7CJBRV		42.55	0.14	0.15	42.39	-0.13	-0.13
7ELD37		43.24	0.83	0.90	43.26	0.75	0.78
7NCEQ7		42.12	-0.29	-0.32	41.75	-0.77	-0.81
7WMFAL		44.26	1.85	2.00	44.66	2.15	2.25
BPXUKE		42.12	-0.29	-0.31	41.75	-0.77	-0.80
BQMV9W		42.72	0.31	0.34	42.98	0.46	0.48
D6VLQV		42.93	0.52	0.56	43.54	1.02	1.07
EVUM6J		42.30	-0.11	-0.12	42.30	-0.22	-0.23
F66PFJ		44.05	1.64	1.77	44.05	1.54	1.61
FL996T		42.54	0.13	0.14	42.95	0.44	0.46
HHZHRJ		41.62	-0.80	-0.86	41.55	-0.96	-1.01
JH88A9		41.90	-0.51	-0.55	41.98	-0.54	-0.56
JQQJNL		42.37	-0.04	-0.04	42.55	0.03	0.03
L7NAFP		42.66	0.25	0.27	42.54	0.03	0.03
LTAN73		42.56	0.14	0.16	42.84	0.32	0.34
MTEQYH		40.61	-1.80	-1.95	40.85	-1.67	-1.75
QCZL2F		41.94	-0.47	-0.51	42.25	-0.27	-0.28
QEQ69W		42.44	0.03	0.03	42.64	0.12	0.13
RPK6NF		42.47	0.06	0.07	42.97	0.45	0.47
UTTEK3		42.68	0.27	0.29	43.01	0.49	0.52
W6F7PT		43.42	1.00	1.09	43.43	0.92	0.96
WHA9T6		41.56	-0.85	-0.92	41.30	-1.22	-1.27
WZAT93		42.35	-0.06	-0.07	42.66	0.14	0.15



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

WebCode	Data Flag	Sample K19			Sample K20		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XAY94L		42.76	0.35	0.38	42.82	0.30	0.32
YVUEUX		41.62	-0.79	-0.86	41.22	-1.30	-1.36
ZBZVHB		42.55	0.14	0.15	42.54	0.02	0.02
ZFUCUW		42.68	0.27	0.29	43.02	0.50	0.53
ZH72F8	X	43.86	1.45	1.57	42.95	0.44	0.46

**Summary Statistics**

Grand Means

42.412 MPa

42.517 MPa

Std Dev Btwn Labs

0.924 MPa

0.955 MPa

Statistics based on 36 of 37 reporting participants

Sample K19: HIPS &amp; Sample K20: HIPS

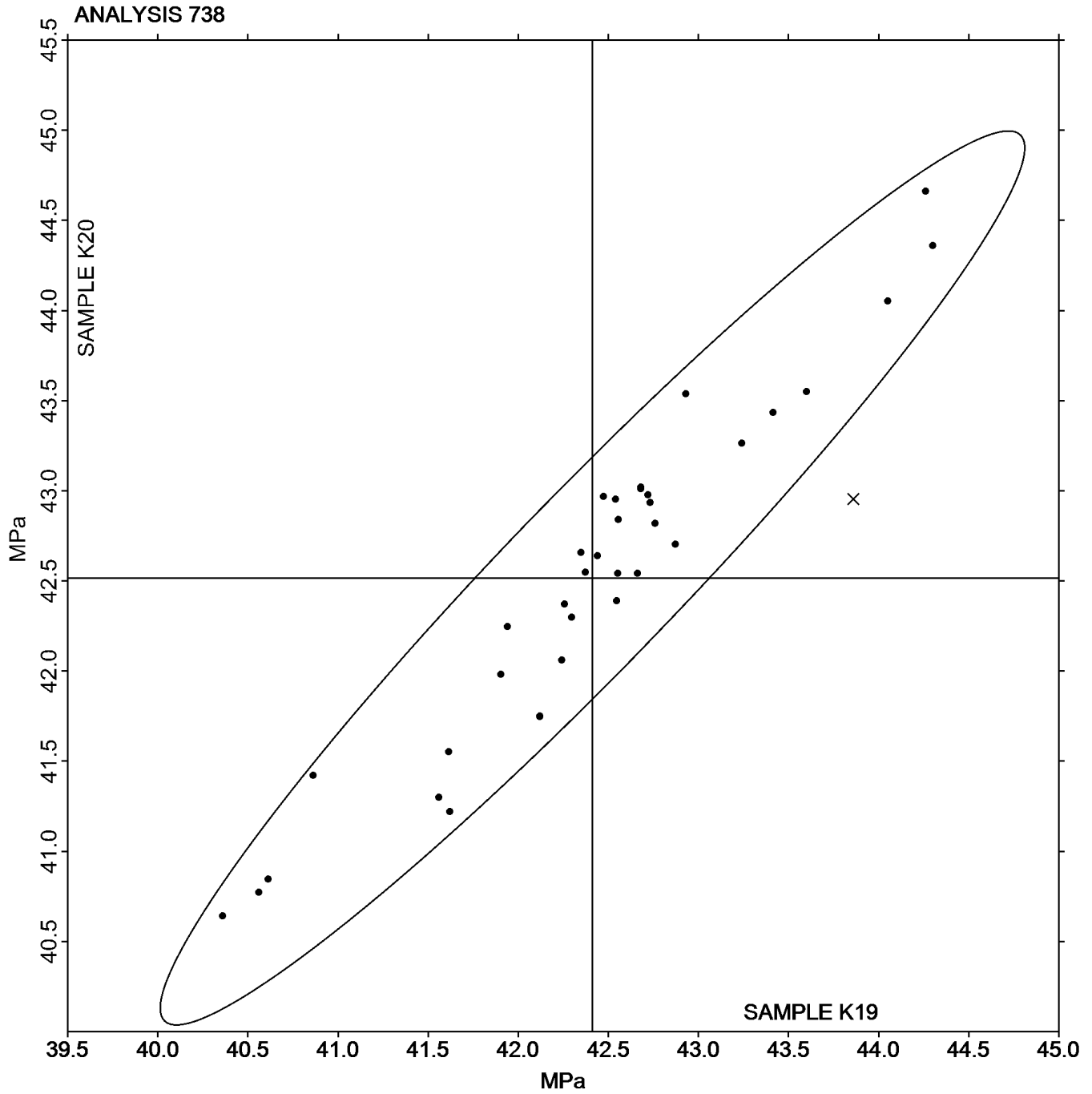
**Comments on assigned Data Flags for Test #738**

ZH72F8 (X) - Inconsistent in testing between samples.

Analysis 738

Flexural Stress at Yield - MPa

Grand Mean Sample K19: 42.412 MPa    Grand Mean Sample K20: 42.517 MPa



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

## Analysis 790

## Notched Izod Impact - ft.lbf/in

WebCode	Data Flag	Sample S19			Sample S20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2FKBTE		10.32	1.76	1.65	10.25	1.75	1.73	TM
2GALGL		8.59	0.04	0.03	8.59	0.09	0.09	TM
2PK26A		7.42	-1.14	-1.06	7.77	-0.73	-0.72	CE
3Q2CXX		7.44	-1.12	-1.05	7.02	-1.48	-1.46	TM
3RELHH		7.71	-0.85	-0.79	7.90	-0.60	-0.59	TO
3TJ4VY		8.32	-0.23	-0.22	7.93	-0.57	-0.56	TM
487DQZ	*	11.28	2.72	2.55	10.25	1.75	1.73	XX
49GBU3		9.04	0.49	0.45	8.79	0.29	0.28	WZ
4A4JNG		8.84	0.28	0.26	8.96	0.46	0.46	TM
4GA6UF		9.26	0.70	0.65	7.75	-0.75	-0.74	TO
683T6B		8.30	-0.26	-0.24	8.78	0.28	0.28	XX
6HFXAK		8.10	-0.45	-0.43	9.11	0.61	0.60	CS
6LZFE4		7.77	-0.78	-0.73	8.38	-0.12	-0.12	TM
7ELD37		7.25	-1.31	-1.22	6.55	-1.95	-1.93	CE
7WMFAL		8.88	0.32	0.30	10.22	1.72	1.70	CE
9BGU4H		8.09	-0.47	-0.44	8.16	-0.34	-0.34	WY
9HE2QR		8.98	0.43	0.40	9.05	0.55	0.55	CE
9JZZHJ		10.33	1.77	1.66	9.25	0.75	0.74	TM
A3PCJD		9.04	0.49	0.45	9.45	0.96	0.94	CE
A3ZN68		10.69	2.13	1.99	9.45	0.95	0.94	DS
AK9ELJ		9.43	0.87	0.81	9.89	1.39	1.38	CE
BD3R22		9.38	0.82	0.77	9.24	0.74	0.74	TY
BQMV9W		9.10	0.55	0.51	7.46	-1.04	-1.03	TM
C7GRXZ		7.84	-0.72	-0.67	7.28	-1.22	-1.21	XX
CA2DCG		8.17	-0.38	-0.36	9.04	0.54	0.54	TO
CYHF8N		8.40	-0.16	-0.15	8.19	-0.31	-0.31	TO
DDFJ8D		8.32	-0.24	-0.22	8.28	-0.22	-0.22	TO
DGCNMX		7.64	-0.92	-0.86	8.06	-0.44	-0.44	TO
E99PV4		7.33	-1.22	-1.15	8.44	-0.06	-0.06	TM
EP49L6		10.01	1.45	1.36	9.87	1.37	1.35	TO
EVUM6J		10.15	1.59	1.49	9.73	1.23	1.21	TO
FL996T		8.49	-0.06	-0.06	8.43	-0.07	-0.07	CE

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

WebCode	Data Flag	Sample S19			Sample S20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
FNJMWF		8.33	-0.23	-0.21	8.56	0.06	0.06	TM
FZADHB		7.70	-0.86	-0.80	8.14	-0.36	-0.36	CE
FZNWZ7		7.73	-0.83	-0.77	8.13	-0.37	-0.37	BA
HHZHRJ		8.04	-0.52	-0.49	8.41	-0.09	-0.09	TM
HZBEQW		8.69	0.13	0.12	8.54	0.04	0.04	TO
J8NT4J		8.30	-0.26	-0.24	8.38	-0.12	-0.12	CE
KMJE9T		8.98	0.43	0.40	8.49	-0.01	-0.01	TM
LTAN73		8.73	0.17	0.16	7.84	-0.66	-0.65	TM
QBNC7J		7.32	-1.24	-1.16	7.45	-1.05	-1.04	CE
QEQ69W		7.56	-1.00	-0.93	7.89	-0.61	-0.60	TM
QHYP86		7.09	-1.47	-1.37	7.23	-1.27	-1.25	XX
RMMDGA		10.34	1.78	1.66	8.99	0.49	0.48	TO
TB9LLD	X	3.36	-5.20	-4.86	3.75	-4.75	-4.70	TM
UP322W		7.88	-0.67	-0.63	7.90	-0.60	-0.59	CE
UZMARD		8.14	-0.42	-0.39	8.01	-0.49	-0.49	CS
VAZJKH	*	5.52	-3.04	-2.84	6.64	-1.86	-1.84	TM
VDAGBU	X	4.67	-3.88	-3.63	4.69	-3.81	-3.76	TO
VDUJED		8.22	-0.34	-0.32	8.92	0.42	0.42	TO
VZ2QHY		10.40	1.84	1.73	10.33	1.83	1.81	TO
W6F7PT		9.10	0.54	0.51	9.17	0.67	0.66	TO
WHA9T6		10.14	1.59	1.48	10.51	2.01	1.99	TO
WKLR9T	X	14.85	6.29	5.89	14.51	6.01	5.94	TO
WVAH9Q	*	7.39	-1.16	-1.09	6.08	-2.42	-2.39	TO
WZAT93		7.66	-0.90	-0.84	7.56	-0.94	-0.93	CE
XAY94L		9.67	1.12	1.05	9.35	0.85	0.84	TY
XEDJKV		7.46	-1.10	-1.03	6.64	-1.86	-1.84	TO
XN3EF6		10.62	2.06	1.93	10.36	1.86	1.84	TO
XQ7A2T		8.56	0.01	0.01	9.01	0.51	0.50	TO
XQXBLY		8.83	0.27	0.26	9.50	1.00	0.99	TM
Y7EKAK		8.00	-0.56	-0.52	7.92	-0.58	-0.58	TO
YPCU8U		7.40	-1.16	-1.08	6.87	-1.63	-1.61	TM
YUFFV4		8.25	-0.30	-0.28	8.56	0.06	0.06	XX

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

WebCode	Data Flag	Sample S19			Sample S20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
YWUFBJ		8.57	0.01	0.01	8.23	-0.27	-0.27	WZ
ZH72F8		8.83	0.28	0.26	8.24	-0.25	-0.25	CE
ZKFKTY		8.27	-0.28	-0.26	8.60	0.10	0.10	TO

**Summary Statistics**

Grand Means

8.557 ft.lbf/in

8.500 ft.lbf/in

Stnd Dev Btwn Labs

1.069 ft.lbf/in

1.011 ft.lbf/in

Statistics based on 64 of 67 reporting participants

Sample S19: ABS/PC &amp; Sample S20: ABS/PC

**Comments on assigned Data Flags for Test #790**

TB9LLD (X) - Data for both samples are low.

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

WKLR9T (X) - Data for both samples are high.

**Instrument Code List as Reported by the Labs**

(BA) - Baldwin

(CE) - Ceast

(CS) - CSI

(DS) - Dynisco

(TM) - TMI

(TO) - Tinius Olsen

(TY) - Toyoseiki

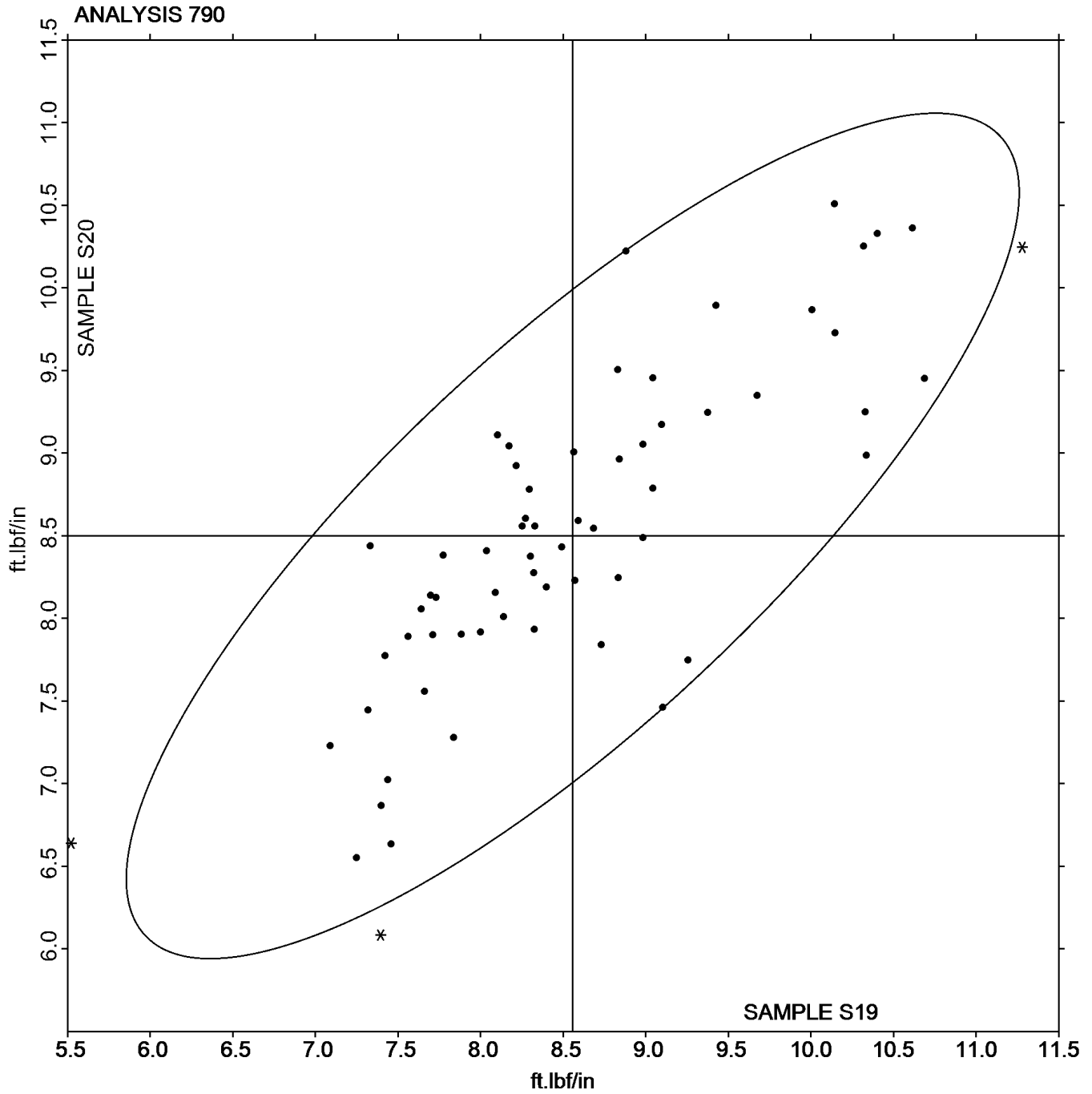
(WY) - Yasuda Seiki

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample S19: 8.5571 ft.lbf/in    Grand Mean Sample S20: 8.4996 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 791**  
**Notched Izod Impact - kJ/m<sup>2</sup>**

WebCode	Data Flag	Sample Z19			Sample Z20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
67DYNE		27.30000	-1.25549	-0.91	27.12000	-1.38352	-1.03	XX
7CJBRV		29.72800	1.17251	0.85	29.75800	1.25448	0.93	XX
BPXUKE		28.96600	0.41051	0.30	29.19600	0.69248	0.52	XX
CK48NY		28.84000	0.28451	0.21	28.74000	0.23648	0.18	XX
F66PFJ		26.44800	-2.10749	-1.53	27.10600	-1.39752	-1.04	XX
JH88A9		26.41800	-2.13749	-1.55	26.21000	-2.29352	-1.71	XX
L7NAFP		29.94500	1.38951	1.01	29.85500	1.35148	1.01	XX
MTEQYH		27.44800	-1.10749	-0.81	27.45400	-1.04952	-0.78	XX
P79NQV		30.94600	2.39051	1.74	30.83400	2.33048	1.73	XX
PVE4QP	X	13.42400	-15.13149	-11.00	13.21800	-15.28552	-11.37	XX
QCZL2F		28.34400	-0.21149	-0.15	28.04600	-0.45752	-0.34	XX
QEQ69W		27.30000	-1.25549	-0.91	27.10800	-1.39552	-1.04	XX
R8RWHN		30.12760	1.57211	1.14	30.09940	1.59588	1.19	XX
RPK6NF		28.66580	0.11031	0.08	28.07840	-0.42512	-0.32	XX
XAY94L		29.63600	1.08051	0.79	29.40800	0.90448	0.67	XX
YVUEUX		28.22000	-0.33549	-0.24	28.54000	0.03648	0.03	XX

Summary Statistics	
Grand Means	28.555493 kJ/m <sup>2</sup> 28.503520 kJ/m <sup>2</sup>
Std Dev Btwn Labs	1.374966 kJ/m <sup>2</sup> 1.344287 kJ/m <sup>2</sup>
Statistics based on 15 of 16 reporting participants	

Sample Z19: ABS & Sample Z20: ABS

**Comments on assigned Data Flags for Test #791**

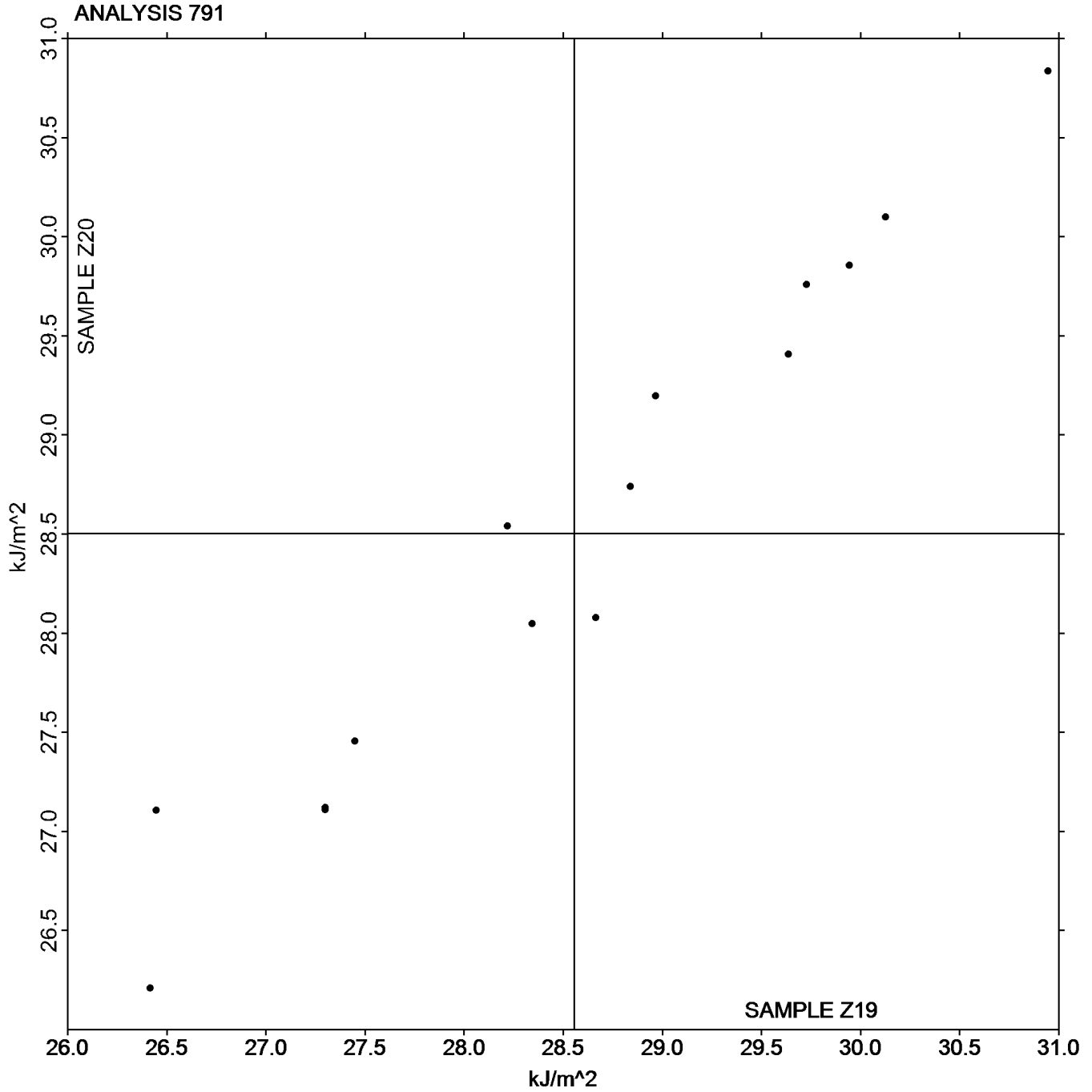
PVE4QP (X) - Data for both samples are low.

