

## Plastics Interlaboratory Testing Program

Web Summary Report #91, 3rd Qtr 2014

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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>
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<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>		
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<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.

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## 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.

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### 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.

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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 #91

## Plastics Interlaboratory Testing Program

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### Analysis 704 - Tensile Stress at Yield

Material: ABS/PC	Sample F21	9,549.55	psi	2.05% COV
	Sample F22	8,628.27	psi	1.69% COV

### Analysis 705 - Tensile Stress at Break

Material: ABS/PC	Sample F21	6,979.15	psi	2.99% COV
	Sample F22	8,501.24	psi	9.07% COV

### Analysis 706 - Percent Elongation at Yield

Material: ABS/PC	Sample F21	3.7331	Percent	3.02% COV
	Sample F22	4.2807	Percent	2.89% COV

### Analysis 708 - Modulus of Elasticity

Material: ABS/PC	Sample F21	400.01	ksi	5.39% COV
	Sample F22	355.75	ksi	5.23% COV

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

Material: HIPS	Sample C21	25.690	MPa	2.69% COV
	Sample C22	25.707	MPa	2.90% COV

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

Material: HIPS	Sample C21	20.034	MPa	3.00% COV
	Sample C22	20.119	MPa	3.44% COV

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

Material: HIPS	Sample C21	1.3701	Percent	5.84% COV
	Sample C22	1.3633	Percent	6.07% COV

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

Material: HIPS	Sample C21	2,090.98	MPa	3.66% COV
	Sample C22	2,093.03	MPa	3.76% COV

### Analysis 720 - Flexural Modulus

Material: ABS	Sample J21	362.77	ksi	4.33% COV
	Sample J22	362.94	ksi	4.54% COV

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

Material: ABS	Sample J21	10,849.83	psi	3.60% COV
	Sample J22	10,837.36	psi	3.85% COV

### Analysis 722 - Flexural Stress at Yield

Material: ABS	Sample J21	10,851.53	psi	3.92% COV
	Sample J22	10,835.79	psi	4.06% COV

### Analysis 736 - Flexural Modulus

Material: ABS	Sample K21	2,399.15	MPa	3.28% COV
	Sample K22	2,403.65	MPa	3.45% COV

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

Material: ABS	Sample K21	71.585	MPa	2.28% COV
	Sample K22	71.842	MPa	2.67% COV

# Results Summary for Web Summary Report #91

## Plastics Interlaboratory Testing Program

### Analysis 738 - Flexural Stress at Yield

Material: ABS	Sample K21	73.219	MPa	1.96% COV
	Sample K22	73.596	MPa	2.43% COV

### Analysis 790 - Notched Izod Impact

Material: ABS	Sample S21	7.0080	ft.lbf/in	6.01% COV
	Sample S22	7.0562	ft.lbf/in	5.58% COV

### Analysis 792 - Notched Charpy Impact

Material: ABS	Sample M21	26.921	kJ/m <sup>2</sup>	3.70% COV
	Sample M22	26.922	kJ/m <sup>2</sup>	4.74% COV

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

Material: ABS	Sample E21	81.103	Degrees C	1.30% COV
	Sample E22	80.492	Degrees C	1.08% COV

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

Material: PP	Sample G21	67.964	Degrees C	2.45% COV
	Sample G22	68.280	Degrees C	2.42% COV

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

Material: ABS	Sample N21	81.469	Degrees C	1.43% COV
	Sample N22	81.942	Degrees C	1.46% COV

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

Material: HIPS	Sample H21	100.22	Degrees C	0.446% COV
	Sample H22	100.23	Degrees C	0.507% COV

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

Material: HIPS	Sample R21	102.46	Degrees C	0.810% COV
	Sample R22	102.49	Degrees C	0.789% COV

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

Material: LDPE	Sample X21	5.0773	grams/10 mins	4.69% COV
	Sample X22	5.0449	grams/10 mins	4.64% COV

### Analysis 718 - Specific Gravity

Material: ABS	Sample T21	1.0458	sp gr 23/23 C	0.194% COV
	Sample T22	1.0457	sp gr 23/23 C	0.195% COV