**Instrument Code List as Reported by the Labs**

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program  
Analysis 791  
Notched Izod Impact - kJ/m<sup>2</sup>

Grand Mean Sample Z19: 28.555 kJ/m<sup>2</sup> Grand Mean Sample Z20: 28.504 kJ/m<sup>2</sup>



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



## Analysis 792

Notched Charpy Impact - kJ/m<sup>2</sup>

WebCode	Data Flag	Sample M19			Sample M20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2PK26A		14.08	1.27	2.04	14.22	1.39	2.27	CE
3JVXDA		11.69	-1.12	-1.80	11.92	-0.90	-1.48	TO
3KMKKF		12.92	0.12	0.19	12.52	-0.31	-0.51	XX
3Q2CXX		12.45	-0.36	-0.58	12.27	-0.56	-0.92	TM
4WDTGM		14.10	1.29	2.08	13.98	1.15	1.88	WZ
64PBH7		13.52	0.71	1.15	13.14	0.31	0.51	CE
67DYNE		12.12	-0.69	-1.11	12.34	-0.49	-0.80	WZ
683T6B		12.68	-0.13	-0.21	12.06	-0.76	-1.25	XX
7CJBRV		12.01	-0.80	-1.29	12.66	-0.17	-0.28	CE
7NCEQ7		13.22	0.41	0.66	13.05	0.22	0.36	WZ
7WMFAL		13.63	0.83	1.33	13.69	0.87	1.41	CE
8MNXL3		12.72	-0.08	-0.14	12.36	-0.46	-0.76	XX
BPXUKE		12.49	-0.31	-0.51	12.83	0.00	0.01	XX
CK48NY		13.20	0.39	0.63	12.64	-0.19	-0.31	CE
DY8WAR		12.17	-0.64	-1.03	12.13	-0.70	-1.15	XX
EP49L6		13.09	0.28	0.45	13.06	0.24	0.38	XX
FDKTL4		12.92	0.11	0.18	13.34	0.51	0.84	TO
FL996T		12.84	0.03	0.05	12.48	-0.35	-0.57	CE
H9NYVN		12.79	-0.02	-0.03	13.28	0.45	0.73	TO
HZBEQW		13.70	0.89	1.44	13.70	0.87	1.42	XX
JH88A9		12.12	-0.68	-1.10	12.13	-0.70	-1.14	WZ
JVQNGM		13.12	0.31	0.50	13.45	0.63	1.02	TM
L7NAFP		13.35	0.54	0.87	13.02	0.20	0.32	TM
LTAN73		12.47	-0.34	-0.55	12.47	-0.36	-0.58	TM
LXPWTZ		13.90	1.09	1.75	13.60	0.78	1.27	CE
MTEQYH		12.10	-0.71	-1.15	11.92	-0.91	-1.48	TO
NRDWCB	X	18.13	5.32	8.56	16.15	3.33	5.43	XX
P79NQV		12.44	-0.37	-0.60	12.73	-0.09	-0.15	XX
PD7GLH		12.82	0.01	0.02	13.41	0.58	0.95	PO
PU8T3H		11.64	-1.17	-1.89	12.18	-0.65	-1.06	XX
QCZL2F		11.97	-0.84	-1.35	12.07	-0.76	-1.23	TO
QEQ69W		13.28	0.47	0.76	12.92	0.09	0.14	WZ

**Plastics Interlaboratory Testing Program**  
**Analysis 792**  
**Notched Charpy Impact - kJ/m<sup>2</sup>**

WebCode	Data Flag	Sample M19			Sample M20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
QHYB86	X	15.08	2.27	3.66	17.08	4.25	6.94	XX
RMMDGA		13.36	0.55	0.89	13.01	0.18	0.30	TO
RPK6NF		13.08	0.27	0.43	13.52	0.69	1.13	CE
UMZJD6		13.01	0.20	0.33	13.24	0.41	0.67	CE
WEY2LX		12.22	-0.59	-0.95	11.69	-1.14	-1.86	CE
WZAT93		12.96	0.15	0.24	13.14	0.31	0.51	CE
XAY94L		12.43	-0.38	-0.61	12.45	-0.37	-0.61	TY
YPCU8U		12.27	-0.54	-0.87	12.15	-0.68	-1.10	TM
YUFFV4		12.28	-0.53	-0.85	13.01	0.18	0.29	XX
YWUFBJ		13.06	0.26	0.41	13.07	0.24	0.39	TM
ZFUCUW		12.94	0.13	0.21	13.09	0.26	0.43	XX

Summary Statistics			
Grand Means	12.808	kJ/m <sup>2</sup>	12.828 kJ/m <sup>2</sup>
Std Dev Btw Labs	0.621	kJ/m <sup>2</sup>	0.613 kJ/m <sup>2</sup>
Statistics based on 41 of 43 reporting participants			

Sample M19: HIPS & Sample M20: HIPS

**Comments on assigned Data Flags for Test #792**

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

QHYB86 (X) - Data for both samples are high.

**Instrument Code List as Reported by the Labs**

(CE) - Ceast

(PO) - POE

(TM) - TMI

(TO) - Tinius Olsen

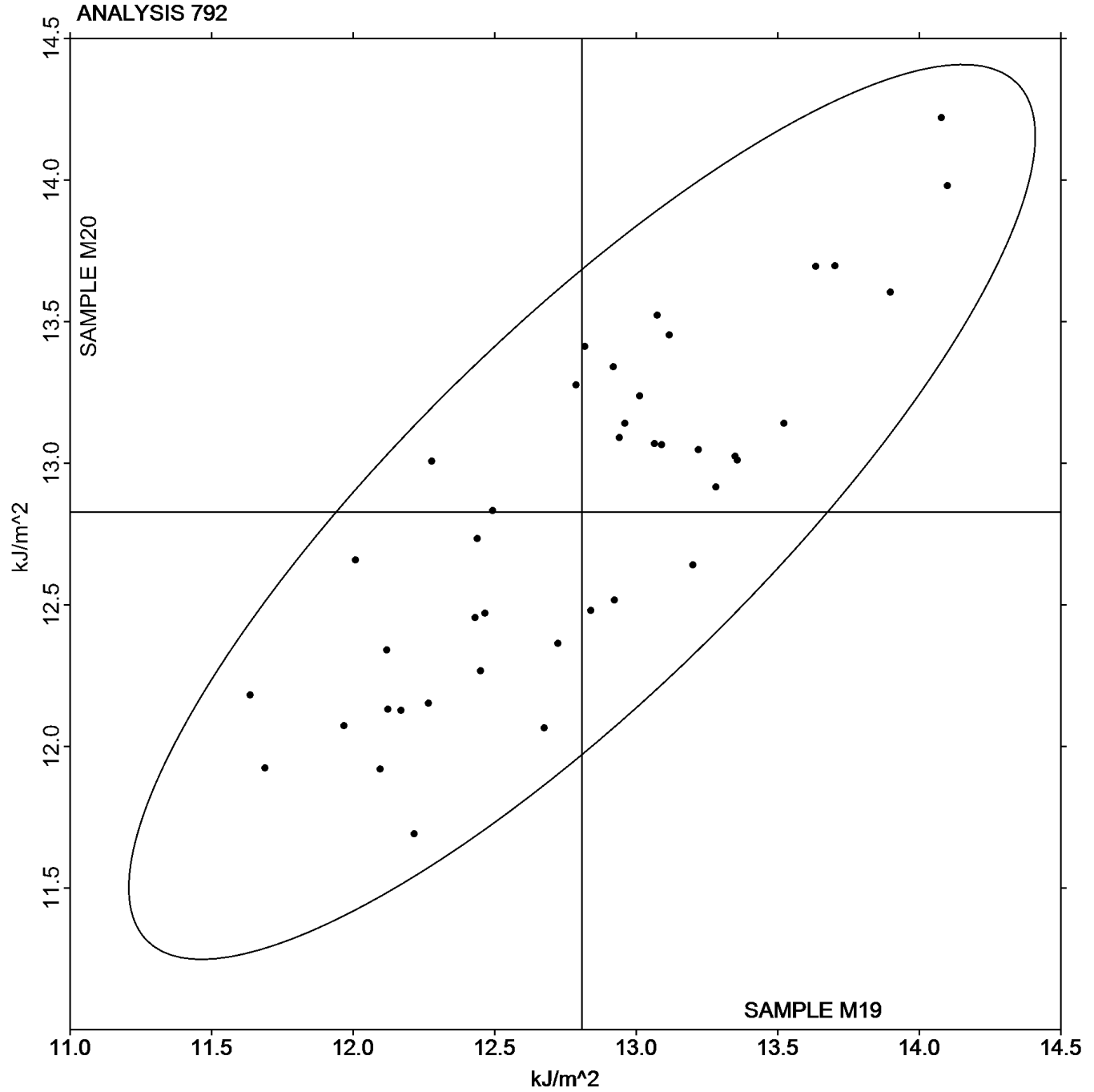
(TY) - Toyoseiki

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

**Plastics Interlaboratory Testing Program**  
**Analysis 792**  
**Notched Charpy Impact - kJ/m<sup>2</sup>**

Grand Mean Sample M19: 12.808 kJ/m<sup>2</sup> Grand Mean Sample M20: 12.828 kJ/m<sup>2</sup>



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 E19			Sample E20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2FKBTE		80.25	1.31	1.18	80.00	0.99	0.87	TO
2PK26A		78.58	-0.37	-0.33	78.90	-0.11	-0.09	CE
487DQZ		80.00	1.06	0.95	80.28	1.27	1.11	XX
4GA6UF		77.90	-1.04	-0.94	77.83	-1.18	-1.03	TO
9HE2QR		77.43	-1.52	-1.36	77.70	-1.31	-1.14	TO
A33V6K		78.80	-0.14	-0.13	79.05	0.04	0.04	TO
A3PCJD		78.55	-0.39	-0.35	78.34	-0.67	-0.59	ZW
BDH2TP		80.70	1.76	1.58	81.20	2.19	1.91	AT
C7TGU6		78.23	-0.72	-0.64	78.20	-0.81	-0.71	AT
CA2DCG		79.68	0.73	0.66	79.68	0.67	0.58	XX
DDFJ8D		78.88	-0.07	-0.06	78.75	-0.26	-0.23	AT
DGCNMX		78.25	-0.69	-0.62	78.00	-1.01	-0.88	RO
EP49L6		77.70	-1.24	-1.12	77.38	-1.63	-1.43	TO
FDKTL4		80.03	1.08	0.98	79.73	0.72	0.63	CE
FL996T		78.68	-0.27	-0.24	78.64	-0.37	-0.32	CE
FZADHB	X	78.88	-0.07	-0.06	80.23	1.22	1.06	CE
HZBEQW		78.13	-0.82	-0.73	78.28	-0.73	-0.64	TO
J8NT4J		77.63	-1.32	-1.18	77.60	-1.41	-1.23	XA
KZXWGB		81.04	2.10	1.89	81.10	2.09	1.82	TO
L7NAFP		79.75	0.81	0.73	79.48	0.47	0.41	AT
LTAN73	*	82.35	3.41	3.07	82.53	3.52	3.07	CS
NYNX2D		78.93	-0.02	-0.01	79.18	0.17	0.15	CE
QEQ69W		79.75	0.81	0.73	79.75	0.74	0.65	AT
UP322W		78.73	-0.22	-0.19	78.75	-0.26	-0.23	DN
UZMARD	X	78.40	-0.54	-0.49	76.25	-2.76	-2.41	RR
W6F7PT		78.55	-0.39	-0.35	78.60	-0.41	-0.36	TO
WHA9T6		78.60	-0.34	-0.31	78.90	-0.11	-0.09	DN
WZAT93		77.30	-1.64	-1.48	77.50	-1.51	-1.32	TO
XAY94L		78.85	-0.09	-0.08	78.68	-0.33	-0.29	TY
XGEB4A		79.35	0.41	0.37	79.53	0.52	0.45	RO
YWUFBJ		78.18	-0.77	-0.69	78.45	-0.56	-0.49	TO
ZH72F8		78.68	-0.27	-0.24	78.55	-0.46	-0.40	CE

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

WebCode	Data Flag	Sample E19			Sample E20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
ZKFKTY	*	78.55	-0.39	-0.35	79.48	0.47	0.41	XX
ZV4HKL		78.15	-0.79	-0.71	78.30	-0.71	-0.62	DN

**Summary Statistics**

Grand Means

78.941 Degrees C

79.009 Degrees C

Std Dev Btw Labs

1.111 Degrees C

1.145 Degrees C

Statistics based on 32 of 34 reporting participants

Sample E19: HIPS &amp; Sample E20: HIPS

**Comments on assigned Data Flags for Test #710**

FZADHB (X) - Inconsistent in testing between samples.

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

**Instrument Code List as Reported by the Labs**

(AT) - Atlas

(CE) - Ceast

(CS) - CSI

(DN) - DYNISCO

(RO) - Rosand

(RR) - Ray-Ran

(TO) - Tinius Olsen

(TY) - Toyoseiki

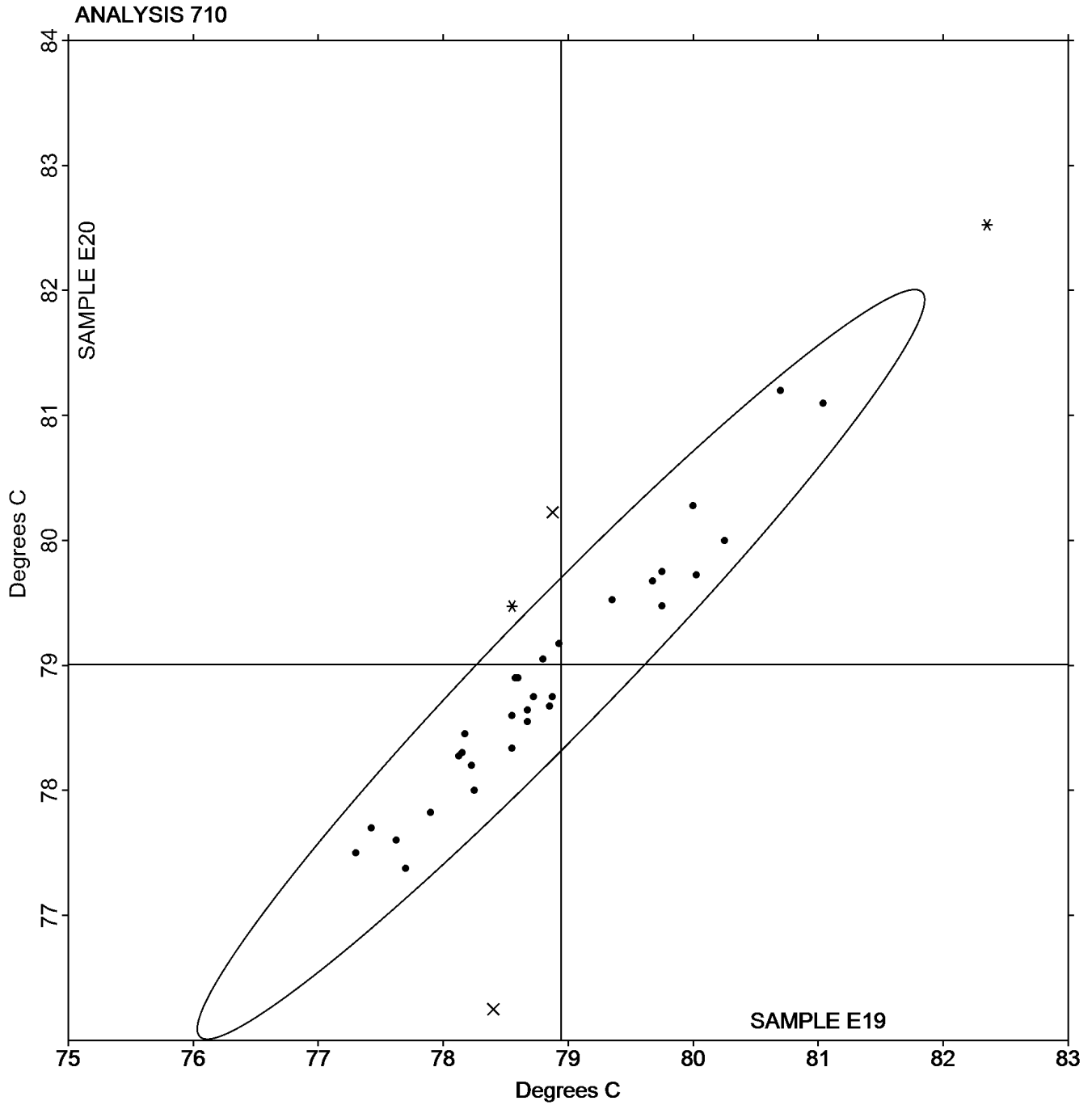
(XA) - Special In-House Instrument

(XX) - Instrument manufacturer not specified by lab

(ZW) - Zwick

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

Grand Mean Sample E19: 78.941 Degrees C    Grand Mean Sample E20: 79.009 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 G19			Sample G20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2PK26A		78.2	1.6	0.72	78.0	0.6	0.30	CE
487DQZ		75.6	-1.1	-0.48	76.9	-0.5	-0.22	XX
4GA6UF		75.6	-1.0	-0.46	76.1	-1.3	-0.62	TO
7WMFAL		80.2	3.6	1.62	79.7	2.3	1.12	RO
977R9G		75.1	-1.6	-0.71	74.8	-2.6	-1.29	XX
9HE2QR		75.3	-1.3	-0.61	74.9	-2.5	-1.20	TO
A33V6K		72.4	-4.3	-1.93	76.2	-1.2	-0.61	XX
DDFJ8D		76.8	0.2	0.10	77.2	-0.2	-0.08	AT
FL996T		76.3	-0.3	-0.13	76.5	-0.9	-0.46	CE
HZBEQW		76.2	-0.4	-0.19	79.1	1.7	0.80	TO
NYNX2D		78.5	1.8	0.83	78.5	1.1	0.55	CE
UZMARD		80.6	4.0	1.80	82.5	5.1	2.49	RR
WZAT93		74.7	-1.9	-0.85	76.1	-1.3	-0.62	TO
YWUFBJ		77.2	0.6	0.28	77.1	-0.3	-0.16	TO

Summary Statistics			
Grand Means	76.61	Degrees C	77.40 Degrees C
Std Dev Btwn Labs	2.21	Degrees C	2.06 Degrees C
Statistics based on 14 of 14 reporting participants			

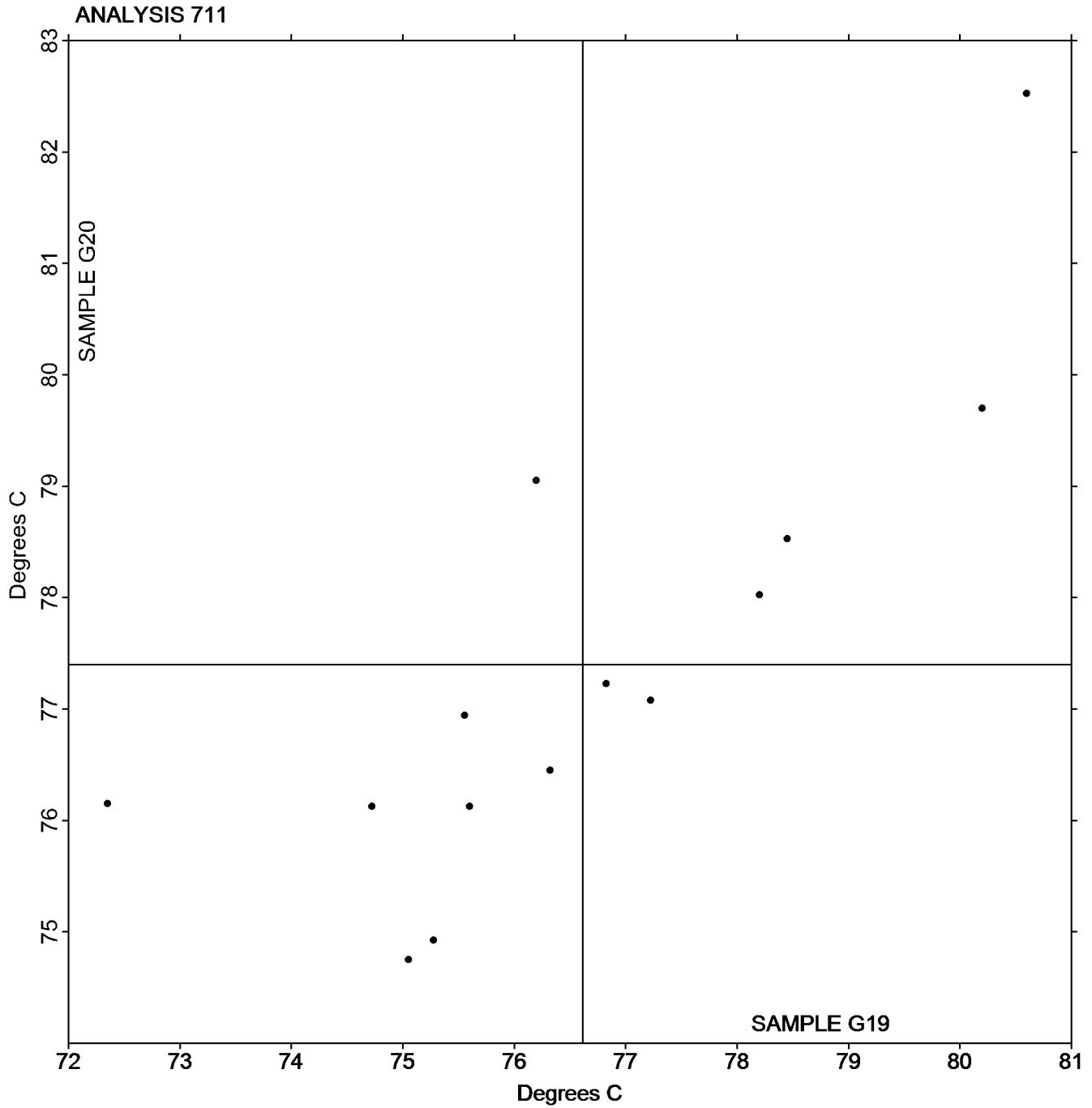
Sample G19: PP & Sample G20: PP

**Instrument Code List as Reported by the Labs**

- |                     |   |
|---------------------|---|
| (AT) - Atlas        | (CE) - Ceast  |
| (RO) - Rosand       | (RR) - Ray-Ran                                      |
| (TO) - Tinius Olsen | (XX) - Instrument manufacturer not specified by lab |

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

Grand Mean Sample G19: 76.613 Degrees C    Grand Mean Sample G20: 77.399 Degrees C



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



## Analysis 712

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

WebCode	Data Flag	Sample N19			Sample N20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2PK26A		78.35	-0.51	-0.51	78.15	-0.96	-0.85	CE
3KMKKF		80.25	1.39	1.39	80.80	1.69	1.50	XX
3Q2CXX		79.73	0.86	0.86	79.55	0.44	0.39	AT
4GA6UF		80.58	1.71	1.71	80.65	1.54	1.37	TO
67DYNE		79.75	0.89	0.89	80.20	1.09	0.97	CE
683T6B		79.33	0.46	0.46	80.73	1.62	1.44	XX
7CJBRV		78.98	0.11	0.11	79.45	0.34	0.30	CE
7MLL6C		78.53	-0.34	-0.34	78.48	-0.63	-0.56	ZW
7NCEQ7		79.45	0.59	0.59	80.08	0.97	0.86	CF
7TPZPP		78.98	0.11	0.11	79.53	0.42	0.37	XX
7WMFAL		78.60	-0.26	-0.26	78.95	-0.16	-0.14	CF
8MNXL3		79.28	0.41	0.41	79.10	-0.01	-0.01	TO
BPXUKE		80.28	1.41	1.41	79.85	0.74	0.66	AT
BQMV9W		78.43	-0.44	-0.44	78.43	-0.68	-0.61	CE
CK48NY		79.28	0.41	0.41	80.03	0.92	0.81	AT
DY8WAR		78.55	-0.31	-0.31	79.23	0.12	0.10	XX
EVUM6J		77.38	-1.49	-1.49	77.15	-1.96	-1.74	TO
F66PFJ	*	81.30	2.44	2.44	80.75	1.64	1.46	TO
HHZHRJ		78.78	-0.09	-0.09	79.20	0.09	0.08	XX
JH88A9		76.95	-1.91	-1.92	76.93	-2.18	-1.94	CE
L7NAFP		79.13	0.26	0.26	78.58	-0.53	-0.48	AT
LTAN73		77.33	-1.54	-1.54	77.60	-1.51	-1.34	IN
MTEQYH		78.53	-0.34	-0.34	77.68	-1.43	-1.28	CE
P79NQV		77.48	-1.39	-1.39	77.70	-1.41	-1.25	XX
QCZL2F		77.65	-1.21	-1.22	78.60	-0.51	-0.45	CE
QEK6V8		78.05	-0.81	-0.82	77.90	-1.21	-1.08	XX
QEQ69W		79.35	0.49	0.49	79.77	0.66	0.58	AT
VUQ4M8		78.20	-0.66	-0.66	78.55	-0.56	-0.50	CE
WEY2LX		80.20	1.34	1.34	81.13	2.02	1.79	CE
WHA9T6		79.23	0.36	0.36	79.45	0.34	0.30	DN
WZAT93		77.70	-1.16	-1.17	77.80	-1.31	-1.16	TO
XAY94L		78.33	-0.54	-0.54	78.85	-0.26	-0.23	TY

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

WebCode	Data Flag	Sample N19			Sample N20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
Y7EKAK		79.00	0.14	0.14	79.20	0.09	0.08	CF
YUFFV4		79.43	0.56	0.56	80.60	1.49	1.33	XX
YVUEUX		77.95	-0.91	-0.92	78.25	-0.86	-0.76	TO

**Summary Statistics**

Grand Means

78.864 Degrees C

79.110 Degrees C

Std Dev Btwn Labs

0.998 Degrees C

1.124 Degrees C

Statistics based on 35 of 35 reporting participants

Sample N19: ABS/PC &amp; Sample N20: ABS/PC

**Instrument Code List as Reported by the Labs**

(AT) - Atlas

(CE) - Ceast

(CF) - Coesfeld

(DN) - DYNISCO

(IN) - Instron

(TO) - Tinius Olsen

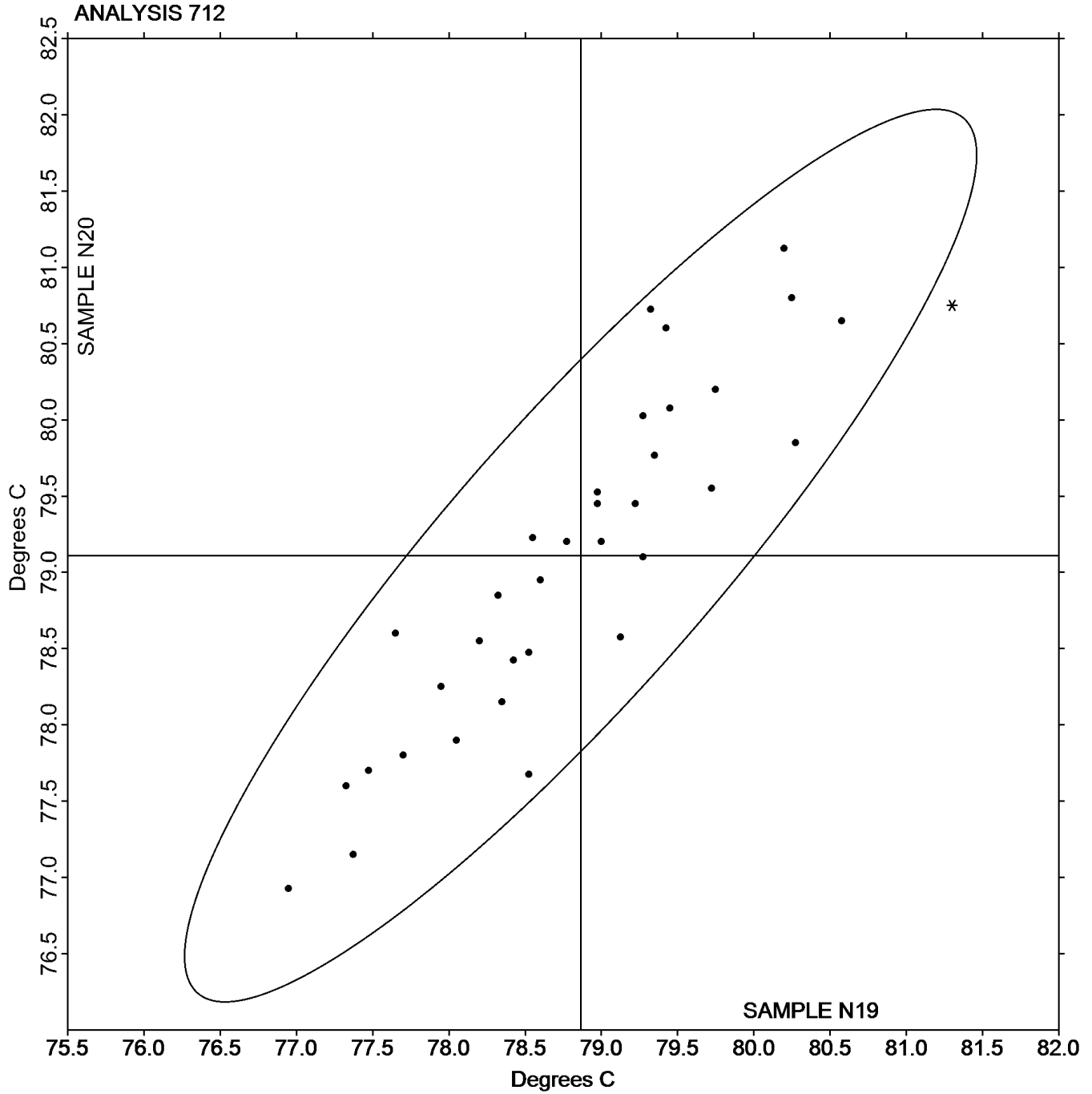
(TY) - Toyoseiki

(XX) - Instrument manufacturer not specified by lab

(ZW) - Zwick

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

Grand Mean Sample N19: 78.864 Degrees C    Grand Mean Sample N20: 79.110 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 H19			Sample H20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3Q2CXX		105.28	-0.16	-0.19	105.15	-0.25	-0.29	AT
3RELHH		105.23	-0.21	-0.25	105.10	-0.30	-0.35	CE
44NQX6		104.25	-1.20	-1.39	104.20	-1.20	-1.39	AT
4GA6UF		105.52	0.07	0.08	105.47	0.07	0.08	TO
67DYNE		105.97	0.52	0.60	105.80	0.40	0.46	XX
7JAKDB		104.22	-1.23	-1.43	104.17	-1.23	-1.43	TO
7MLL6C		104.70	-0.75	-0.87	104.83	-0.57	-0.66	WZ
7WMFAL		105.35	-0.10	-0.11	105.55	0.15	0.17	CF
8MNXL3		105.72	0.27	0.31	106.05	0.65	0.75	XX
A3PCJD		105.08	-0.36	-0.42	105.07	-0.33	-0.39	CE
AK9ELJ		105.53	0.09	0.10	105.27	-0.13	-0.16	CE
BE34AD		105.10	-0.35	-0.40	104.63	-0.77	-0.89	TO
DGCNMX		105.27	-0.18	-0.21	105.17	-0.23	-0.27	RO
FL996T		106.45	1.00	1.16	106.47	1.07	1.24	CE
FNJMWF	*	104.87	-0.58	-0.67	105.42	0.02	0.02	CE
FZADHB		107.40	1.95	2.26	107.43	2.03	2.36	CE
JVQNGM		106.17	0.72	0.83	106.17	0.77	0.89	CE
K3TKYH		105.25	-0.20	-0.23	105.23	-0.17	-0.19	CE
K4XRY7		106.45	1.00	1.16	106.10	0.70	0.81	CE
L7NAFP		106.07	0.62	0.72	105.83	0.43	0.50	AT
LXPWTZ		104.35	-1.10	-1.27	104.23	-1.17	-1.35	AT
P79NQV	X	96.63	-8.81	-10.23	94.77	-10.63	-12.33	XX
PD7GLH		105.33	-0.11	-0.13	105.30	-0.10	-0.12	CE
QEQ69W		107.23	1.79	2.07	107.12	1.72	1.99	CF
R8RWHN		104.91	-0.54	-0.63	104.84	-0.56	-0.65	CE
UP322W		106.60	1.15	1.34	106.77	1.37	1.58	DN
UZMARD		105.52	0.07	0.08	105.12	-0.28	-0.33	RR
VZ2QHY	X	106.15	0.70	0.81	105.00	-0.40	-0.47	CE
XAY94L		104.13	-1.31	-1.53	104.27	-1.13	-1.32	TY
Y7EKAK		104.20	-1.25	-1.45	104.18	-1.22	-1.41	CF
YPCU8U		105.85	0.40	0.47	105.72	0.32	0.37	CE

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

Summary Statistics			
Grand Means	105.448	Degrees C	105.401 Degrees C
Std Dev Btwn Labs	0.862	Degrees C	0.862 Degrees C
Statistics based on 29 of 31 reporting participants			

Sample H19: ABS & Sample H20: ABS

**Comments on assigned Data Flags for Test #715**

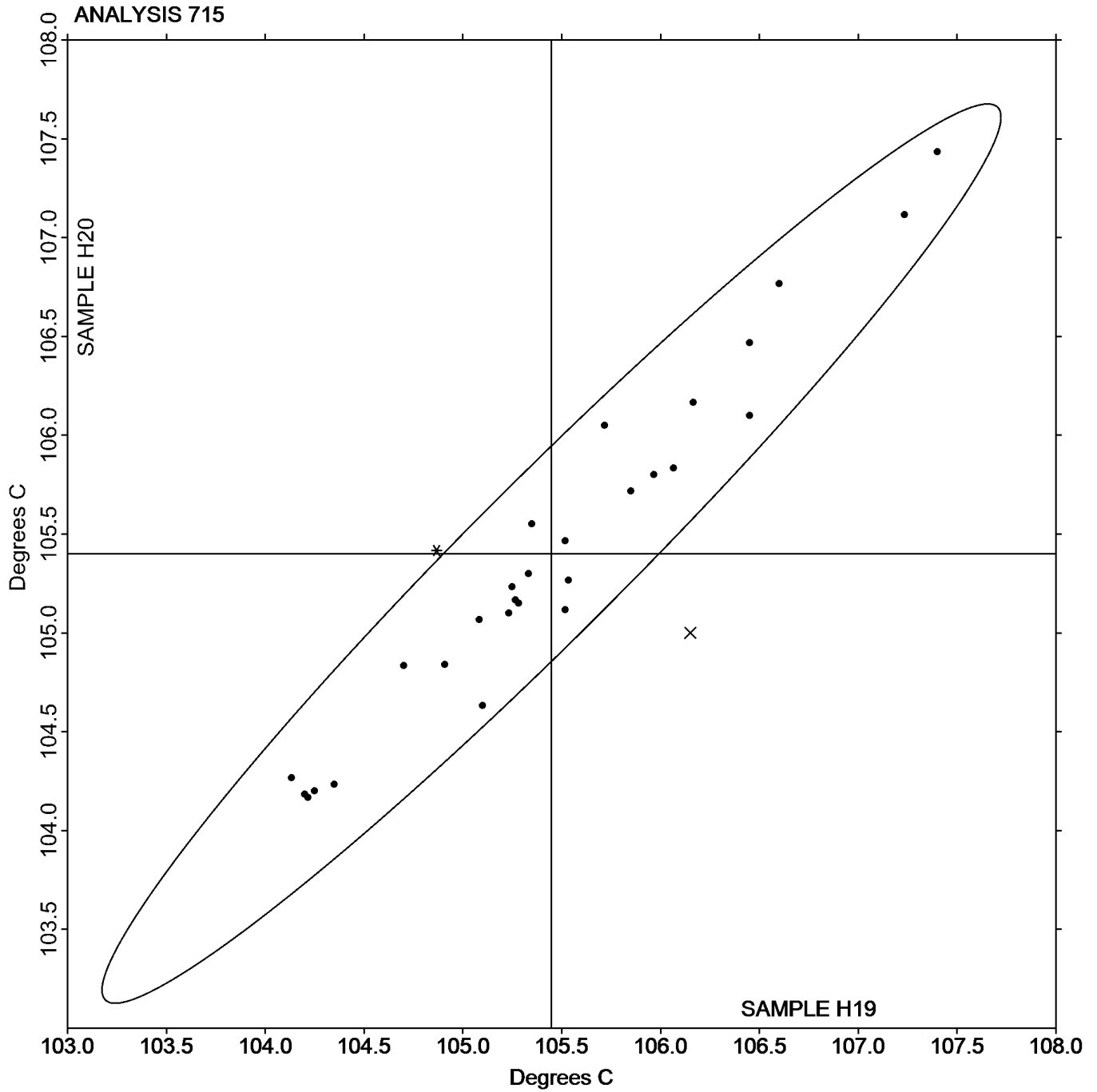
P79NQV (X) - Data for both samples are low.

VZ2QHY (X) - Inconsistent in testing between samples.

Instrument Code List as Reported by the Labs	
(AT) - Atlas	(CE) - Ceast
(CF) - Coesfeld	(DN) - DYNISCO
(RO) - Rosand	(RR) - Ray-Ran
(TO) - Tinius Olsen	(TY) - Toyoseiki
(WZ) - Zwick	(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample H19: 105.45 Degrees C    Grand Mean Sample H20: 105.40 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 R19			Sample R20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3Q2CXX		107.42	0.49	0.44	107.25	0.39	0.36	AT
3RELHH		106.45	-0.48	-0.44	106.47	-0.40	-0.36	CE
44NQX6		105.88	-1.05	-0.95	105.82	-1.05	-0.96	AT
4GA6UF		105.12	-1.81	-1.65	105.32	-1.55	-1.42	TO
67DYNE		106.98	0.05	0.05	106.62	-0.25	-0.23	XX
6D7ARC		107.18	0.25	0.23	107.13	0.27	0.25	TO
7JAKDB		105.68	-1.25	-1.14	105.72	-1.15	-1.06	TO
7MLL6C		106.88	-0.05	-0.04	106.78	-0.08	-0.07	WZ
7WMFAL		105.60	-1.33	-1.21	105.25	-1.61	-1.49	CF
8MNXL3		107.80	0.87	0.79	107.02	0.15	0.14	XX
A3PCJD		106.27	-0.66	-0.60	106.34	-0.52	-0.48	CE
AK9ELJ		107.23	0.30	0.28	107.47	0.60	0.56	CE
BE34AD		105.50	-1.43	-1.30	105.10	-1.76	-1.62	TO
DGCNMX		107.07	0.14	0.13	106.58	-0.28	-0.26	RO
EP49L6		106.62	-0.31	-0.29	106.77	-0.10	-0.09	TO
FL996T		108.08	1.15	1.05	108.09	1.23	1.14	CE
FNJMWF	*	106.50	-0.43	-0.39	107.43	0.57	0.53	CE
FZADHB		109.40	2.47	2.25	109.60	2.74	2.52	CE
JVQNGM		107.68	0.75	0.68	107.43	0.57	0.53	CE
L7NAFP		108.57	1.64	1.49	108.15	1.29	1.19	AT
NYNX2D		105.68	-1.25	-1.14	105.60	-1.26	-1.16	CE
P79NQV	X	98.40	-8.53	-7.79	96.35	-10.51	-9.69	XX
PD7GLH		107.70	0.77	0.70	107.38	0.52	0.48	XX
QEQ69W		108.67	1.74	1.59	108.65	1.79	1.65	CF
R8RWHN		106.78	-0.15	-0.14	106.78	-0.08	-0.07	XX
UP322W		106.80	-0.13	-0.12	106.78	-0.08	-0.07	DN
UZMARD		107.87	0.94	0.86	107.65	0.79	0.73	RR
VZ2QHY		108.18	1.25	1.14	108.15	1.29	1.19	CE
WZAT93		105.30	-1.63	-1.49	105.36	-1.50	-1.38	TO
XAY94L		106.07	-0.86	-0.79	106.30	-0.56	-0.52	TY

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

**Summary Statistics**

Grand Means	106.930 Degrees C	106.862 Degrees C
Std Dev Btwn Labs	1.096 Degrees C	1.085 Degrees C
Statistics based on 29 of 30 reporting participants		

Sample R19: ABS & Sample R20: ABS

**Comments on assigned Data Flags for Test #716**

P79NQV (X) - Data for both samples are low. Also Inconsistent in testing within Sample R20.

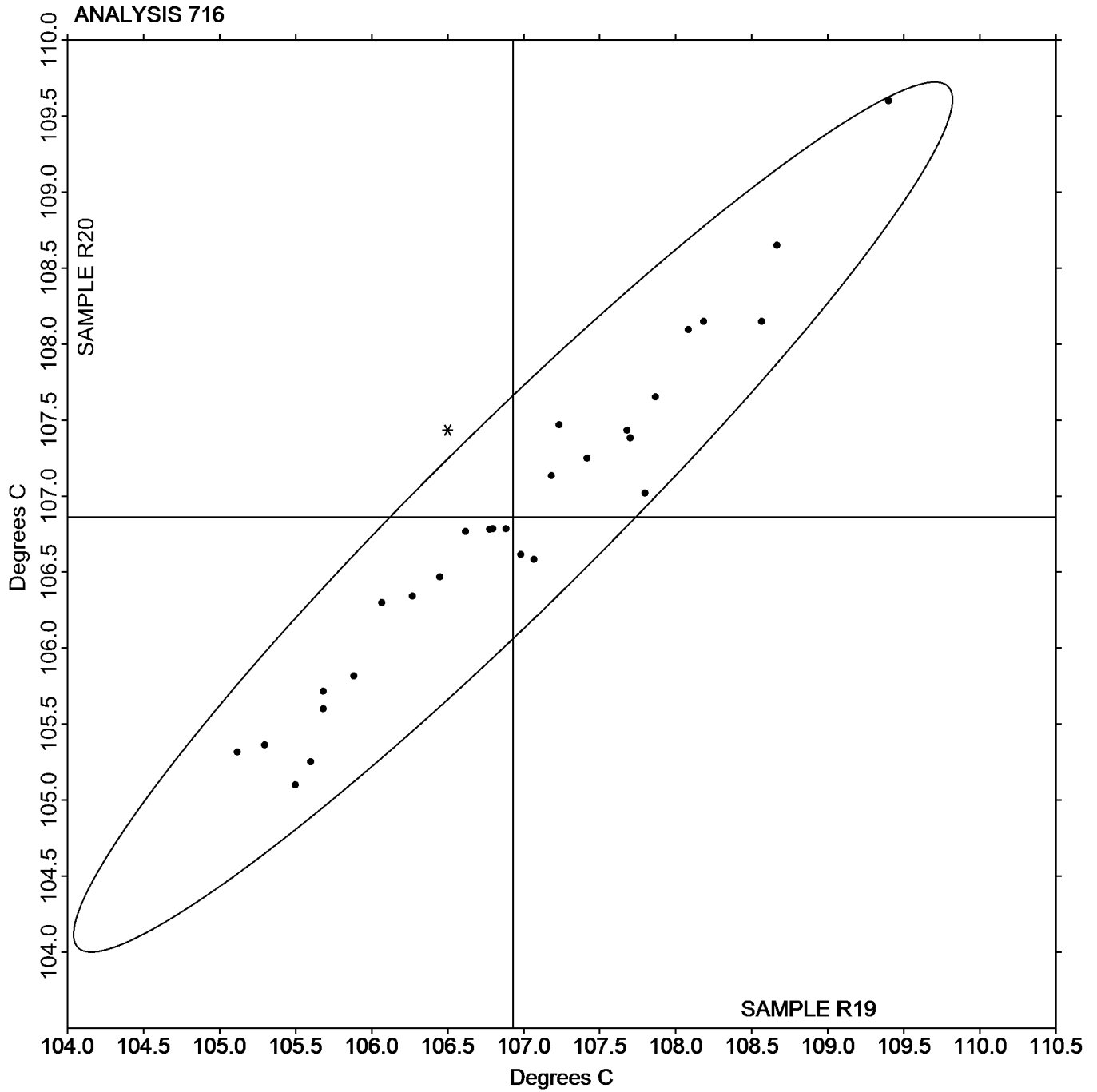
**Instrument Code List as Reported by the Labs**

(AT) - Atlas	(CE) - Ceast
(CF) - Coesfeld	(DN) - DYNISCO
(RO) - Rosand	(RR) - Ray-Ran
(TO) - Tinius Olsen	(TY) - Toyoseiki
(WZ) - Zwick	(XX) - Instrument manufacturer not specified by lab



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

Grand Mean Sample R19: 106.93 Degrees C    Grand Mean Sample R20: 106.86 Degrees C



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

## Analysis 750

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

WebCode	Data Flag	Sample X19			Sample X20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2KW47C		5.35	0.36	0.97	5.00	0.01	0.02	TO
2PK26A		5.07	0.08	0.20	5.00	0.00	0.00	TO
3BMVXE	*	4.90	-0.09	-0.25	4.51	-0.48	-1.37	TO
3JVXDA	*	5.65	0.66	1.77	5.20	0.21	0.58	TO
3KMKKF		5.11	0.12	0.31	5.09	0.09	0.26	XX
3Q2CXX		4.82	-0.17	-0.44	4.54	-0.46	-1.29	KA
487DQZ		4.60	-0.39	-1.04	4.60	-0.39	-1.12	XX
49GBU3	*	4.12	-0.87	-2.34	4.53	-0.47	-1.33	WZ
4CLTDH		5.10	0.11	0.30	5.15	0.16	0.44	TO
4WDTGM		5.07	0.08	0.22	5.07	0.07	0.20	DY
67DYNE		5.19	0.20	0.54	5.13	0.13	0.37	WZ
683T6B		5.40	0.41	1.10	5.25	0.26	0.73	XX
6EY8XX		4.97	-0.02	-0.06	5.17	0.18	0.51	TM
6HFXAK		5.05	0.06	0.16	5.05	0.06	0.16	AT
7BQYRE		5.21	0.22	0.59	5.19	0.20	0.56	XX
7EGYMJ		4.26	-0.73	-1.95	4.36	-0.63	-1.79	QT
7NCEQ7		5.33	0.34	0.91	5.36	0.36	1.03	GO
7WMFAL		5.03	0.04	0.10	5.00	0.00	0.00	XX
9BGU4H		5.15	0.16	0.43	4.90	-0.09	-0.27	TY
9HE2QR		4.90	-0.09	-0.24	4.85	-0.14	-0.41	KA
9JZZHJ		5.75	0.76	2.04	5.65	0.66	1.86	TO
A6VJYY		5.02	0.03	0.08	4.95	-0.04	-0.12	DY
AFUCDJ		5.02	0.03	0.08	4.97	-0.03	-0.08	GO
B38HJ6		5.56	0.57	1.53	5.48	0.49	1.38	TO
BA7FHM		4.77	-0.21	-0.57	4.99	0.00	0.00	DY
BPXUKE		5.01	0.02	0.06	5.19	0.20	0.56	TO
C7GRXZ		5.21	0.22	0.59	5.22	0.22	0.63	XX
C7TGU6		5.50	0.51	1.37	5.50	0.51	1.43	TO
CAJLZB		5.29	0.30	0.79	5.55	0.55	1.56	TO
CRMZQT		4.65	-0.34	-0.90	4.75	-0.24	-0.69	DY
CYHF8N	X	5.50	0.51	1.37	4.75	-0.24	-0.69	TO
CYQGGD		4.85	-0.13	-0.36	4.75	-0.25	-0.69	TO