### Analysis 757 - Ash Content

Material: PBT	Sample L21	15.155	Percent	0.405% COV
	Sample L22	15.158	Percent	0.462% COV

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

Material: LDPE	Sample B21	1,689.61	psi	6.85% COV
	Sample B22	1,697.62	psi	6.91% COV

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

Material: LDPE	Sample B21	3,012.60	psi	12.9% COV
	Sample B22	3,044.81	psi	13.1% COV

# Results Summary for Web Summary Report #91

## Plastics Interlaboratory Testing Program

### Analysis 772 - Elongation at Yield, Films

Material: LDPE	Sample B21	37.973	Percent	78.8% COV
	Sample B22	36.828	Percent	78.5% COV

### Analysis 773 - Elongation at Break, Films

Material: LDPE	Sample B21	712.20	Percent	31.0% COV
	Sample B22	748.12	Percent	32.8% COV

### Analysis 774 - Thickness of Film Specimens

Material: LDPE	Sample B21	4.1986	mils	4.98% COV
	Sample B22	4.2558	mils	4.11% COV

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

Material: LDPE	Sample B21	33,390.24	psi	15.7% COV
	Sample B22	33,392.82	psi	15.3% COV

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

Material: LDPE	Sample B21	27,355.75	psi	10.3% COV
	Sample B22	27,523.56	psi	9.66% COV

### Analysis 780 - Static Friction

Material: LDPE	Sample P21	0.11641	COF	34.3% COV
	Sample P22	0.12463	COF	34.5% COV

### Analysis 781 - Kinetic Friction

Material: LDPE	Sample P21	0.08532	COF	36.2% COV
	Sample P22	0.08597	COF	32.6% COV

### Analysis 782 - Tear Resistance of Film

Material: LDPE	Sample Q21	371.57	grams-force	14.1% COV
	Sample Q22	377.80	grams-force	10.5% COV

### Analysis 785 - Percent Haze

Material: LDPE	Sample D21	17.423	Percent	5.39% COV
	Sample D22	15.789	Percent	5.27% COV

### Analysis 786 - Total Transmittance

Material: LDPE	Sample D21	92.048	Percent	1.31% COV
	Sample D22	91.850	Percent	1.31% COV

### Analysis 791 - Notched Izod Impact

Material: ABS/PC	Sample Z21	19.407	kJ/m <sup>2</sup>	18.3% COV
	Sample Z22	20.228	kJ/m <sup>2</sup>	23.8% COV

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

WebCode	Data Flag	Sample F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GE2ZX		9,154.3	-395.2	-2.02	8,400.1	-228.2	-1.57
2WMWBJ		9,132.5	-417.0	-2.13	8,389.1	-239.2	-1.64
3GP8UD		9,540.2	-9.3	-0.05	8,760.6	132.3	0.91
3LJ4GJ		9,484.0	-65.5	-0.34	8,658.0	29.7	0.20
44LYWV		9,326.4	-223.1	-1.14	8,498.0	-130.3	-0.89
4HC6JV		9,674.1	124.6	0.64	8,766.2	137.9	0.95
6TCXRM		9,581.6	32.1	0.16	8,673.2	44.9	0.31
6UVQUK		9,471.0	-78.5	-0.40	8,495.8	-132.5	-0.91
6WQT7Y		9,549.7	0.1	0.00	8,690.7	62.5	0.43
73XEZM		9,443.6	-105.9	-0.54	8,465.8	-162.5	-1.11
7RZQTQ		9,457.1	-92.4	-0.47	8,689.3	61.0	0.42
83WWLP		9,867.6	318.1	1.63	8,872.0	243.7	1.67
8B89NN		9,405.6	-143.9	-0.74	8,540.6	-87.7	-0.60
8YE2EQ		9,707.2	157.7	0.81	8,737.0	108.7	0.75
A4DANQ		9,604.2	54.7	0.28	8,630.8	2.5	0.02
AYLXVF	X	9,596.6	47.1	0.24	8,911.0	282.7	1.94
B7WL3L		9,393.6	-156.0	-0.80	8,477.2	-151.0	-1.04
BGHL26		9,585.9	36.3	0.19	8,675.4	47.1	0.32
BV37JC		9,808.7	259.1	1.33	8,871.2	242.9	1.67
BYM7KE		9,771.6	222.1	1.14	8,756.2	127.9	0.88
CAGVQD		9,449.6	-99.9	-0.51	8,546.8	-81.5	-0.56
CFJZM4	X	9,271.6	-277.9	-1.42	8,168.4	-459.9	-3.16
CQK8KN		9,496.0	-53.6	-0.27	8,654.5	26.2	0.18
CTCJ4U		9,535.0	-14.6	-0.07	8,565.5	-62.8	-0.43
D3D7T7		9,605.0	55.5	0.28	8,722.0	93.7	0.64
D8LPRY		9,523.6	-25.9	-0.13	8,662.2	33.9	0.23
DEMWFEE		9,484.4	-65.1	-0.33	8,634.6	6.3	0.04
DRWJLQ	X	9,596.0	46.4	0.24	9,589.8	961.5	6.60
DVRBQG		9,554.0	4.5	0.02	8,699.4	71.1	0.49
EAAGLG		9,408.0	-141.5	-0.72	8,442.0	-186.3	-1.28
EDPTFC		9,515.2	-34.3	-0.18	8,710.4	82.1	0.56
ET42FF		9,961.8	412.3	2.11	8,926.2	297.9	2.04