## Analysis 750

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

WebCode	Data Flag	Sample X19			Sample X20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
DDFJ8D		5.05	0.06	0.16	5.00	0.01	0.02	TO
DGCNMX		4.85	-0.14	-0.37	5.10	0.11	0.30	TO
E99PV4		5.12	0.13	0.34	5.09	0.10	0.27	TO
EBRTJ9		5.30	0.31	0.83	5.40	0.41	1.15	DY
EP49L6		4.45	-0.54	-1.44	4.40	-0.59	-1.68	TO
EVUM6J		4.75	-0.24	-0.64	4.90	-0.09	-0.27	TO
EWLWZ7		4.95	-0.04	-0.12	4.92	-0.07	-0.21	TO
EXGX3Z		5.03	0.04	0.11	4.94	-0.05	-0.14	TO
F66PFJ		5.35	0.36	0.97	5.40	0.41	1.15	TO
F7HVWV		5.25	0.26	0.69	5.21	0.22	0.62	CE
FB82AU		5.05	0.06	0.16	5.10	0.11	0.30	DY
FDKTL4	*	4.10	-0.89	-2.38	4.50	-0.49	-1.40	TO
FL996T		5.10	0.11	0.30	5.00	0.01	0.02	DY
FNJMWF		4.95	-0.04	-0.10	5.35	0.36	1.01	TO
FZADHB	X	3.34	-1.65	-4.42	3.26	-1.73	-4.92	GO
FZNWZ7		5.14	0.15	0.39	5.22	0.23	0.64	TO
H9NYVN		4.80	-0.19	-0.50	4.95	-0.04	-0.12	TO
HZBEQW	*	4.05	-0.94	-2.52	4.06	-0.94	-2.65	CS
J8NT4J		4.95	-0.04	-0.10	4.95	-0.04	-0.12	TO
JH88A9		4.93	-0.06	-0.17	5.09	0.09	0.26	GO
KZXWGB		5.23	0.24	0.63	5.30	0.31	0.87	TO
L7NAFP		5.10	0.11	0.30	5.22	0.23	0.64	TO
LDHMXB	*	4.06	-0.93	-2.48	4.10	-0.90	-2.54	CE
LLMH6X		4.94	-0.05	-0.14	4.77	-0.23	-0.65	CE
LPDZ2Z		4.94	-0.05	-0.13	4.67	-0.32	-0.92	CE
LTAN73		5.30	0.31	0.83	5.50	0.51	1.43	TO
MTEQYH		4.38	-0.61	-1.64	4.43	-0.56	-1.60	TO
N3U63M		5.00	0.01	0.02	5.10	0.10	0.29	TO
NYNX2D	*	4.12	-0.87	-2.32	3.99	-1.01	-2.86	CE
P79NQV	*	4.35	-0.64	-1.71	4.75	-0.24	-0.69	KA
P7R9KF		4.70	-0.29	-0.77	4.60	-0.39	-1.12	KA
PU8T3H		5.37	0.38	1.03	5.08	0.09	0.25	TO

## Analysis 750

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

WebCode	Data Flag	Sample X19			Sample X20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
Q4XGWU		5.35	0.36	0.97	5.20	0.21	0.58	WZ
QCZL2F		4.48	-0.51	-1.37	4.40	-0.59	-1.68	TO
QEQ69W		5.18	0.19	0.50	5.12	0.12	0.34	TO
QGARN8		5.00	0.01	0.03	5.05	0.06	0.16	DY
QHVB86		5.25	0.26	0.70	5.21	0.22	0.61	DY
QX273C		4.59	-0.40	-1.07	4.68	-0.32	-0.90	XX
RPK6NF	*	5.97	0.98	2.62	5.82	0.82	2.34	TO
TY7X7Q		5.01	0.02	0.04	4.92	-0.07	-0.21	TO
UMDE8X		5.00	0.01	0.03	5.10	0.11	0.30	DY
UP322W		4.85	-0.14	-0.37	4.70	-0.29	-0.83	DY
VAZJKH		5.39	0.40	1.07	5.31	0.31	0.88	TO
VDAGBU		4.80	-0.19	-0.50	4.95	-0.04	-0.12	TO
VZ2QHY		5.45	0.46	1.23	5.50	0.51	1.43	TO
WHA9T6		5.40	0.41	1.10	5.40	0.41	1.15	TO
WRRULX		5.01	0.02	0.04	4.88	-0.11	-0.32	GO
WT2HYD		4.93	-0.06	-0.17	5.00	0.01	0.02	TO
WVAH9Q		4.73	-0.26	-0.69	4.57	-0.42	-1.20	TO
WZAT93		5.22	0.23	0.61	5.17	0.17	0.48	TO
XAY94L		5.53	0.54	1.43	5.30	0.30	0.85	TY
XEDJKV		5.05	0.06	0.16	5.20	0.21	0.58	TO
XN3EF6		4.60	-0.39	-1.04	4.65	-0.34	-0.98	TO
XQ7A2T		4.75	-0.24	-0.64	4.83	-0.16	-0.47	TO
XQXBLY	X	5.14	0.15	0.39	1.15	-3.85	-10.92	TO
YPCU8U		4.73	-0.26	-0.69	4.70	-0.29	-0.83	TO
YUFFV4		5.00	0.01	0.03	5.40	0.41	1.15	XX
YWUFBJ		5.10	0.11	0.30	5.10	0.11	0.30	TO
ZKFKTY		5.15	0.16	0.43	5.35	0.36	1.01	TO

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

Summary Statistics			
Grand Means	4.988	grams/10 mins	4.994
			grams/10 mins
Std Dev Btwn Labs	0.374	grams/10 mins	0.353
			grams/10 mins
Statistics based on 88 of 91 reporting participants			

Sample X19: PP &amp; Sample X20: PP

**Comments on assigned Data Flags for Test #750**

CYHF8N (X) - Inconsistent in testing between samples.

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

XQXBLY (X) - Inconsistent in testing between samples, data for Sample X20 are low.

**Instrument Code List as Reported by the Labs**

(AT) - Atlas

(CE) - Ceast

(CS) - CSI

(DY) - Dynisco

(GO) - Gottfert

(KA) - Kayeness

(QT) - Qualitest

(TM) - TMI

(TO) - Tinius Olsen

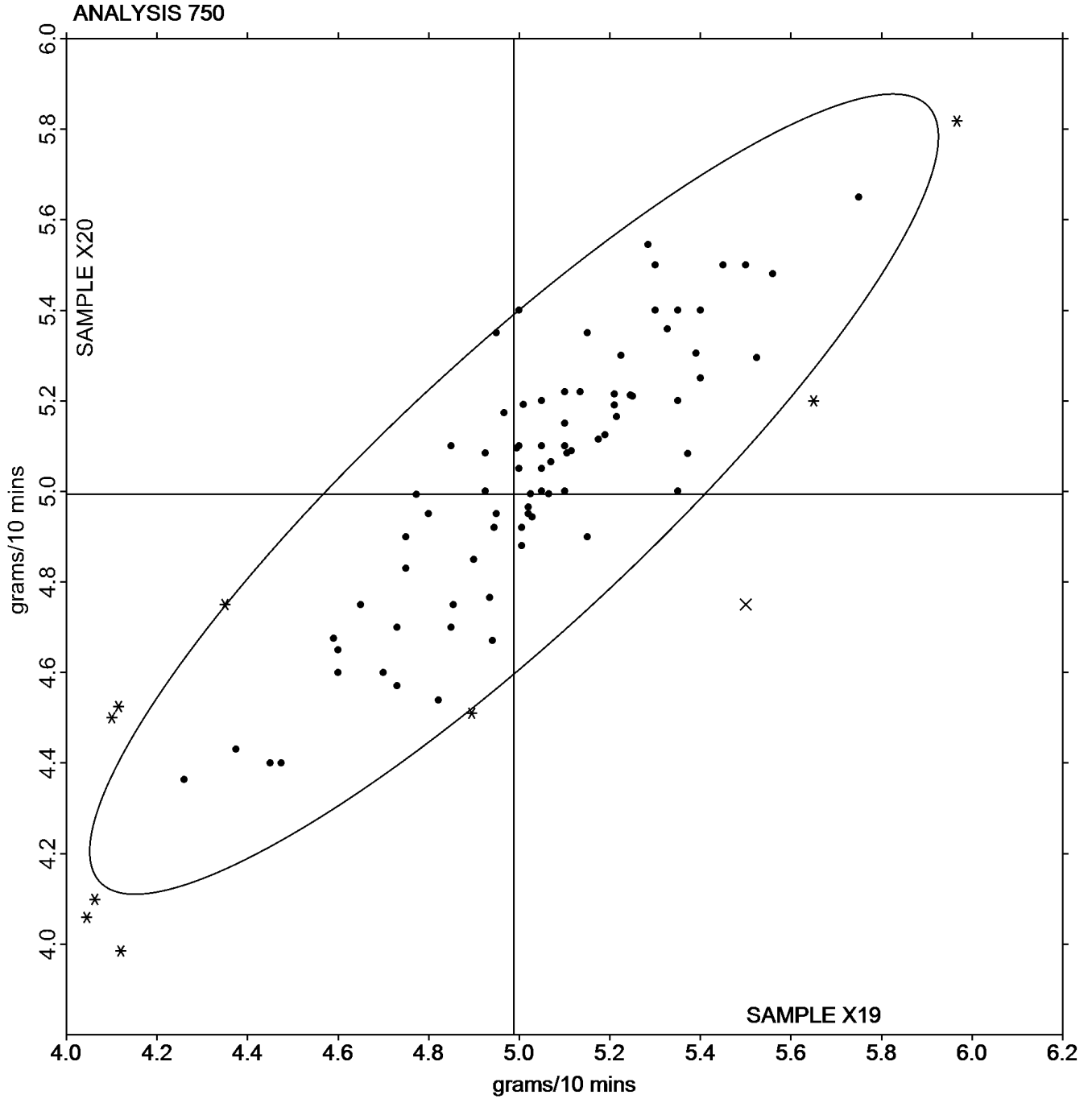
(TY) - Toyoseiki Seisakusho

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample X19: 4.9884 grams/10 mins    Grand Mean Sample X20: 4.9940 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.

## Analysis 718

## Specific Gravity - sp gr 23/23 C

WebCode	Data Flag	Sample T19			Sample T20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2FKBTE		1.02897	-0.00055	-0.29	1.03443	0.00192	0.96	XX
2GALGL		1.03167	0.00215	1.15	1.03400	0.00149	0.75	XX
2PK26A		1.03207	0.00255	1.36	1.03423	0.00172	0.86	XX
2TLGXA		1.02707	-0.00245	-1.31	1.03153	-0.00098	-0.49	XX
3DETTB		1.03060	0.00108	0.58	1.03403	0.00152	0.76	XX
3JJCRE		1.03080	0.00128	0.69	1.03477	0.00226	1.13	XX
3JVXDA		1.02547	-0.00405	-2.17	1.02787	-0.00464	-2.32	XX
3KMKKF		1.03063	0.00112	0.60	1.03500	0.00249	1.25	XX
3Q2CXX		1.03170	0.00218	1.17	1.03497	0.00246	1.23	XX
487DQZ		1.02767	-0.00185	-0.99	1.03030	-0.00221	-1.11	XX
4GA6UF		1.02967	0.00015	0.08	1.03300	0.00049	0.25	XX
4PG6W6		1.02700	-0.00252	-1.35	1.03233	-0.00018	-0.09	XX
4WDTGM		1.03050	0.00098	0.53	1.03297	0.00046	0.23	XX
64PBH7		1.02693	-0.00258	-1.38	1.03173	-0.00078	-0.39	XX
683T6B	*	1.03320	0.00368	1.97	1.03347	0.00096	0.48	XX
7CJBRV		1.02980	0.00028	0.15	1.03347	0.00096	0.48	XX
7EGYMJ		1.02877	-0.00075	-0.40	1.02950	-0.00301	-1.51	XX
7Q2DE6		1.03000	0.00048	0.26	1.03313	0.00062	0.31	XX
7WMFAL		1.02950	-0.00002	-0.01	1.03000	-0.00251	-1.26	XX
7YZYMR		1.02998	0.00046	0.24	1.03035	-0.00216	-1.08	XX
96FK4Z		1.03050	0.00098	0.53	1.03440	0.00189	0.95	XX
9BGU4H		1.02790	-0.00162	-0.87	1.03127	-0.00124	-0.62	XX
9HE2QR		1.02817	-0.00135	-0.72	1.03183	-0.00068	-0.34	XX
9JZZHJ		1.02833	-0.00118	-0.63	1.03433	0.00182	0.91	XX
ARY7EP		1.03033	0.00082	0.44	1.03367	0.00116	0.58	XX
BA7FHM		1.02653	-0.00298	-1.60	1.02930	-0.00321	-1.61	XX
BDH2TP		1.02813	-0.00138	-0.74	1.03037	-0.00214	-1.07	XX
BPXUKE		1.02867	-0.00085	-0.46	1.03433	0.00182	0.91	XX
BQMV9W		1.03053	0.00102	0.54	1.03413	0.00162	0.81	XX
BXFL9F		1.02910	-0.00042	-0.22	1.03063	-0.00188	-0.94	XX
C8F7W8		1.03058	0.00107	0.57	1.03150	-0.00101	-0.51	XX
CK48NY		1.02940	-0.00012	-0.06	1.03300	0.00049	0.25	XX

## Analysis 718

## Specific Gravity - sp gr 23/23 C

WebCode	Data Flag	Sample T19			Sample T20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
CRMZQT		1.03020	0.00068	0.36	1.03363	0.00112	0.56	XX
CYHF8N		1.03143	0.00192	1.02	1.03490	0.00239	1.20	XX
D2FWP8		1.02733	-0.00218	-1.17	1.02967	-0.00284	-1.42	XX
D97CM6		1.02960	0.00008	0.04	1.03320	0.00069	0.35	XX
DDFJ8D		1.03193	0.00242	1.29	1.03383	0.00132	0.66	XX
DE4UPW		1.02883	-0.00068	-0.37	1.03350	0.00099	0.50	XX
DV66VX	X	1.02423	-0.00528	-2.83	1.02440	-0.00811	-4.06	XX
DWRPGY		1.03013	0.00062	0.33	1.03477	0.00226	1.13	XX
EH7DLR		1.02873	-0.00078	-0.42	1.03180	-0.00071	-0.36	XX
EP49L6		1.03100	0.00148	0.79	1.03423	0.00172	0.86	XX
EVUM6J		1.03103	0.00152	0.81	1.03387	0.00136	0.68	XX
FDKTL4		1.03043	0.00092	0.49	1.03283	0.00032	0.16	XX
FL996T		1.02607	-0.00345	-1.85	1.02863	-0.00388	-1.94	XX
FNJMWF		1.02980	0.00028	0.15	1.03333	0.00082	0.41	XX
FZADHB		1.03000	0.00048	0.26	1.03000	-0.00251	-1.26	XX
GJALRJ		1.02800	-0.00152	-0.81	1.03167	-0.00084	-0.42	XX
GMQ3QR		1.03003	0.00052	0.28	1.03420	0.00169	0.85	XX
HHZHRJ		1.03133	0.00182	0.97	1.03333	0.00082	0.41	XX
HZBEQW		1.02987	0.00035	0.19	1.03213	-0.00038	-0.19	XX
JH88A9		1.02867	-0.00085	-0.46	1.03267	0.00016	0.08	XX
JYX8XM		1.02800	-0.00152	-0.81	1.03167	-0.00084	-0.42	XX
KBHTDP		1.03133	0.00182	0.97	1.03467	0.00216	1.08	XX
KZXWGB		1.02667	-0.00285	-1.52	1.02833	-0.00418	-2.09	XX
L7NAFP		1.03000	0.00048	0.26	1.03267	0.00016	0.08	XX
LLMH6X		1.03000	0.00048	0.26	1.03000	-0.00251	-1.26	XX
LPDZ2Z	X	1.01197	-0.01755	-9.39	1.03333	0.00082	0.41	XX
LTAN73		1.02923	-0.00028	-0.15	1.03367	0.00116	0.58	XX
LXPWTZ		1.02737	-0.00215	-1.15	1.02813	-0.00438	-2.19	XX
M9TFEV	*	1.02437	-0.00515	-2.75	1.02787	-0.00464	-2.32	XX
MGMK8W		1.02659	-0.00292	-1.56	1.03050	-0.00201	-1.01	XX
MTEQYH		1.02723	-0.00228	-1.22	1.03273	0.00022	0.11	XX
NYNX2D	X	1.03500	0.00548	2.93	1.03423	0.00172	0.86	XX



## Analysis 718

## Specific Gravity - sp gr 23/23 C

WebCode	Data Flag	Sample T19			Sample T20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
P79NQV		1.02757	-0.00195	-1.04	1.03043	-0.00208	-1.04	XX
P7R9KF		1.02783	-0.00168	-0.90	1.03140	-0.00111	-0.56	XX
PN7H8F	X	1.01833	-0.01118	-5.98	1.02867	-0.00384	-1.92	XX
PUMLT7		1.03115	0.00163	0.87	1.03274	0.00023	0.12	XX
PZJKUF		1.03000	0.00048	0.26	1.03000	-0.00251	-1.26	XX
Q88W2G		1.03301	0.00349	1.87	1.03642	0.00391	1.96	XX
QCZL2F		1.02797	-0.00155	-0.83	1.02923	-0.00328	-1.64	XX
QEQ69W		1.03260	0.00308	1.65	1.03660	0.00409	2.05	XX
QGARN8		1.03087	0.00135	0.72	1.03447	0.00196	0.98	XX
QKKGW3		1.02900	-0.00052	-0.28	1.03200	-0.00051	-0.25	XX
R8RWHN		1.03307	0.00355	1.90	1.03517	0.00266	1.33	XX
RH28JE		1.03057	0.00105	0.56	1.03360	0.00109	0.55	XX
RMMDGA		1.02950	-0.00002	-0.01	1.03283	0.00032	0.16	XX
RPK6NF		1.03000	0.00048	0.26	1.03020	-0.00231	-1.16	XX
TUQGKG		1.02867	-0.00085	-0.46	1.03200	-0.00051	-0.25	XX
TY7X7Q		1.02647	-0.00305	-1.63	1.03057	-0.00194	-0.97	XX
UE6DP4		1.03167	0.00215	1.15	1.03200	-0.00051	-0.25	XX
UMDE8X		1.03300	0.00348	1.86	1.03567	0.00316	1.58	XX
UP322W		1.02833	-0.00118	-0.63	1.03167	-0.00084	-0.42	XX
UZMARD		1.03117	0.00165	0.88	1.03410	0.00159	0.80	XX
VDUJED		1.03047	0.00095	0.51	1.03390	0.00139	0.70	XX
W6F7PT	X	1.00827	-0.02125	-11.37	1.05210	0.01959	9.81	XX
WCN4B9		1.03320	0.00368	1.97	1.03490	0.00239	1.20	XX
WE3FFL		1.02833	-0.00118	-0.63	1.03300	0.00049	0.25	XX
WHA9T6		1.03197	0.00245	1.31	1.03530	0.00279	1.40	XX
WZAT93		1.03000	0.00048	0.26	1.03337	0.00086	0.43	XX
X8FYC9		1.02793	-0.00158	-0.85	1.03163	-0.00088	-0.44	XX
XAQAJ2		1.02773	-0.00178	-0.95	1.03167	-0.00084	-0.42	XX
XAY94L		1.02980	0.00028	0.15	1.03337	0.00086	0.43	XX
XD72AU		1.02820	-0.00132	-0.70	1.03273	0.00022	0.11	XX
XEDJKV		1.03267	0.00315	1.68	1.03433	0.00182	0.91	XX

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

WebCode	Data Flag	Sample T19			Sample T20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
XMQVFA		1.03027	0.00075	0.40	1.03380	0.00129	0.65	XX
Y3AMCN		1.03080	0.00128	0.69	1.03487	0.00236	1.18	XX
Y7EKAK		1.03000	0.00048	0.26	1.03067	-0.00184	-0.92	XX
YPCU8U		1.03087	0.00135	0.72	1.03353	0.00102	0.51	XX
YUFFV4		1.02950	-0.00002	-0.01	1.03303	0.00052	0.26	XX
YUNP6T		1.02783	-0.00168	-0.90	1.03140	-0.00111	-0.56	XX
YWUFBJ		1.03067	0.00115	0.61	1.03410	0.00159	0.80	XX
ZG29BK		1.02528	-0.00424	-2.27	1.02867	-0.00383	-1.92	XX
ZKFKTY		1.02893	-0.00058	-0.31	1.03077	-0.00174	-0.87	XX

Summary Statistics			
Grand Means	1.029518	sp gr 23/23 C	1.032509
			sp gr 23/23 C
Std Dev Btwn Labs	0.001870	sp gr 23/23 C	0.001997
			sp gr 23/23 C
Statistics based on 99 of 104 reporting participants			

Sample T19: HIPS & Sample T20: HIPS

**Comments on assigned Data Flags for Test #718**

DV66VX (X) - Data for both samples are low.

LPDZZZ (X) - Inconsistent in testing between samples, data for Sample T19 are low. Also Inconsistent in testing within Sample T19.

NYNX2D (X) - Inconsistent in testing between samples, data for Sample T19 are high. Also Inconsistent in testing within Sample T19.

PN7H8F (X) - Inconsistent in testing between samples, data for Sample T19 are low. Also Inconsistent in testing within Sample T20.

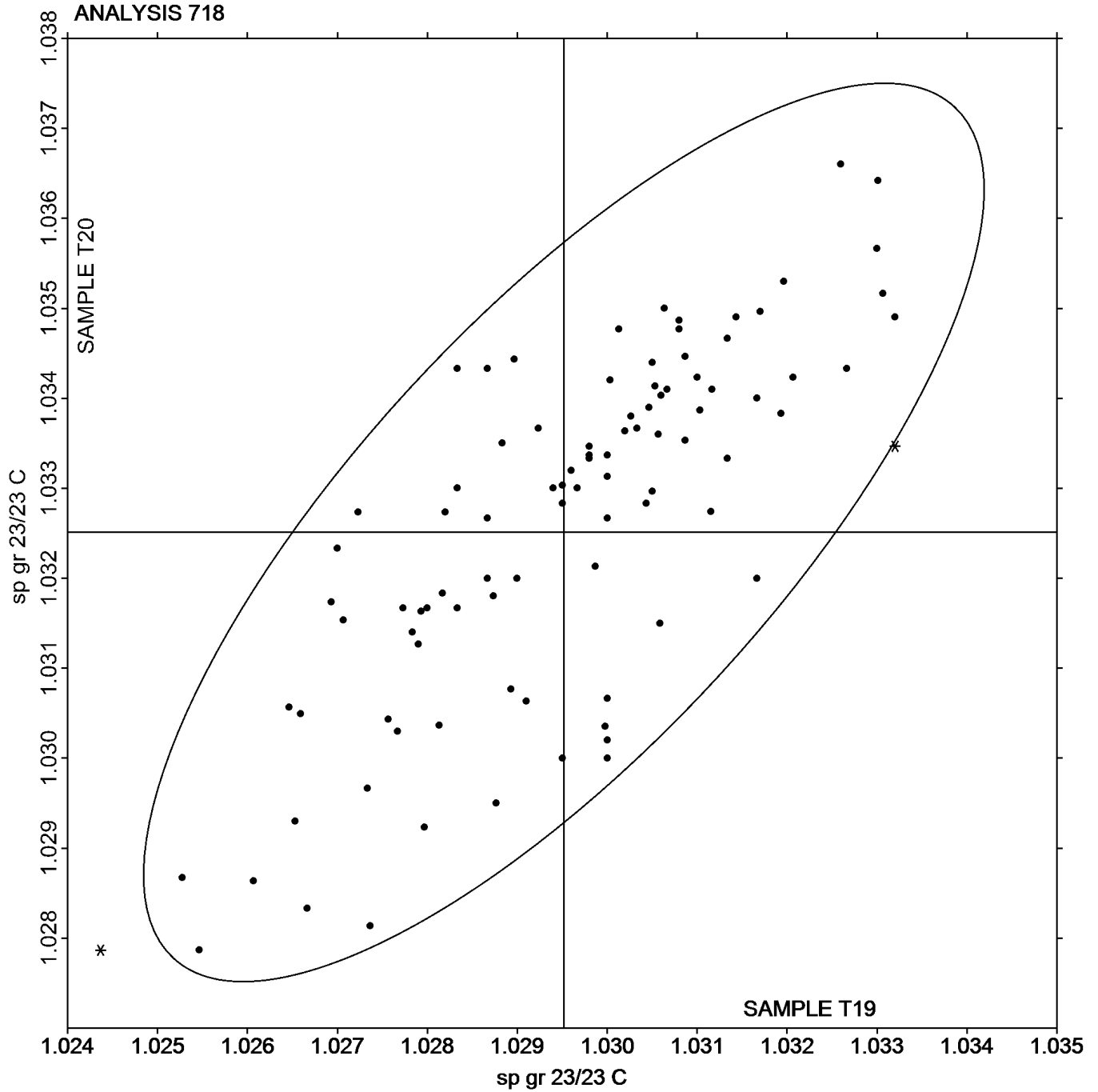
W6F7PT (X) - Inconsistent in testing between samples, data for Sample T19 are low, and data for Sample T20 are high. Also Inconsistent in testing within both samples.