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

WebCode	Data Flag	Sample F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FWGEHE		9,700.2	150.7	0.77	8,692.6	64.3	0.44
FYNEWU		9,627.1	77.6	0.40	8,651.0	22.7	0.16
GPT3VX	X	10,094.7	545.2	2.79	9,197.5	569.2	3.91
H4C6TF		9,628.6	79.0	0.40	8,563.7	-64.6	-0.44
H62B97		9,059.4	-490.1	-2.51	8,288.8	-339.5	-2.33
H8EW88	X	10,326.8	777.2	3.97	8,818.4	190.1	1.30
HEA4HZ	*	9,093.4	-456.1	-2.33	8,226.0	-402.3	-2.76
JNDFCA		9,419.6	-129.9	-0.66	8,582.0	-46.3	-0.32
KT3GQT		9,881.2	331.6	1.70	8,827.7	199.4	1.37
L32CKH		9,387.4	-162.1	-0.83	8,443.6	-184.7	-1.27
LBXACQ		9,536.3	-13.2	-0.07	8,615.6	-12.7	-0.09
LDLLAB		9,791.6	242.0	1.24	8,838.7	210.4	1.44
LUPDVD		9,578.4	28.8	0.15	8,598.2	-30.1	-0.21
MHEZHJ		9,466.4	-83.1	-0.43	8,498.0	-130.3	-0.89
MNJ7N9		9,142.6	-406.9	-2.08	8,340.4	-287.9	-1.98
MUPTKJ		9,201.8	-347.7	-1.78	8,353.8	-274.5	-1.88
N2K2KF		9,702.6	153.1	0.78	8,745.0	116.7	0.80
N9PPP3		9,628.2	78.7	0.40	8,656.6	28.3	0.19
NAFXP7		9,637.2	87.7	0.45	8,623.2	-5.1	-0.03
PGD328		9,590.0	40.5	0.21	8,704.0	75.7	0.52
Q2VLK4		9,549.9	0.4	0.00	8,602.3	-26.0	-0.18
QVQWNG		9,749.9	200.4	1.02	8,795.6	167.3	1.15
RCKXC		9,836.2	286.7	1.47	8,719.4	91.1	0.63
RFBYJG		9,583.9	34.3	0.18	8,603.7	-24.6	-0.17
T29QWY		9,496.6	-52.9	-0.27	8,572.8	-55.5	-0.38
TAZ6Z6		9,602.8	53.3	0.27	8,674.0	45.7	0.31
U2MVPG		9,587.2	37.7	0.19	8,682.2	53.9	0.37
UF6LQ6	X	7,081.6	-2,467.9	-12.62	6,034.6	-2,593.7	-17.79
UJNHEV	*	10,040.0	490.5	2.51	9,000.0	371.7	2.55
UTCEDB		9,421.7	-127.8	-0.65	8,650.1	21.9	0.15
V392KX		9,691.9	142.4	0.73	8,751.7	123.4	0.85
VCXMQW		9,554.7	5.2	0.03	8,645.3	17.0	0.12