**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 T19: 1.0295 sp gr 23/23 C    Grand Mean Sample T20: 1.0325 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 L19			Sample L20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2FKBTE		39.785	-0.028	-0.21	39.910	0.042	0.30	XX
2KW47C	*	39.484	-0.329	-2.47	39.924	0.055	0.40	XX
2PK26A		39.910	0.097	0.73	39.705	-0.163	-1.19	XX
3JVXDA		39.865	0.052	0.39	39.840	-0.028	-0.21	XX
3KMKKF		40.035	0.222	1.67	40.000	0.132	0.96	XX
487DQZ		39.610	-0.203	-1.53	39.650	-0.218	-1.59	XX
4CLTDH		39.770	-0.043	-0.32	39.800	-0.068	-0.50	XX
4WDTGM		39.855	0.042	0.31	39.980	0.112	0.81	XX
64PBH7		39.725	-0.088	-0.66	39.540	-0.328	-2.39	XX
67DYNE		39.820	0.007	0.05	39.875	0.007	0.05	XX
6LZFE4		40.035	0.222	1.67	39.950	0.082	0.59	XX
7WMFAL		39.910	0.097	0.73	39.950	0.082	0.59	XX
8HPW3N		39.960	0.147	1.10	40.035	0.167	1.21	XX
9BGU4H		40.013	0.199	1.50	39.988	0.120	0.87	XX
9FKZH2		39.780	-0.033	-0.25	39.820	-0.048	-0.35	XX
A3ZN68		39.665	-0.148	-1.11	39.650	-0.218	-1.59	XX
A6VJYY	*	39.655	-0.158	-1.19	40.155	0.287	2.09	XX
BDH2TP		39.735	-0.078	-0.59	39.985	0.117	0.85	XX
BPXUKE		39.870	0.057	0.43	39.875	0.007	0.05	XX
BQMV9W		39.690	-0.123	-0.93	39.875	0.007	0.05	XX
CAJLZB	*	39.685	-0.128	-0.96	39.450	-0.418	-3.05	XX
CRMZQT		39.780	-0.033	-0.25	39.975	0.107	0.78	XX
D2FWP8		39.900	0.087	0.65	39.850	-0.018	-0.13	XX
DDFJ8D		39.815	0.002	0.01	39.955	0.087	0.63	XX
EVUM6J		39.850	0.037	0.28	39.760	-0.108	-0.79	XX
EWLWZ7		39.875	0.062	0.46	39.910	0.042	0.30	XX
EXGX3Z		39.829	0.016	0.12	39.636	-0.232	-1.69	XX
FB82AU		39.905	0.092	0.69	39.835	-0.033	-0.24	XX
FL996T		39.965	0.152	1.14	39.845	-0.023	-0.17	XX
FNJMWF		39.805	-0.008	-0.06	39.845	-0.023	-0.17	XX
FZADHB		39.880	0.067	0.50	39.890	0.022	0.16	XX
H9NYVN		39.785	-0.028	-0.21	39.810	-0.058	-0.43	XX

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

WebCode	Data Flag	Sample L19			Sample L20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
JH88A9		39.790	-0.023	-0.17	39.995	0.127	0.92	XX
JJGE8T		39.755	-0.058	-0.44	39.900	0.032	0.23	XX
JQQJNL		39.945	0.132	0.99	39.845	-0.023	-0.17	XX
K3TKYH		40.095	0.282	2.12	39.850	-0.018	-0.13	XX
L7NAFP		39.655	-0.158	-1.19	39.747	-0.121	-0.88	XX
LLMH6X		39.870	0.057	0.43	39.930	0.062	0.45	XX
LPDZ2Z		39.850	0.037	0.28	39.810	-0.058	-0.43	XX
LTAN73		39.730	-0.083	-0.63	39.755	-0.113	-0.83	XX
LXPWTZ	X	39.415	-0.398	-2.99	39.520	-0.348	-2.54	XX
MTEQYH		39.839	0.026	0.19	39.884	0.015	0.11	XX
P7R9KF	*	39.650	-0.163	-1.23	40.220	0.352	2.56	XX
QCZL2F		39.759	-0.055	-0.41	39.791	-0.078	-0.57	XX
QEQ69W	*	39.590	-0.223	-1.68	40.085	0.217	1.58	XX
QGARN8		39.830	0.017	0.13	40.045	0.177	1.29	XX
QX273C		39.810	-0.003	-0.02	39.720	-0.148	-1.08	XX
R8RWHN		39.950	0.137	1.03	40.000	0.132	0.96	XX
RPK6NF		40.065	0.252	1.89	39.940	0.072	0.52	XX
UMDE8X		39.890	0.077	0.58	39.980	0.112	0.81	XX
UP322W		39.755	-0.058	-0.44	39.930	0.062	0.45	XX
UTTEK3		40.000	0.187	1.40	39.785	-0.083	-0.61	XX
WHA9T6		39.690	-0.123	-0.93	39.775	-0.093	-0.68	XX
WT2HYD		39.850	0.037	0.28	40.025	0.157	1.14	XX
WVAH9Q	*	39.455	-0.358	-2.69	39.650	-0.218	-1.59	XX
WZAT93		39.885	0.072	0.54	39.840	-0.028	-0.21	XX
XD72AU		39.890	0.077	0.58	39.890	0.022	0.16	XX
XGEB4A	X	38.740	-1.073	-8.06	38.585	-1.283	-9.35	XX
Y3AMCN		39.680	-0.133	-1.00	39.715	-0.153	-1.12	XX
YUFFV4		39.770	-0.043	-0.32	39.880	0.012	0.08	XX
YUNP6T		39.940	0.127	0.95	39.920	0.052	0.38	XX
YWUFBJ		39.610	-0.203	-1.53	39.885	0.017	0.12	XX
ZKFKTY		39.760	-0.053	-0.40	39.915	0.047	0.34	XX

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

**Summary Statistics**

Grand Means

39.8132 Percent

39.8684 Percent

Std Dev Btwn Labs

0.1331 Percent

0.1373 Percent

Statistics based on 61 of 63 reporting participants

Sample L19: PP &amp; Sample L20: PP

**Comments on assigned Data Flags for Test #757**

LXPWTZ (X) - Low data for Sample L19.

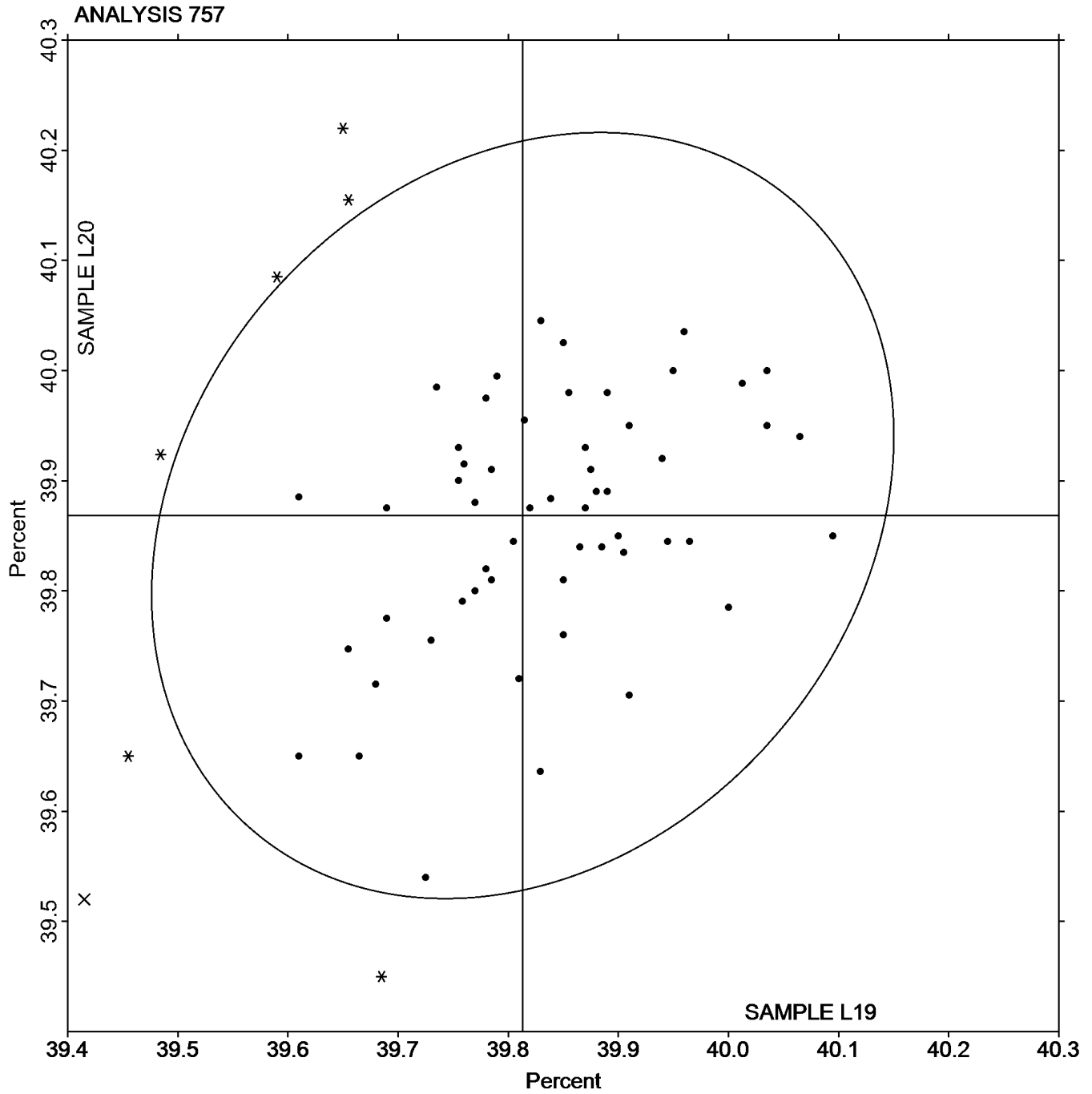
XGEB4A (X) - Data for both samples are low.

**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 L19: 39.813 Percent Grand Mean Sample L20: 39.868 Percent



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

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

WebCode	Data Flag	Sample B19			Sample B20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		1,613	-19	-0.20	1,591	-21	-0.23	IM
2486UJ		1,501	-130	-1.35	1,501	-112	-1.21	IN
2N4TUP		1,680	48	0.50	1,703	90	0.97	IN
4GA6UF		1,551	-80	-0.83	1,589	-24	-0.26	MT
8VPLY8		1,783	152	1.57	1,725	112	1.21	XX
9HE2QR		1,516	-116	-1.20	1,496	-117	-1.26	IN
D9NR2F		1,701	70	0.72	1,723	110	1.19	IN
DDE23K		1,649	17	0.18	1,617	4	0.05	TY
ENPNBK		1,711	80	0.83	1,673	60	0.65	IN
FNJMWf		1,676	44	0.46	1,698	85	0.92	IN
FZADHB		1,606	-26	-0.27	1,574	-39	-0.42	WZ
HJBUE9	*	1,369	-262	-2.72	1,353	-260	-2.81	XX
K4XRY7		1,648	16	0.17	1,622	9	0.09	IN
LDHMXB		1,581	-51	-0.53	1,557	-56	-0.60	IN
NYNX2D		1,711	80	0.83	1,605	-8	-0.08	MT
QBNC7J		1,666	34	0.35	1,621	8	0.08	MT
RG9C2C		1,562	-69	-0.72	1,556	-57	-0.61	ME
UZMARD		1,692	60	0.62	1,667	54	0.58	LI
VNYUA6		1,731	99	1.03	1,708	95	1.03	TH
YPCU8U		1,684	53	0.55	1,678	65	0.70	IN

Summary Statistics			
Grand Means	1,631.5 psi	1,612.8 psi	
Stnd Dev Btwn Labs	96.5 psi	92.6 psi	
Statistics based on 20 of 20 reporting participants			

Sample B19: LDPE & Sample B20: LDPE



**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

(LI) - Lloyd Instruments

(ME) - Metrotech

(MT) - MTS/Sintech

(TH) - Thwing Albert

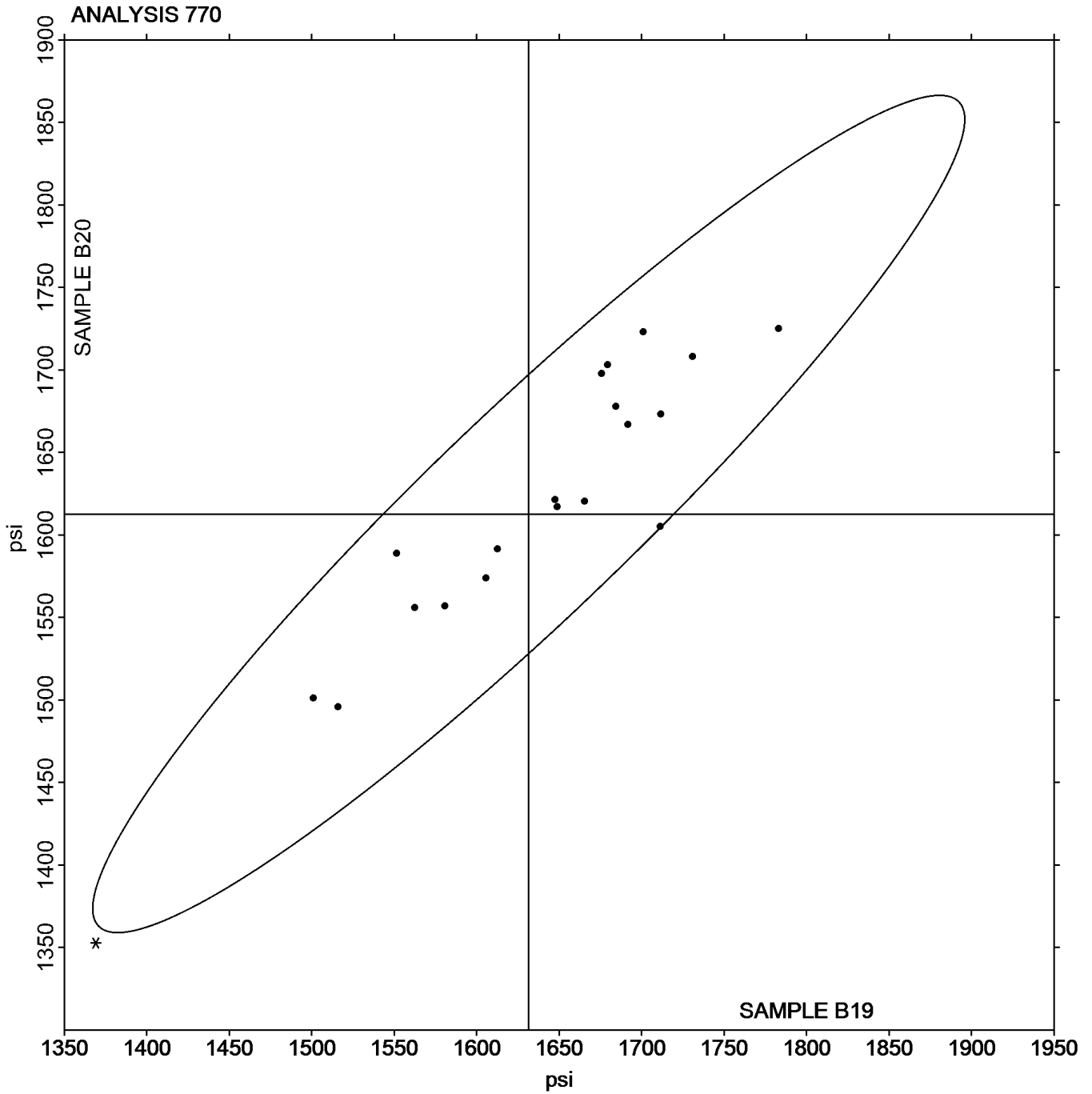
(TY) - Toyoseiki

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B19: 1,631.47 psi    Grand Mean Sample B20: 1,612.78 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 B19			Sample B20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		2,932	-120	-0.53	3,007	-80	-0.37	IM
2486UJ		2,927	-125	-0.55	2,963	-124	-0.57	IN
2N4TUP		3,022	-30	-0.13	3,098	11	0.05	IN
4GA6UF		3,142	90	0.39	3,438	351	1.62	MT
8VPLY8		2,852	-200	-0.87	2,913	-174	-0.80	XX
9BGU4H		3,008	-44	-0.19	3,207	120	0.56	SH
9HE2QR		3,045	-7	-0.03	3,050	-37	-0.17	IN
D9NR2F		3,219	167	0.73	3,257	170	0.78	IN
DDE23K		3,104	53	0.23	2,985	-101	-0.47	TY
DE4UPW		3,044	-8	-0.03	3,051	-36	-0.16	IN
ENPNBK		3,290	238	1.04	3,304	218	1.01	IN
FNJMWf		3,315	264	1.15	3,360	273	1.26	IN
FZADHB		3,246	194	0.85	3,142	55	0.25	WZ
HJBUE9		2,853	-198	-0.87	2,752	-334	-1.54	XX
K4XRY7		3,311	259	1.13	3,358	271	1.25	IN
LDHMXB		3,070	18	0.08	3,062	-25	-0.11	IN
NYNX2D		3,138	86	0.38	2,952	-134	-0.62	MT
QBNC7J	*	2,286	-766	-3.35	2,514	-572	-2.64	MT
RG9C2C		2,892	-160	-0.70	2,889	-198	-0.91	ME
UZMARD		2,963	-89	-0.39	3,095	8	0.04	LI
VNYUA6		3,335	284	1.24	3,280	193	0.89	TH
YPCU8U		3,146	94	0.41	3,230	144	0.66	IN

Summary Statistics	
Grand Means	3,051.9 psi                      3,086.7 psi
Std Dev Btwn Labs	228.7 psi                              216.6 psi
Statistics based on 22 of 22 reporting participants	

Sample B19: LDPE & Sample B20: LDPE

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

---

**Instrument Code List as Reported by the Labs**

(IM) - Instru-Met Instruments

(LI) - Lloyd Instruments

(MT) - MTS/Sintech

(TH) - Thwing Albert

(WZ) - Zwick

(IN) - Instron

(ME) - Metrotech

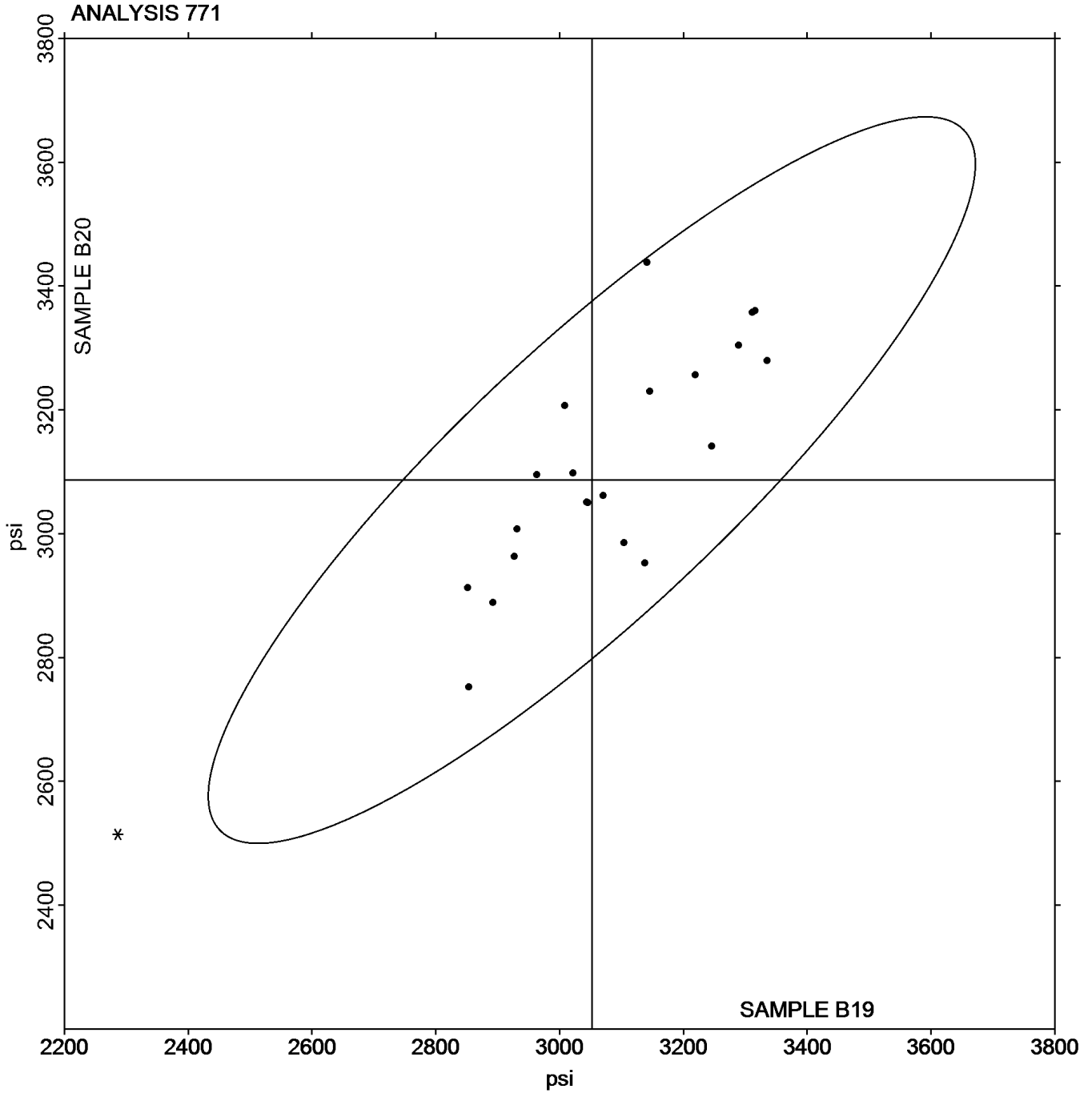
(SH) - Shimadzu

(TY) - Toyoseiki

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B19: 3,051.88 psi    Grand Mean Sample B20: 3,086.70 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 B19			Sample B20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		17.40	-11.55	-0.57	17.64	-10.82	-0.56	IM
2486UJ		37.74	8.79	0.43	37.66	9.20	0.47	IN
4GA6UF		12.49	-16.46	-0.81	12.94	-15.52	-0.80	MT
8VPLY8		38.90	9.95	0.49	39.10	10.64	0.55	XX
9HE2QR		11.40	-17.55	-0.86	11.38	-17.08	-0.88	IN
ENPNBK		68.71	39.76	1.96	67.05	38.58	1.99	IN
FNJMWF		23.34	-5.61	-0.28	20.40	-8.06	-0.42	IN
FZADHB		17.85	-11.10	-0.55	18.16	-10.31	-0.53	WZ
HJBUE9		82.64	53.69	2.64	78.81	50.35	2.59	XX
K4XRY7		29.27	0.32	0.02	28.59	0.13	0.01	IN
LDHMXB		10.12	-18.82	-0.93	10.22	-18.24	-0.94	IN
NYNX2D		31.06	2.11	0.10	30.79	2.33	0.12	MT
QBNC7J		21.53	-7.42	-0.37	22.44	-6.02	-0.31	MT
RG9C2C		25.08	-3.86	-0.19	22.82	-5.64	-0.29	ME
UZMARD		19.17	-9.78	-0.48	20.91	-7.55	-0.39	LI
YPCU8U		16.46	-12.49	-0.61	16.51	-11.95	-0.62	IN

**Summary Statistics**

Grand Means

28.948 Percent

28.463 Percent

Std Dev Btwn Labs

20.310 Percent

19.406 Percent

Statistics based on 16 of 16 reporting participants

Sample B19: LDPE &amp; Sample B20: LDPE

**Instrument Code List as Reported by the Labs**

(IM) - Instru-Met Instruments

(IN) - Instron

(LI) - Lloyd Instruments

(ME) - Metrotech

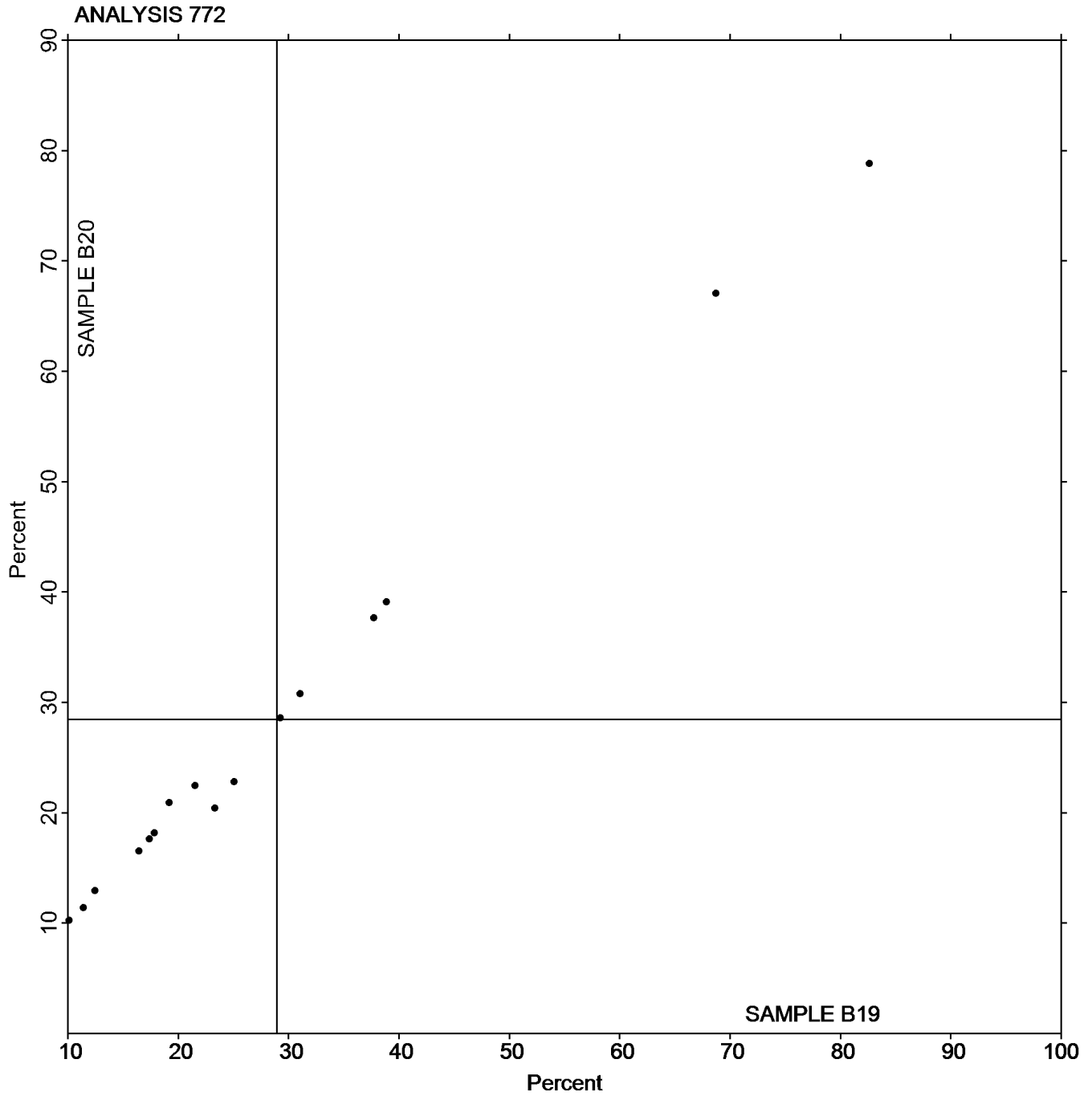
(MT) - MTS/Sintech

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B19: 28.948 Percent    Grand Mean Sample B20: 28.463 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 B19			Sample B20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		765.5	10.0	0.05	809.8	28.2	0.14	IM
2486UJ		990.8	235.4	1.22	1,024.0	242.4	1.17	IN
2N4TUP		632.9	-122.6	-0.64	632.5	-149.1	-0.72	IN
4GA6UF		679.8	-75.7	-0.39	679.5	-102.1	-0.49	MT
8VPLY8		346.0	-409.5	-2.13	374.0	-407.6	-1.97	XX
9BGU4H	*	1,181.5	426.0	2.21	1,305.0	523.4	2.53	SH
9HE2QR		902.7	147.2	0.77	930.2	148.6	0.72	IN
D9NR2F		666.8	-88.7	-0.46	668.6	-113.0	-0.55	IN
DE4UPW		570.0	-185.5	-0.96	594.0	-187.6	-0.91	IN
ENPNBK		772.3	16.8	0.09	785.3	3.7	0.02	IN
FNJMWf		988.4	232.9	1.21	1,007.2	225.6	1.09	IN
FZADHB		646.0	-109.5	-0.57	650.0	-131.6	-0.64	WZ
HJBUE9		756.3	0.8	0.00	748.9	-32.7	-0.16	XX
K4XRY7		1,082.3	326.8	1.70	1,103.5	321.9	1.55	IN
LDHMXB		639.6	-115.9	-0.60	644.9	-136.7	-0.66	IN
NYNX2D		729.1	-26.4	-0.14	748.4	-33.2	-0.16	MT
QBNC7J	*	641.7	-113.8	-0.59	757.9	-23.7	-0.11	MT
RG9C2C		873.0	117.5	0.61	891.0	109.4	0.53	ME
UZMARD		749.8	-5.7	-0.03	802.1	20.5	0.10	LI
VNYUA6		588.7	-166.8	-0.87	587.3	-194.3	-0.94	TH
YPCU8U		661.8	-93.7	-0.49	669.3	-112.3	-0.54	IN

Summary Statistics			
Grand Means	755.47	Percent	781.59
Std Dev Btwn Labs	192.38	Percent	207.17
Statistics based on 21 of 21 reporting participants			

Sample B19: LDPE & Sample B20: LDPE



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

---

**Instrument Code List as Reported by the Labs**

(IM) - Instru-Met Instruments

(IN) - Instron

(LI) - Lloyd Instruments

(ME) - Metrotech

(MT) - MTS/Sintech

(SH) - Shimadzu

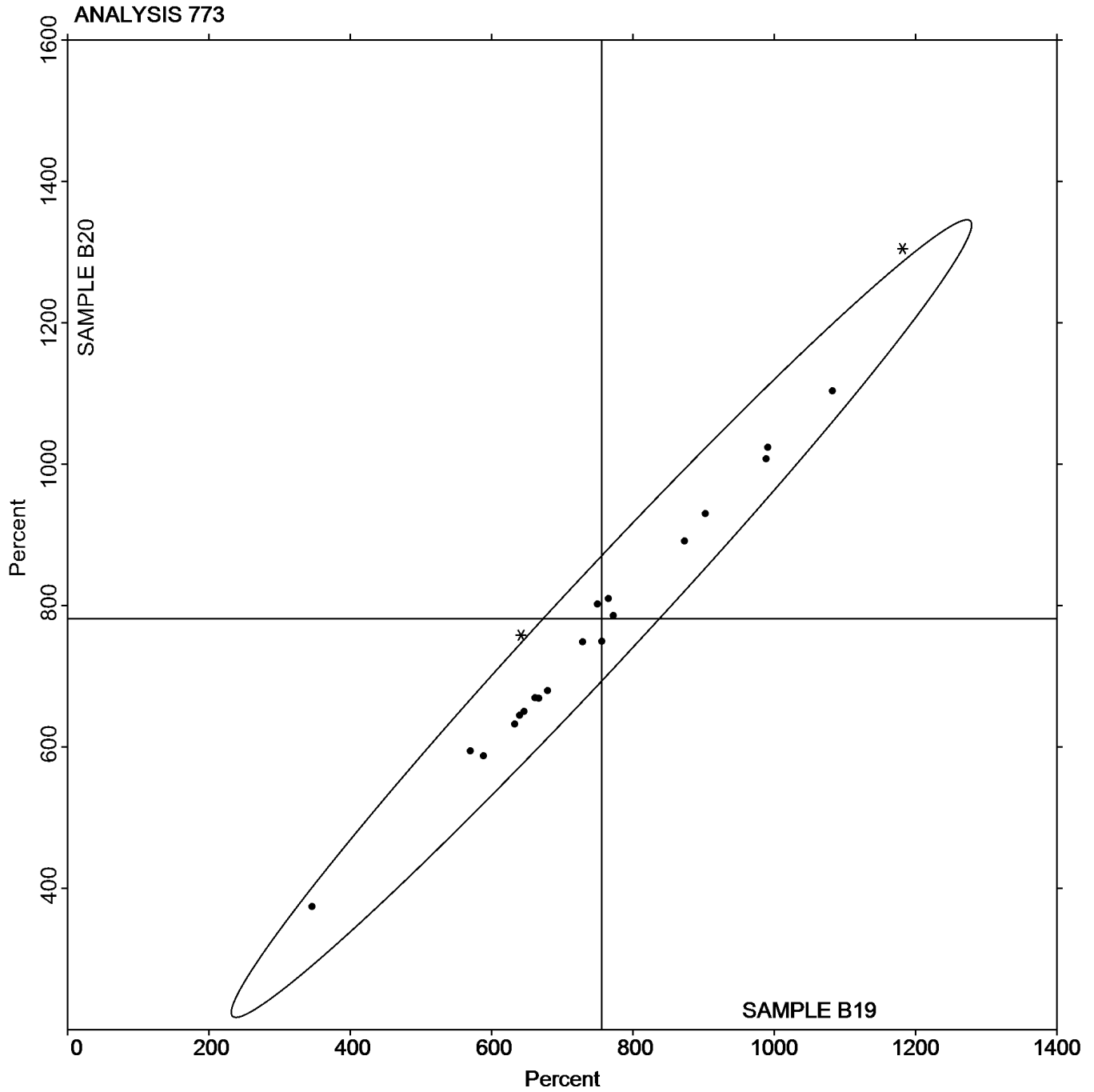
(TH) - Thwing Albert

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B19: 755.47 Percent    Grand Mean Sample B20: 781.59 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 774**  
**Thickness of Film Tensile Samples - mils**

WebCode	Data Flag	Sample B19			Sample B20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		4.0800	0.1018	1.17	4.1000	0.1494	2.02	XX
2486UJ		4.0552	0.0770	0.89	3.9961	0.0456	0.62	XX
2N4TUP		4.0160	0.0378	0.44	3.8900	-0.0606	-0.82	XX
3BUDLV		3.8950	-0.0832	-0.96	3.8650	-0.0856	-1.16	XX
4GA6UF		4.0200	0.0418	0.48	4.0000	0.0494	0.67	XX
8VPLY8		3.8200	-0.1582	-1.83	3.8800	-0.0706	-0.96	XX
9BGU4H		3.8346	-0.1436	-1.66	3.8386	-0.1120	-1.52	XX
9HE2QR		4.0000	0.0218	0.25	3.9900	0.0394	0.53	XX
D9NR2F		4.0320	0.0538	0.62	3.9480	-0.0026	-0.03	XX
DDE23K		3.9291	-0.0491	-0.57	3.9331	-0.0175	-0.24	XX
DE4UPW		3.9400	-0.0382	-0.44	3.9100	-0.0406	-0.55	XX
ENPNBK		3.8465	-0.1317	-1.52	3.8820	-0.0686	-0.93	XX
F24QWC		4.0980	0.1198	1.38	4.0010	0.0504	0.68	XX
FNJMWF		4.1400	0.1618	1.87	4.0600	0.1094	1.48	XX
FZADHB		3.8780	-0.1003	-1.16	3.7992	-0.1513	-2.05	XX
HJBUE9		4.0500	0.0718	0.83	4.0500	0.0994	1.35	XX
K4XRY7		3.9843	0.0061	0.07	3.9174	-0.0332	-0.45	XX
LDHMXB		3.9607	-0.0175	-0.20	3.9765	0.0259	0.35	XX
NYNX2D		3.9000	-0.0782	-0.90	4.0300	0.0794	1.08	XX
QBNC7J		3.9430	-0.0352	-0.41	3.9610	0.0104	0.14	XX
RG9C2C		4.1064	0.1281	1.48	3.9883	0.0377	0.51	XX
TRCP73		3.9630	-0.0152	-0.18	3.9130	-0.0376	-0.51	XX
UZMARD		3.9520	-0.0262	-0.30	4.0158	0.0653	0.88	XX
VNYUA6		4.0300	0.0518	0.60	3.9350	-0.0156	-0.21	XX
YPCU8U		3.9820	0.0038	0.04	3.8840	-0.0666	-0.90	XX

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

---

Summary Statistics	
Grand Means	
3.97824 mils	3.95056 mils
Std Dev Btwn Labs	
0.08662 mils	0.07384 mils
Statistics based on 25 of 25 reporting participants	

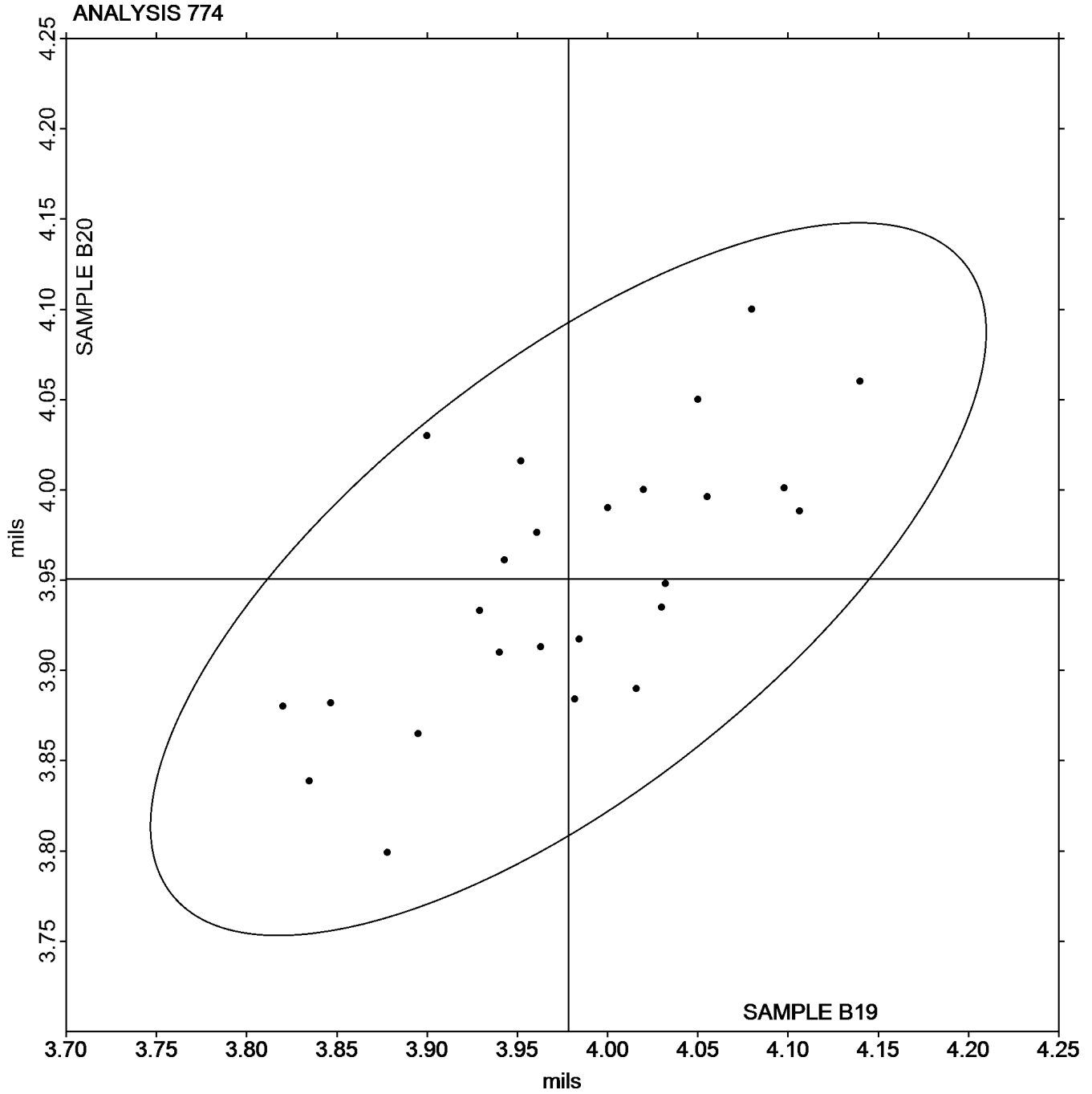
Sample B19: LDPE & Sample B20: LDPE

**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 B19: 3.9782 mils    Grand Mean Sample B20: 3.9506 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 B19			Sample B20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		31,850	984	0.35	30,878	-203	-0.07	IM
2486UJ	*	37,540	6,675	2.38	35,343	4,262	1.56	IN
2N4TUP		31,609	744	0.27	31,713	632	0.23	IN
4GA6UF		28,547	-2,319	-0.83	29,222	-1,860	-0.68	MT
9HE2QR		29,374	-1,491	-0.53	28,756	-2,326	-0.85	IN
D9NR2F		27,394	-3,471	-1.24	27,870	-3,211	-1.18	IN
DE4UPW		28,900	-1,965	-0.70	29,710	-1,371	-0.50	IN
ENPNBK		35,105	4,239	1.51	36,770	5,689	2.09	IN
FNJMWF		31,787	922	0.33	33,950	2,868	1.05	IN
FZADHB		31,706	840	0.30	30,821	-261	-0.10	IN
HJBUE9		30,326	-539	-0.19	30,305	-777	-0.28	XX
K4XRY7		26,149	-4,716	-1.68	26,161	-4,921	-1.80	IN
QBNC7J		33,024	2,159	0.77	33,238	2,157	0.79	MT
RG9C2C		28,327	-2,539	-0.90	29,476	-1,606	-0.59	ME
UZMARD		29,566	-1,299	-0.46	29,320	-1,761	-0.65	LI
VNYUA6		31,804	939	0.33	32,514	1,433	0.53	TH
YPCU8U		31,701	836	0.30	32,337	1,256	0.46	IN

Summary Statistics	
Grand Means	
30,865.2 psi	31,081.4 psi
Std Dev Btwn Labs	
2,806.5 psi	2,728.3 psi
Statistics based on 17 of 17 reporting participants	

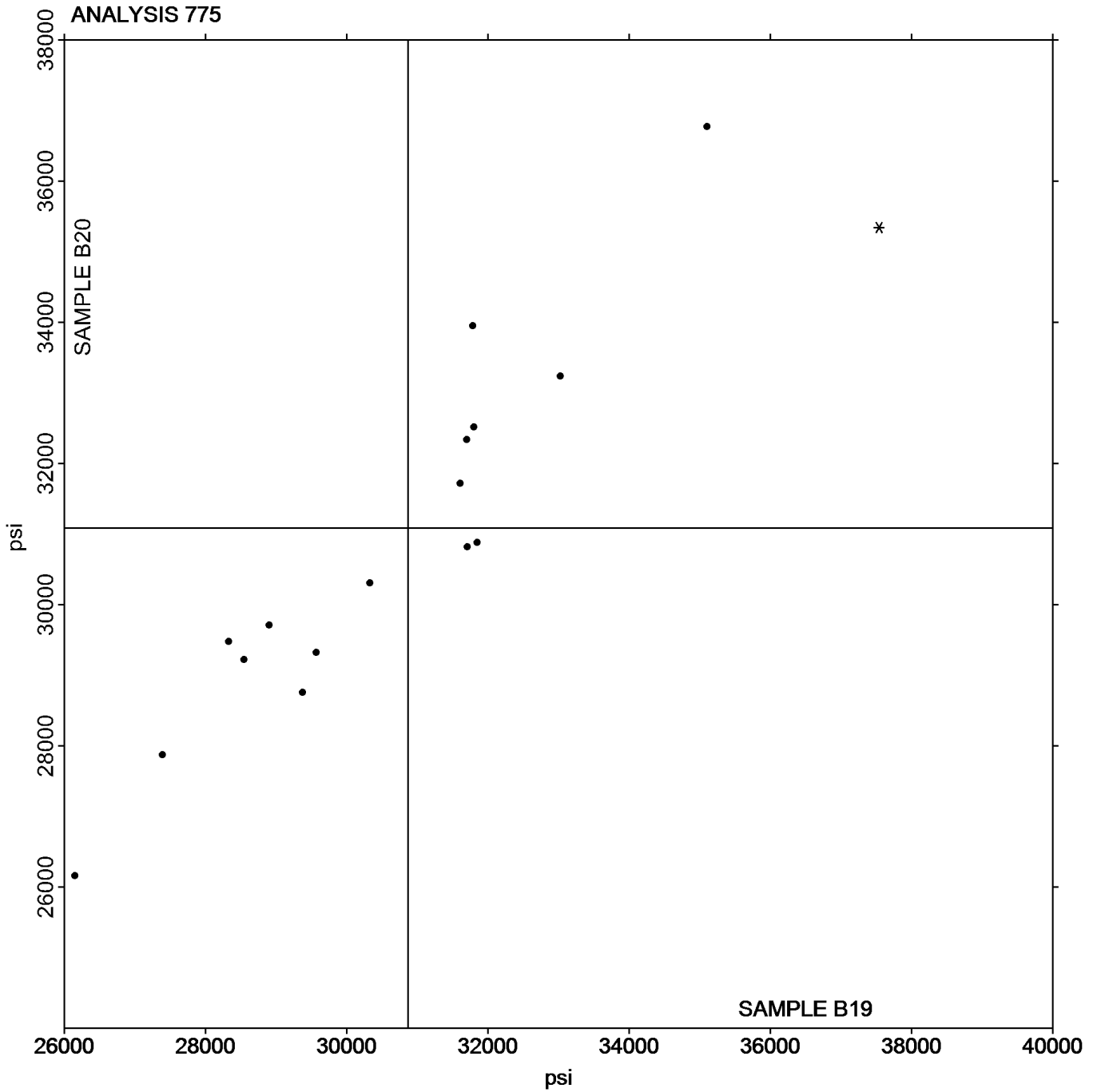
Sample B19: LDPE & Sample B20: LDPE

**Instrument Code List as Reported by the Labs**

- |   |                      |
|---|----------------------|
| (IM) - Instru-Met Instruments                       | (IN) - Instron       |
| (LI) - Lloyd Instruments                            | (ME) - Metrotech     |
| (MT) - MTS/Sintech                                  | (TH) - Thwing Albert |
| (XX) - Instrument manufacturer not specified by lab |                      |