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

WebCode	Data Flag	Sample F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
VFYNVY		9,645.2	95.7	0.49	8,613.4	-14.9	-0.10
WHJ3UT		9,510.6	-38.9	-0.20	8,552.6	-75.7	-0.52
WJG7UV		9,485.2	-64.3	-0.33	8,535.0	-93.3	-0.64
XD869R		9,522.6	-26.9	-0.14	8,616.4	-11.9	-0.08
XN3MEK		9,393.9	-155.7	-0.80	8,576.2	-52.1	-0.36
XTG6RV	*	9,811.4	261.9	1.34	8,676.8	48.5	0.33
YMLQML		9,650.3	100.8	0.52	8,636.8	8.5	0.06
ZZNKC2		9,572.6	23.0	0.12	8,702.3	74.1	0.51

Summary Statistics	
Grand Means	9,549.55 psi      8,628.27 psi
Std Dev Btwn Labs	195.57 psi      145.76 psi
Statistics based on 66 of 72 reporting participants	

Sample F21: ABS/PC & Sample F22: ABS/PC

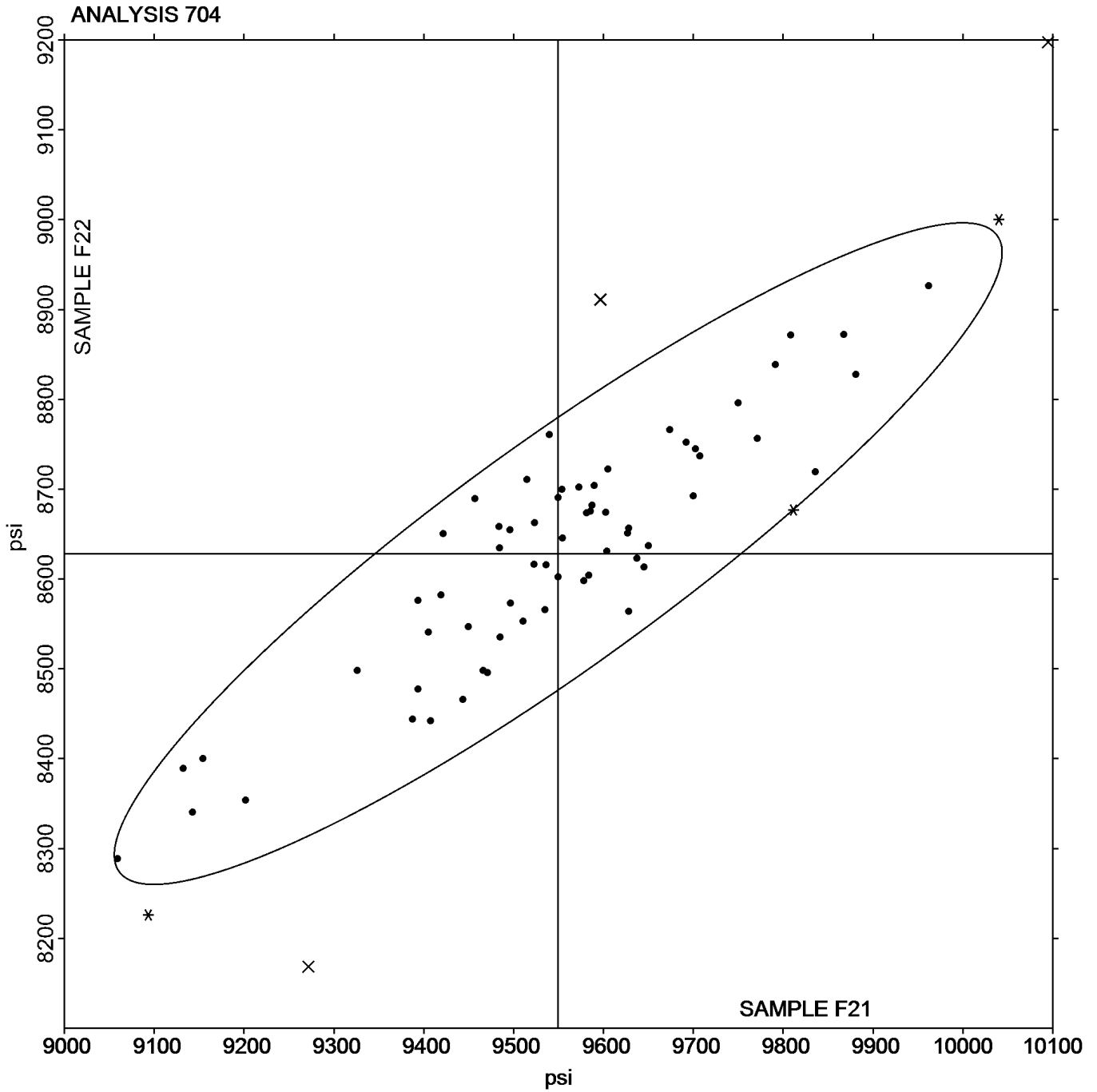
**Comments on assigned Data Flags for Test #704**

- AYLXVF (X) - Inconsistent in testing between samples and inconsistent in testing within Sample F22.
- CFJZM4 (X) - Low data for Sample F22. Also Inconsistent in testing within Sample F21.
- DRWJLQ (X) - High data for Sample F22.
- GPT3VX (X) - Data for both samples are high.
- H8EW88 (X) - High data for Sample F21. Also Inconsistent in testing within Sample F22.
- UF6LQ6 (X) - Data for both samples are low.

Analysis 704

Tensile Stress at Yield - psi

Grand Mean Sample F21: 9,549.55 psi    Grand Mean Sample F22: 8,628.27 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 F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GE2ZX		6,628.2	-350.9	-1.68	8,975.5	474.2	0.62
2WMWBJ		6,691.5	-287.6	-1.38	7,900.3	-601.0	-0.78
3GP8UD		6,976.2	-2.9	-0.01	8,688.4	187.2	0.24
3LJ4GJ		6,912.0	-67.1	-0.32	8,874.0	372.8	0.48
4HC6JV		6,944.5	-34.7	-0.17	9,146.2	644.9	0.84
6TCXRM		6,898.6	-80.5	-0.39	9,177.6	676.4	0.88
6UVQUK		6,800.0	-179.1	-0.86	6,789.9	-1,711.4	-2.22
6WQT7Y		6,941.6	-37.6	-0.18	9,154.6	653.3	0.85
73XEZM		6,777.2	-201.9	-0.97	8,918.0	416.8	0.54
83WWLP		7,365.8	386.7	1.85	7,799.6	-701.6	-0.91
8YE2EQ		7,007.0	27.9	0.13	9,104.8	603.6	0.78
A4DANQ		7,028.8	49.7	0.24	8,984.6	483.4	0.63
AYLXVF		7,062.2	83.1	0.40	8,440.8	-60.4	-0.08
B7WL3L		6,932.6	-46.6	-0.22	7,016.1	-1,485.1	-1.93
BGHL26	X	3,392.0	-3,587.2	-17.20	8,794.2	293.0	0.38
BV37JC		6,921.6	-57.6	-0.28	8,594.7	93.5	0.12
BYM7KE		7,090.2	111.1	0.53	8,856.4	355.2	0.46
CAGVQD		6,895.6	-83.5	-0.40	9,155.4	654.2	0.85
CFJZM4		6,929.2	-49.9	-0.24	8,180.0	-321.2	-0.42
CQK8KN		6,977.0	-2.2	-0.01	8,995.0	493.8	0.64
CTCJ4U		6,806.6	-172.6	-0.83	7,293.9	-1,207.4	-1.57
D3D7T7		6,992.4	13.3	0.06	8,645.4	144.2	0.19
D8LPRY		6,917.2	-61.9	-0.30	8,847.4	346.2	0.45
DEMWFE		7,007.4	28.3	0.14	8,482.4	-18.8	-0.02
DRWJLQ		7,010.0	30.8	0.15	7,065.7	-1,435.6	-1.86
DVRBQG	M	6,948.2	-30.9	-0.15	No data reported for this sample		
EAAGLG	X	9,408.0	2,428.9	11.65	8,442.0	-59.2	-0.08
EDPTFC		6,817.6	-161.5	-0.77	9,363.2	862.0	1.12
ET42FF		7,223.0	243.9	1.17	7,476.4	-1,024.8	-1.33
FWGEHE		7,038.4	59.3	0.28	9,043.8	542.6	0.70
FYNEWU		6,945.3	-33.8	-0.16	7,385.4	-1,115.9	-1.45
GPB8AP		6,665.9	-313.3	-1.50	9,101.0	599.8	0.78