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

Grand Mean Sample B19: 30,865.24 psi    Grand Mean Sample B20: 31,081.41 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 B19			Sample B20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		26,764	560	0.34	26,045	-269	-0.16	IM
2486UJ		30,740	4,536	2.73	29,926	3,612	2.09	IN
2N4TUP		26,405	201	0.12	26,492	178	0.10	IN
4GA6UF		24,727	-1,477	-0.89	25,344	-970	-0.56	MT
9HE2QR		25,905	-299	-0.18	25,498	-816	-0.47	IN
D9NR2F		25,291	-913	-0.55	24,825	-1,488	-0.86	XX
DE4UPW		24,890	-1,314	-0.79	25,590	-723	-0.42	IN
ENPNBK		27,993	1,789	1.08	29,136	2,823	1.64	XX
FNJMWF		26,406	202	0.12	28,118	1,805	1.05	IN
FZADHB		25,585	-619	-0.37	24,338	-1,976	-1.15	IN
HJBUE9		25,333	-870	-0.52	25,294	-1,020	-0.59	XX
QBNC7J		27,287	1,083	0.65	27,506	1,192	0.69	MT
RG9C2C		23,971	-2,232	-1.34	24,715	-1,598	-0.93	ME
UZMARD		24,851	-1,353	-0.81	24,572	-1,741	-1.01	LI
VNYUA6		26,910	707	0.43	27,304	990	0.57	TH

**Summary Statistics**

Grand Means

26,203.8 psi

26,313.4 psi

Std Dev Btwn Labs

1,661.1 psi

1,724.9 psi

Statistics based on 15 of 15 reporting participants

Sample B19: LDPE &amp; Sample B20: LDPE

**Instrument Code List as Reported by the Labs**

(IM) - Instru-Met Instruments

(IN) - Instron

(LI) - Lloyd Instruments

(ME) - Metrotech

(MT) - MTS/Sintech

(TH) - Thwing Albert

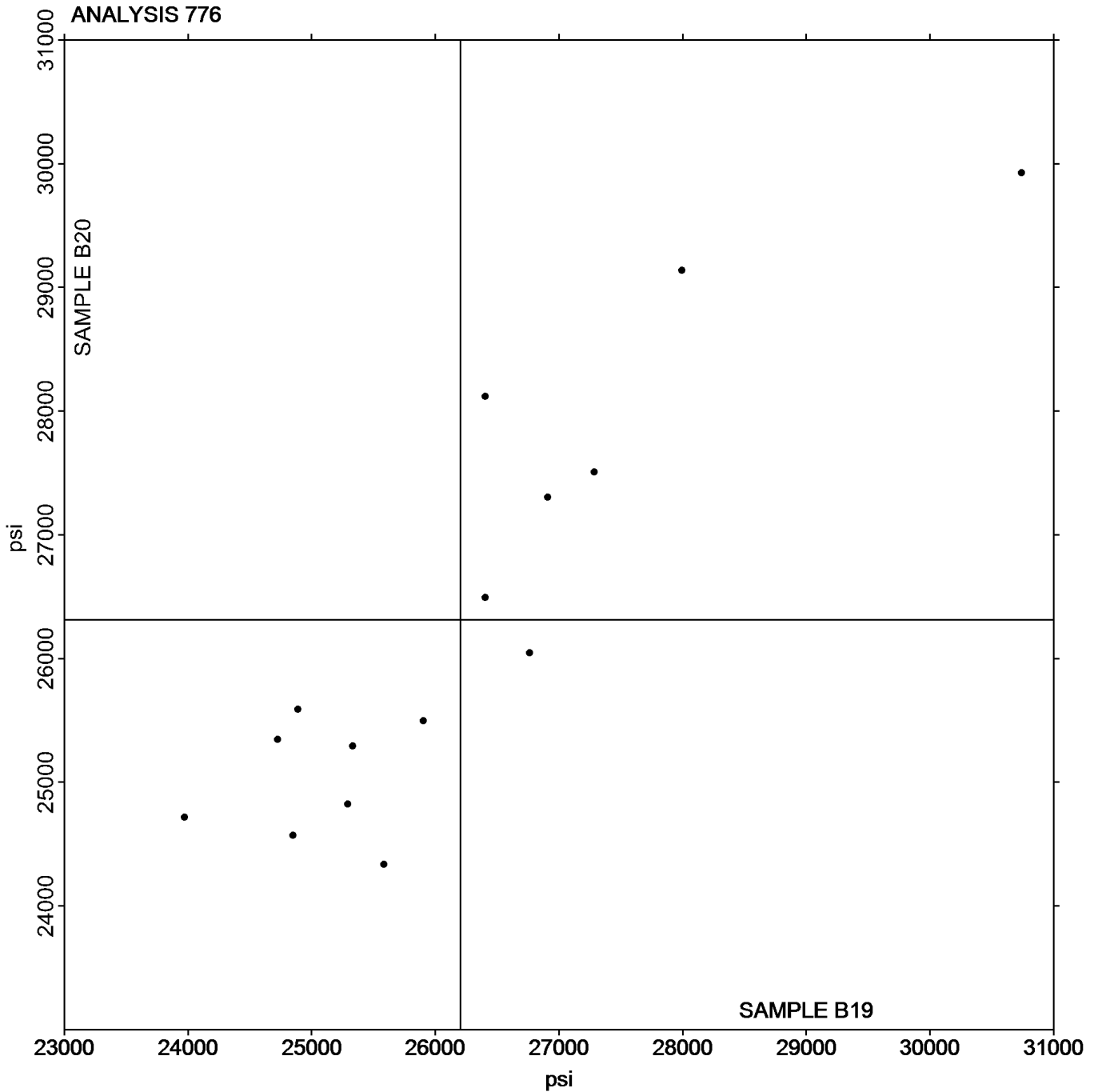
(XX) - Instrument manufacturer not specified by lab



Analysis 776

Secant Modulus at 2% Strain - psi

Grand Mean Sample B19: 26,203.78 psi    Grand Mean Sample B20: 26,313.42 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 P19			Sample P20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		0.1410	0.0032	0.07	0.1376	0.0050	0.12	TH
2N4TUP		0.1202	-0.0176	-0.37	0.1212	-0.0114	-0.26	TM
2TLGXA		0.1558	0.0180	0.38	0.1438	0.0112	0.26	TH
46JMPW		0.1420	0.0042	0.09	0.1162	-0.0164	-0.38	RD
4GA6UF		0.1654	0.0276	0.58	0.1594	0.0268	0.62	MI
6LZFE4		0.0902	-0.0476	-1.00	0.0928	-0.0398	-0.92	TN
9BGU4H		0.2200	0.0822	1.72	0.1770	0.0444	1.03	SA
9HE2QR	*	0.2336	0.0958	2.01	0.2468	0.1142	2.64	TN
D2FWP8		0.0960	-0.0418	-0.88	0.1060	-0.0266	-0.61	KA
DE4UPW		0.1428	0.0050	0.10	0.1208	-0.0118	-0.27	IG
ENPNBK		0.1366	-0.0012	-0.03	0.1366	0.0040	0.09	IG
EP49L6		0.1682	0.0304	0.64	0.1482	0.0156	0.36	XX
FNJMWf		0.1416	0.0038	0.08	0.1322	-0.0004	-0.01	IS
FZADHB		0.0540	-0.0838	-1.76	0.0740	-0.0586	-1.35	XX
H9NYVN		0.1456	0.0078	0.16	0.1442	0.0116	0.27	TH
K4XRY7		0.1340	-0.0038	-0.08	0.1220	-0.0106	-0.24	TL
NYNX2D		0.1290	-0.0088	-0.18	0.1526	0.0200	0.46	MI
P4VZYR		0.0700	-0.0678	-1.42	0.0660	-0.0666	-1.54	IG
PZJKUF		0.0445	-0.0933	-1.96	0.0486	-0.0840	-1.94	IG
QBNC7J		0.1814	0.0436	0.91	0.1614	0.0288	0.67	MT
UE6DP4		0.1952	0.0574	1.20	0.1947	0.0621	1.43	IG
VNYUA6		0.0936	-0.0442	-0.93	0.0944	-0.0382	-0.88	TH
Y3AMCN		0.1222	-0.0156	-0.33	0.1086	-0.0240	-0.55	IS
YPCU8U		0.1846	0.0468	0.98	0.1764	0.0438	1.01	TH

Summary Statistics			
Grand Means	0.13781	COF	0.13256
			COF
Std Dev Btwn Labs	0.04773	COF	0.04333
			COF
Statistics based on 24 of 24 reporting participants			

Sample P19: LDPE & Sample P20: LDPE

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

---

**Instrument Code List as Reported by the Labs**

(IG) - Instron

(KA) - Kayeness Inc.

(MT) - MTS Q-Test

(SA) - Shimadzu Autograph

(TL) - TMI #32-90

(TN) - TMI #32-06

(IS) - Instron 5000 Series

(MI) - MTS Insight

(RD) - RDM CF

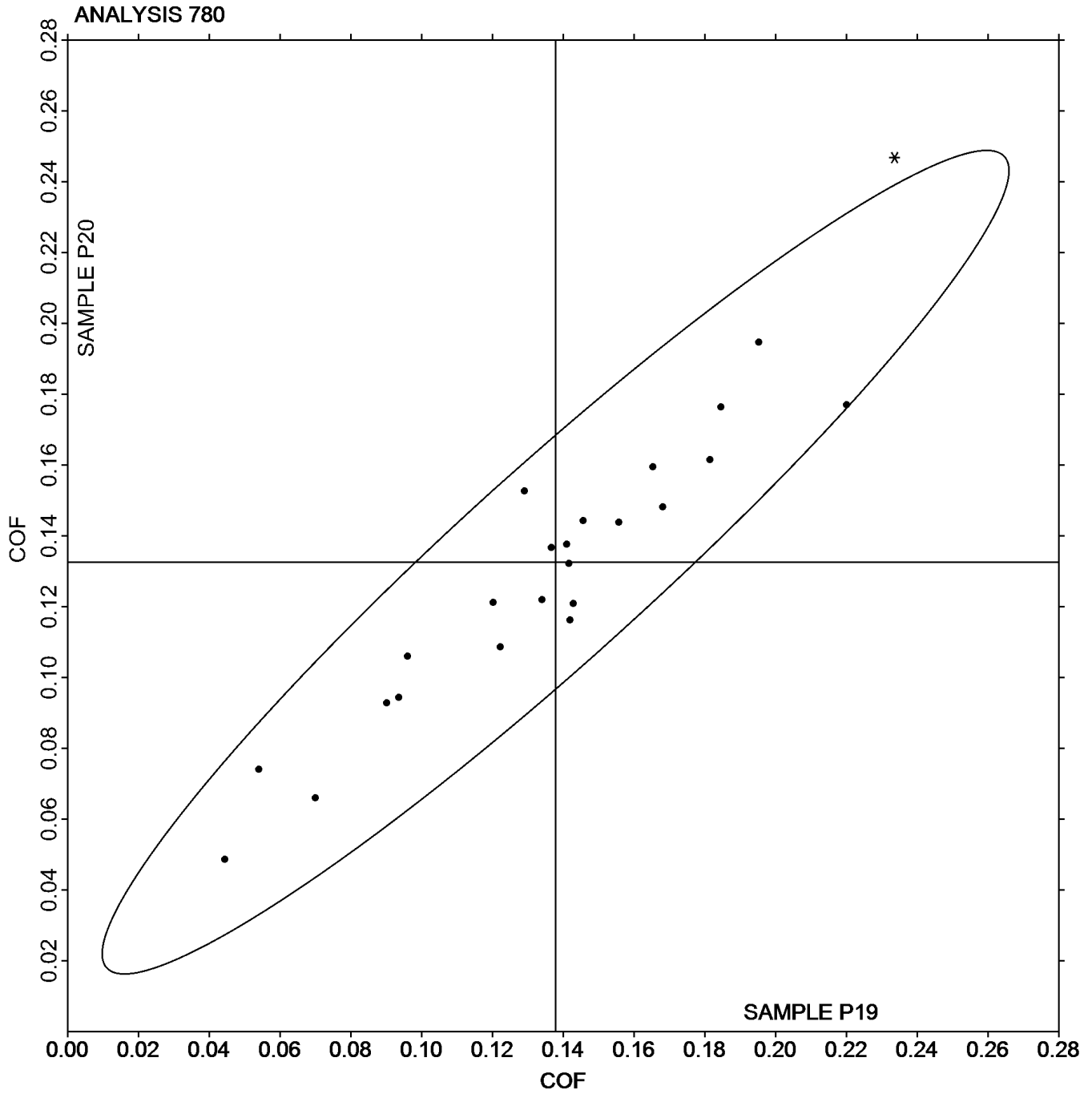
(TH) - Thwing Albert Friction/Peel Tester Model 225-1

(TM) - TMI Slip and Friction Tester

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

Plastics Interlaboratory Testing Program  
Analysis 780  
Coefficient of Static Friction

Grand Mean Sample P19: 0.13781 COF    Grand Mean Sample P20: 0.13256 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 P19			Sample P20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		0.0884	-0.0096	-0.30	0.0864	-0.0043	-0.13	TH
2N4TUP		0.1048	0.0068	0.21	0.0916	0.0009	0.03	TM
2TLGXA		0.0876	-0.0104	-0.32	0.0754	-0.0153	-0.46	TH
46JMPW		0.1364	0.0384	1.20	0.1224	0.0317	0.96	RD
4GA6UF		0.1088	0.0108	0.34	0.1008	0.0101	0.31	MI
6LZFE4		0.0722	-0.0258	-0.80	0.0710	-0.0197	-0.60	TN
9BGU4H		0.1114	0.0134	0.42	0.0944	0.0037	0.11	SA
9HE2QR	*	0.1746	0.0766	2.39	0.1846	0.0939	2.84	TN
D2FWP8		0.1000	0.0020	0.06	0.1000	0.0093	0.28	KA
DE4UPW		0.1094	0.0114	0.36	0.0944	0.0037	0.11	IG
ENPNBK		0.0946	-0.0034	-0.11	0.0922	0.0015	0.05	IG
EP49L6		0.1182	0.0202	0.63	0.1012	0.0105	0.32	XX
FNJMWF		0.1130	0.0150	0.47	0.0980	0.0073	0.22	IS
FZADHB		0.0300	-0.0680	-2.12	0.0220	-0.0687	-2.08	XX
H9NYVN		0.0864	-0.0116	-0.36	0.0836	-0.0071	-0.21	TH
K4XRY7		0.1120	0.0140	0.44	0.1000	0.0093	0.28	TL
NYNX2D		0.0760	-0.0220	-0.68	0.0794	-0.0113	-0.34	MI
P4VZYR	*	0.0620	-0.0360	-1.12	0.0320	-0.0587	-1.78	IG
PZJKUF		0.0292	-0.0687	-2.14	0.0377	-0.0530	-1.60	IG
QBNC7J		0.1300	0.0320	1.00	0.1136	0.0229	0.69	MT
UE6DP4		0.1266	0.0286	0.89	0.1259	0.0352	1.07	IG
VNYUA6		0.0740	-0.0240	-0.75	0.0702	-0.0205	-0.62	TH
Y3AMCN		0.0880	-0.0100	-0.31	0.0818	-0.0089	-0.27	IS
YPCU8U		0.1178	0.0198	0.62	0.1180	0.0273	0.83	TH

Summary Statistics			
Grand Means	0.09798	COF	0.09069
			COF
Std Dev Btwn Labs	0.03210	COF	0.03303
			COF
Statistics based on 24 of 24 reporting participants			

Sample P19: LDPE & Sample P20: LDPE

**Plastics Interlaboratory Testing Program**  
**Analysis 781**  
**Coefficient of Kinetic Friction**

---

**Instrument Code List as Reported by the Labs**

(IG) - Instron

(KA) - Kayeness Inc.

(MT) - MTS Q-Test

(SA) - Shimadzu Autograph

(TL) - TMI #32-90

(TN) - TMI #32-06

(IS) - Instron 5000 Series

(MI) - MTS Insight

(RD) - RDM CF

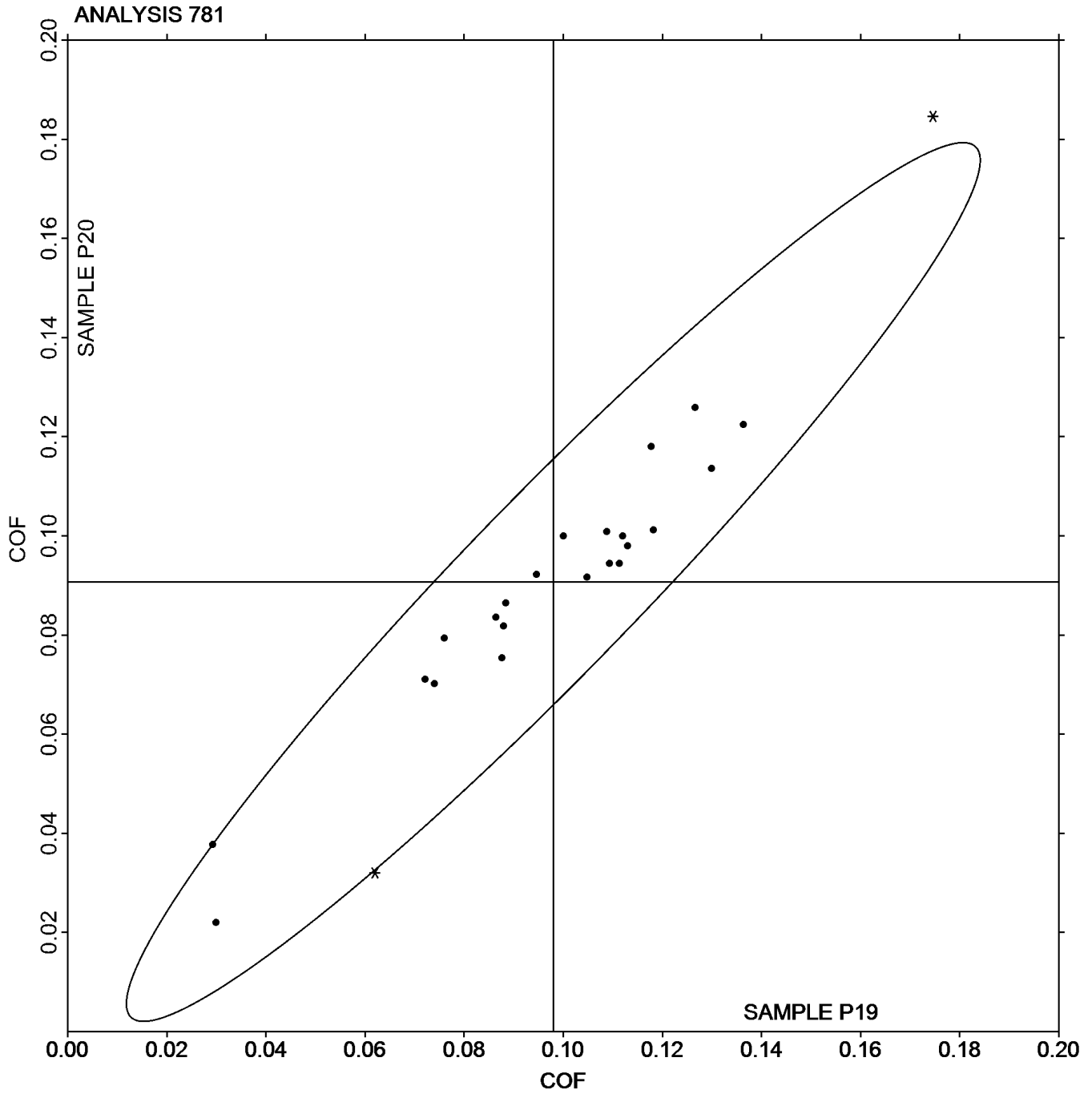
(TH) - Thwing Albert Friction/Peel Tester Model 225-1

(TM) - TMI Slip and Friction Tester

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

Plastics Interlaboratory Testing Program  
Analysis 781  
Coefficient of Kinetic Friction

Grand Mean Sample P19: 0.09798 COF    Grand Mean Sample P20: 0.09069 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 Q19			Sample Q20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		741.2	-9.2	-0.12	588.0	-152.5	-1.65	TE
2N4TUP		796.8	46.4	0.60	630.4	-110.1	-1.19	TE
4GA6UF		564.0	-186.4	-2.40	613.4	-127.0	-1.37	TE
9BGU4H		776.6	26.2	0.34	773.4	32.9	0.36	LO
9HE2QR		752.6	2.2	0.03	830.9	90.4	0.98	TM
DE4UPW		862.9	112.5	1.45	785.3	44.8	0.48	TN
ENPNBK		759.4	8.9	0.12	767.7	27.2	0.29	IN
FNJMWF		845.6	95.2	1.23	801.3	60.8	0.66	TE
FZADHB		729.8	-20.6	-0.27	753.6	13.1	0.14	TA
HJBUE9		732.0	-18.5	-0.24	922.7	182.3	1.97	XX
K4XRY7		714.2	-36.2	-0.47	694.5	-46.0	-0.50	TM
LDHMXB		754.1	3.7	0.05	763.4	22.9	0.25	SZ
NYNX2D		828.8	78.4	1.01	781.1	40.7	0.44	XX
YPCU8U		647.8	-102.6	-1.32	660.8	-79.7	-0.86	TE

**Summary Statistics**

Grand Means

750.41 grams-force

740.46 grams-force

Std Dev Btwn Labs

77.58 grams-force

92.50 grams-force

Statistics based on 14 of 14 reporting participants

Sample Q19: LDPE &amp; Sample Q20: LDPE

**Instrument Code List as Reported by the Labs**

(IN) - Instron

(LO) - Lorentzen &amp; Wettre Model II

(SZ) - Textest FX 3700

(TA) - Thwing-Albert

(TE) - Thwing-Albert Pro Tear

(TM) - TMI No. 83-1100

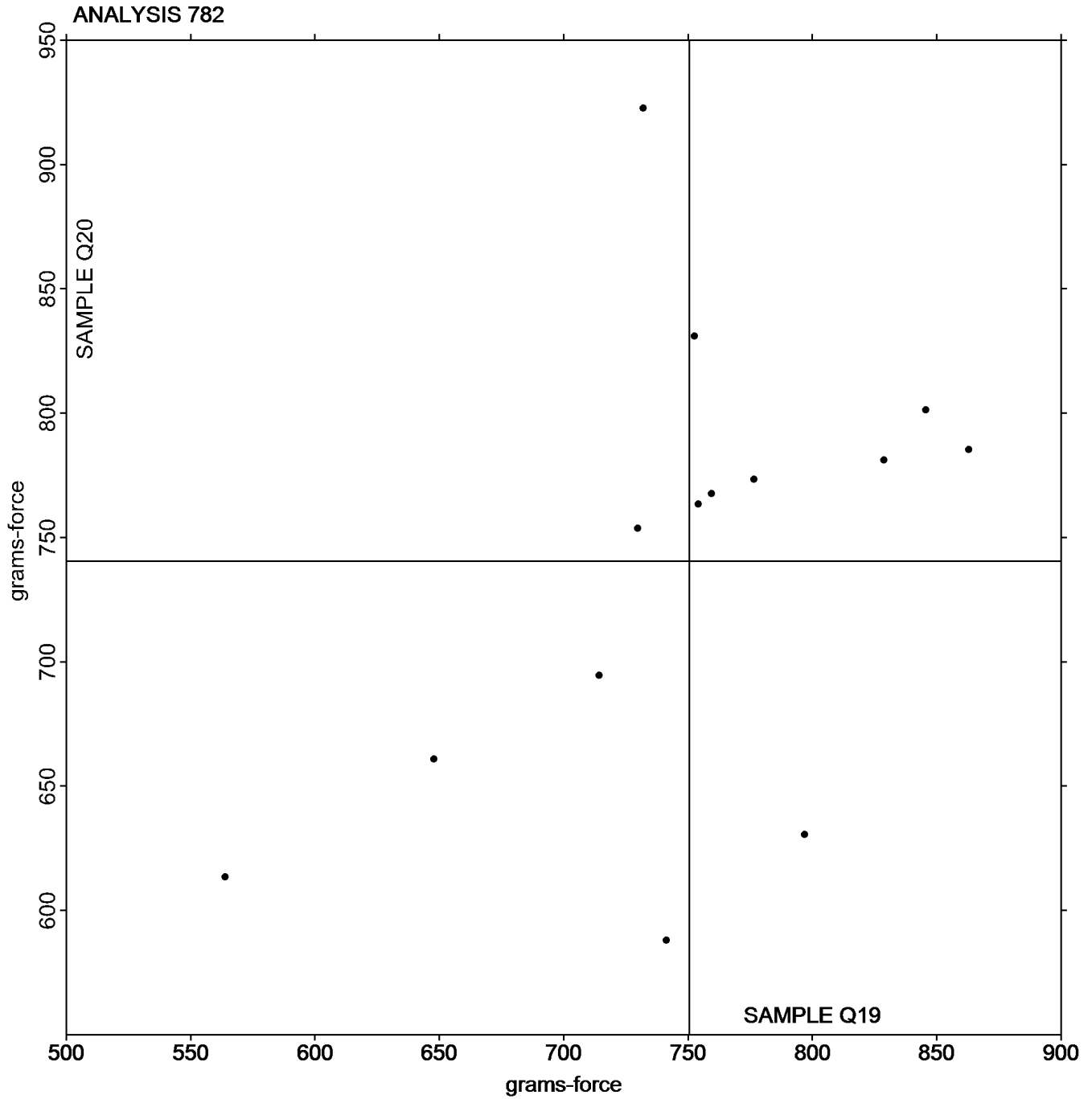
(TN) - TMI Tear Tester 83-10

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



Plastics Interlaboratory Testing Program  
Analysis 782  
Tear Resistance of Films

Grand Mean Sample Q19: 750.41 grams-force    Grand Mean Sample Q20: 740.46 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 D19			Sample D20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		15.263	0.101	0.16	15.238	0.088	0.16	BJ
2N4TUP		15.150	-0.011	-0.02	15.050	-0.100	-0.18	BJ
2TLGXA		15.375	0.214	0.33	15.413	0.263	0.47	BH
4GA6UF		15.663	0.501	0.78	15.863	0.713	1.26	BJ
8WK39D		14.488	-0.674	-1.04	15.088	-0.062	-0.11	BJ
936MNV		15.913	0.751	1.16	16.025	0.875	1.55	DA
9HE2QR		15.413	0.251	0.39	15.563	0.413	0.73	BJ
DM6KUT		13.964	-1.197	-1.86	14.135	-1.015	-1.80	XR
FNJMWF		16.241	1.080	1.67	16.043	0.893	1.58	BT
FZADHB		16.000	0.839	1.30	15.825	0.675	1.20	BJ
HKZAGR		14.488	-0.674	-1.04	14.338	-0.812	-1.44	BJ
JCT26G		13.484	-1.677	-2.60	13.766	-1.384	-2.45	HL
JVJ2P3		14.998	-0.164	-0.25	15.066	-0.084	-0.15	BJ
K3TKYH		15.038	-0.124	-0.19	14.913	-0.237	-0.42	BJ
K4XRY7		15.200	0.039	0.06	15.463	0.313	0.55	BJ
LDHMXB		15.450	0.289	0.45	15.250	0.100	0.18	BJ
LTAN73		15.575	0.414	0.64	15.475	0.325	0.58	BJ
NAX4PF		15.563	0.401	0.62	15.450	0.300	0.53	BJ
NYNX2D		15.488	0.326	0.51	14.900	-0.250	-0.44	XX
Q7XHBT		15.013	-0.149	-0.23	15.225	0.075	0.13	BJ
TRCP73		14.588	-0.574	-0.89	14.963	-0.187	-0.33	BJ
XAY94L		14.450	-0.711	-1.10	14.438	-0.712	-1.26	BJ
XHPEMA		15.743	0.581	0.90	15.584	0.434	0.77	XR
Y3AMCN		14.913	-0.249	-0.39	14.838	-0.312	-0.55	BJ
YH2M23		15.885	0.724	1.12	15.338	0.188	0.33	XR
YPCU8U		14.850	-0.311	-0.48	14.650	-0.500	-0.89	BJ

**Plastics Interlaboratory Testing Program**  
**Analysis 785**  
**Percent Haze of Film**

**Summary Statistics**

Grand Means

15.1611 Percent

15.1498 Percent

Std Dev Btwn Labs

0.6451 Percent

0.5636 Percent

Statistics based on 26 of 26 reporting participants

Sample D19: LDPE &amp; Sample D20: 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 Series

(DA) - Datacolor SF 600 Series

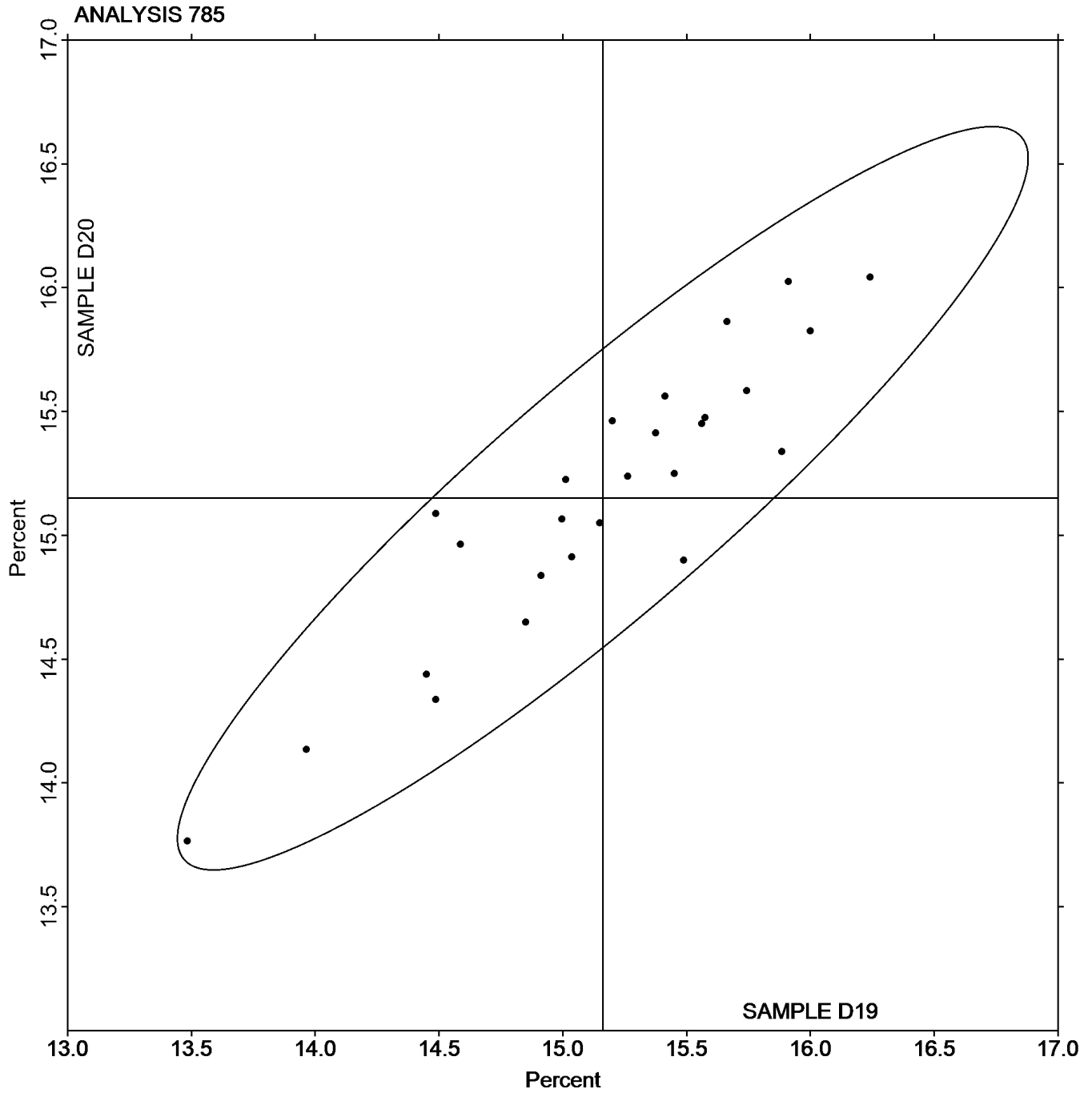
(HL) - Hunterlab Ultrascan XE

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

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

Plastics Interlaboratory Testing Program  
Analysis 785  
Percent Haze of Film

Grand Mean Sample D19: 15.161 Percent    Grand Mean Sample D20: 15.150 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 D19			Sample D20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22D8CL		92.26	0.32	0.23	92.70	0.67	0.49	BJ
2N4TUP		89.35	-2.59	-1.85	89.36	-2.67	-1.95	BJ
2TLGXA		92.19	0.25	0.18	92.21	0.18	0.13	BH
4GA6UF		91.54	-0.40	-0.29	91.55	-0.48	-0.35	BJ
8WK39D	X	79.14	-12.80	-9.14	78.94	-13.09	-9.58	BJ
936MNV		90.78	-1.16	-0.83	90.79	-1.24	-0.91	DA
9HE2QR		92.30	0.36	0.26	92.64	0.61	0.44	BJ
DM6KUT		90.79	-1.15	-0.82	91.03	-1.01	-0.74	XR
FNJMWf		92.86	0.92	0.66	93.10	1.07	0.78	BT
FZADHB	X	78.89	-13.05	-9.32	79.20	-12.83	-9.39	BJ
HKZAGR		92.51	0.57	0.41	92.58	0.54	0.40	BJ
JCT26G		90.51	-1.44	-1.03	90.51	-1.52	-1.11	HL
JVJ2P3		93.34	1.39	0.99	93.32	1.29	0.95	BJ
K3TKYH		93.24	1.30	0.92	93.09	1.06	0.77	BJ
K4XRY7		92.91	0.97	0.69	92.90	0.87	0.64	BJ
LDHMXB	*	88.30	-3.64	-2.60	88.73	-3.31	-2.42	BJ
LTAN73		90.66	-1.28	-0.91	90.73	-1.31	-0.96	BJ
NAX4PF		92.69	0.75	0.53	92.73	0.69	0.51	BJ
Q7XHBT		92.98	1.03	0.74	93.03	0.99	0.73	BJ
TRCP73		94.30	2.36	1.68	94.30	2.27	1.66	BJ
XAY94L		92.36	0.42	0.30	92.41	0.38	0.28	BJ
XHPEMA		91.77	-0.17	-0.12	91.73	-0.30	-0.22	XR
Y3AMCN		91.71	-0.23	-0.16	91.86	-0.17	-0.12	BJ
YH2M23		91.61	-0.33	-0.24	91.60	-0.44	-0.32	XR
YPCU8U		93.70	1.76	1.25	93.85	1.82	1.33	BJ

**Plastics Interlaboratory Testing Program**  
**Analysis 786**  
**Total Luminous transmittance of film**

Summary Statistics			
Grand Means	91.942	Percent	92.032
			Percent
Stnd Dev Btwn Labs	1.401	Percent	1.366
			Percent
Statistics based on 23 of 25 reporting participants			

Sample D19: LDPE &amp; Sample D20: LDPE

**Comments on assigned Data Flags for Test #786**

8WK39D (X) - Data for both samples are low. Also Inconsistent in testing within Sample D20.

FZADHB (X) - Data for both samples are low. Also Inconsistent in testing within Sample D20.

**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

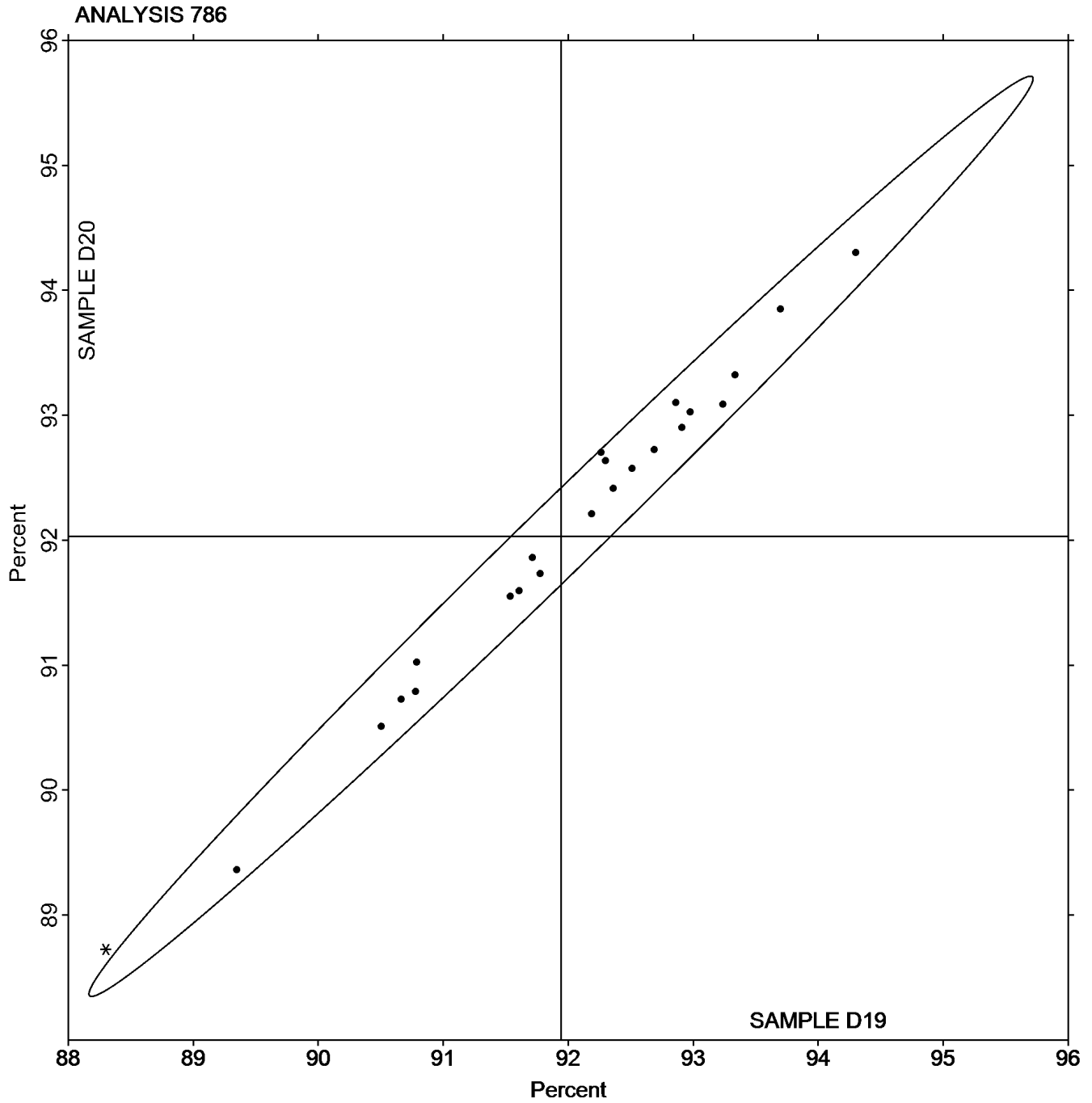
(DA) - Datacolor SF 600 Series

(HL) - Hunterlab Ultrascan XE

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

Plastics Interlaboratory Testing Program  
Analysis 786  
Total Luminous transmittance of film

Grand Mean Sample D19: 91.942 Percent    Grand Mean Sample D20: 92.032 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 755**  
**Moisture Content of Plastics**

WebCode	Data Flag	Sample Y19			Sample Y20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2GALGL		0.18210	0.01163	0.45	0.17467	0.00293	0.14	XX
2KW47C		0.15567	-0.01481	-0.58	0.15533	-0.01641	-0.76	AZ
3JVXDA		0.18433	0.01386	0.54	0.17833	0.00659	0.31	MU
3KMKKF	*	0.10773	-0.06274	-2.45	0.11123	-0.06051	-2.80	XX
3RXX9E		0.21367	0.04319	1.68	0.20767	0.03593	1.66	XX
4PG6W6		0.14500	-0.02547	-0.99	0.15050	-0.02124	-0.98	SB
683T6B		0.14000	-0.03047	-1.19	0.14667	-0.02507	-1.16	XX
6D7ARC		0.20000	0.02953	1.15	0.20000	0.02826	1.31	XX
6LZFE4		0.16400	-0.00647	-0.25	0.15600	-0.01574	-0.73	MA
7WMFAL		0.17660	0.00613	0.24	0.17800	0.00626	0.29	MT
9JZZHJ		0.23333	0.06286	2.45	0.22000	0.04826	2.23	MU
A3PCJD		0.18970	0.01923	0.75	0.19503	0.02329	1.08	CS
A6VJYY		0.13600	-0.03447	-1.34	0.15300	-0.01874	-0.87	MB
BA7FHM		0.21060	0.04013	1.57	0.20480	0.03306	1.53	AZ
BPXUKE	X	0.18567	0.01519	0.59	0.13750	-0.03424	-1.58	XX
BQMV9W		0.15700	-0.01347	-0.53	0.15700	-0.01474	-0.68	MK
C7TGU6		0.17233	0.00186	0.07	0.16800	-0.00374	-0.17	MJ
CA2DCG		0.17033	-0.00014	-0.01	0.16867	-0.00307	-0.14	CS
CAJLZB		0.17713	0.00666	0.26	0.17497	0.00323	0.15	MR
CRMZQT		0.16533	-0.00514	-0.20	0.16600	-0.00574	-0.27	MU
EXGX3Z		0.15300	-0.01747	-0.68	0.15800	-0.01374	-0.64	SA
FDKTL4		0.18967	0.01919	0.75	0.17657	0.00483	0.22	MD
FNJMWF		0.19050	0.02003	0.78	0.19600	0.02426	1.12	ML
LLMH6X		0.16000	-0.01047	-0.41	0.15800	-0.01374	-0.64	MU
LPDZ2Z		0.19053	0.02006	0.78	0.17610	0.00436	0.20	XX
LTAN73		0.14433	-0.02614	-1.02	0.15867	-0.01307	-0.61	MK
P79NQV		0.16600	-0.00447	-0.17	0.18233	0.01059	0.49	XX
QGARN8		0.15300	-0.01747	-0.68	0.16967	-0.00207	-0.10	AZ
QX273C		0.16500	-0.00547	-0.21	0.16700	-0.00474	-0.22	XX
RPK6NF		0.19933	0.02886	1.13	0.20033	0.02859	1.32	SB
UP322W		0.18037	0.00989	0.39	0.18020	0.00846	0.39	MR
WEY2LX		0.15800	-0.01247	-0.49	0.17233	0.00059	0.03	MJ



**Plastics Interlaboratory Testing Program  
Analysis 755  
Moisture Content of Plastics**

WebCode	Data Flag	Sample Y19			Sample Y20			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
WT2HYD		0.14500	-0.02547	-0.99	0.15300	-0.01874	-0.87	SB
YUFFV4		0.15000	-0.02047	-0.80	0.15333	-0.01841	-0.85	XX

Summary Statistics			
Grand Means	0.170473	Percent	0.171739
Std Dev Btwn Labs	0.025637	Percent	0.021604
Statistics based on 33 of 34 reporting participants			

Sample Y19: ABS & Sample Y20: ABS

**Comments on assigned Data Flags for Test #755**

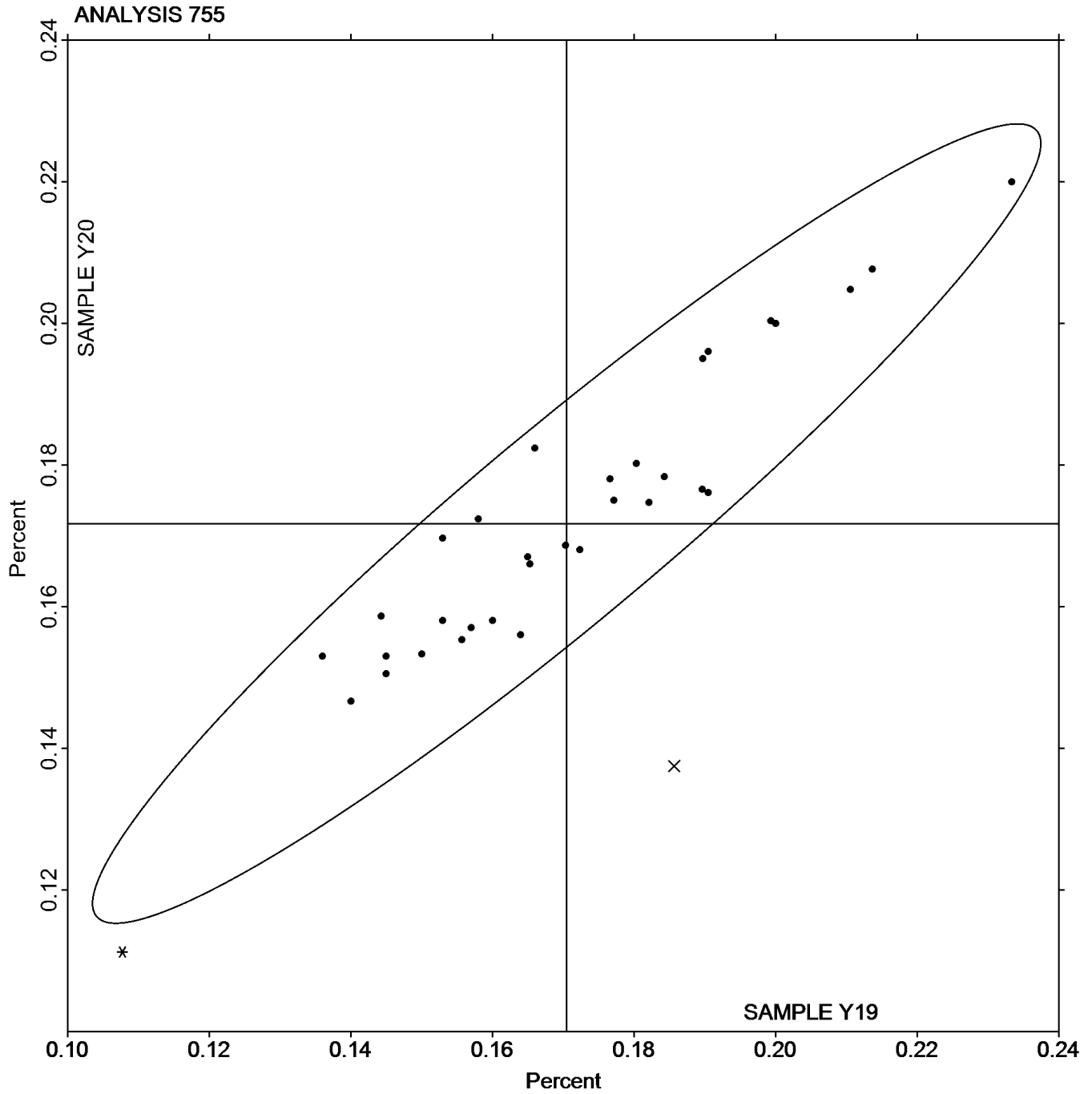
BPXUKE (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

**Instrument Code List as Reported by the Labs**

- |  |   |
|--|---|
| (AZ) - Arizona Instruments Moisture Analyzer | (CS) - Cosa Instruments                             |
| (MA) - Omnimark Mark 2                       | (MB) - Omnimark Mark 3                              |
| (MD) - Mettler Toledo DL37                   | (MJ) - Mitsubishi KF Analyzer Series                |
| (MK) - Mitsubishi KF Analyzer CA 100         | (ML) - Metrohm Coulometer                           |
| (MR) - Metrohm Coulometer 756 KF             | (MT) - Mettler Toledo DL39                          |
| (MU) - Mettler Toledo                        | (SA) - Sartorius MA30                               |
| (SB) - Sartorius Mark 3                      | (XX) - Instrument manufacturer not specified by lab |

Plastics Interlaboratory Testing Program  
Analysis 755  
Moisture Content of Plastics

Grand Mean Sample Y19: 0.17047 Percent    Grand Mean Sample Y20: 0.17174 Percent



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