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

WebCode	Data Flag	Sample F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
GPT3VX		7,425.4	446.3	2.14	8,555.6	54.3	0.07
H4C6TF		7,106.0	126.9	0.61	9,277.9	776.6	1.01
H62B97	X	5,949.6	-1,029.5	-4.94	6,398.8	-2,102.4	-2.73
H8EW88	*	7,513.0	533.9	2.56	7,919.1	-582.1	-0.76
HEA4HZ		6,612.0	-367.1	-1.76	8,180.0	-321.2	-0.42
KT3GQT	*	7,438.2	459.1	2.20	7,497.6	-1,003.7	-1.30
L32CKH		6,795.6	-183.5	-0.88	8,916.0	414.8	0.54
LBXACQ		7,042.8	63.7	0.31	8,929.2	427.9	0.56
LDLLAB		6,913.7	-65.4	-0.31	8,685.2	184.0	0.24
LUPDVD		7,082.3	103.1	0.49	8,875.2	374.0	0.49
MHEZHJ		6,954.4	-24.7	-0.12	8,408.4	-92.8	-0.12
MNJ7N9	*	6,553.6	-425.5	-2.04	6,792.0	-1,709.2	-2.22
MUPTKJ	*	6,529.6	-449.5	-2.16	6,795.6	-1,705.6	-2.21
N2K2KF		7,244.2	265.1	1.27	9,115.8	614.6	0.80
N9PPP3		7,049.8	70.7	0.34	9,143.0	641.8	0.83
NAFXP7		7,079.4	100.3	0.48	9,112.2	611.0	0.79
PGD328	M	6,638.0	-341.1	-1.64	No data reported for this sample		
Q2VLK4		6,898.9	-80.2	-0.38	8,105.9	-395.3	-0.51
QVQWNG		7,180.1	201.0	0.96	9,729.6	1,228.4	1.59
RCCKXC		7,319.0	339.9	1.63	9,490.2	989.0	1.28
RFBYJG		6,844.1	-135.0	-0.65	7,893.0	-608.2	-0.79
U2MVPG		6,914.2	-64.9	-0.31	8,471.6	-29.6	-0.04
UF6LQ6	X	9,589.4	2,610.3	12.52	9,196.2	695.0	0.90
UJNHEV		7,274.0	294.9	1.41	7,492.0	-1,009.2	-1.31
UTCEDB		6,892.3	-86.9	-0.42	9,166.5	665.2	0.86
V392KX		7,187.8	208.7	1.00	8,674.0	172.8	0.22
VCXMQW		7,034.7	55.5	0.27	9,313.5	812.3	1.05
VFYNVY		6,979.4	0.3	0.00	8,870.8	369.6	0.48
WHJ3UT		7,009.0	29.9	0.14	8,921.3	420.0	0.54
XD869R		6,927.6	-51.5	-0.25	9,245.2	744.0	0.97
XN3MEK		6,621.9	-357.2	-1.71	8,053.7	-447.5	-0.58
XTG6RV		7,165.6	186.5	0.89	7,062.8	-1,438.4	-1.87

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

WebCode	Data Flag	Sample F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
YMLQML		6,936.9	-42.2	-0.20	8,874.6	373.4	0.48
ZZNKC2		7,019.9	40.7	0.20	9,050.4	549.2	0.71

Summary Statistics			
Grand Means	6,979.15	psi	8,501.24
Std Dev Btwn Labs	208.55	psi	770.78
Statistics based on 60 of 66 reporting participants			

Sample F21: ABS/PC & Sample F22: ABS/PC

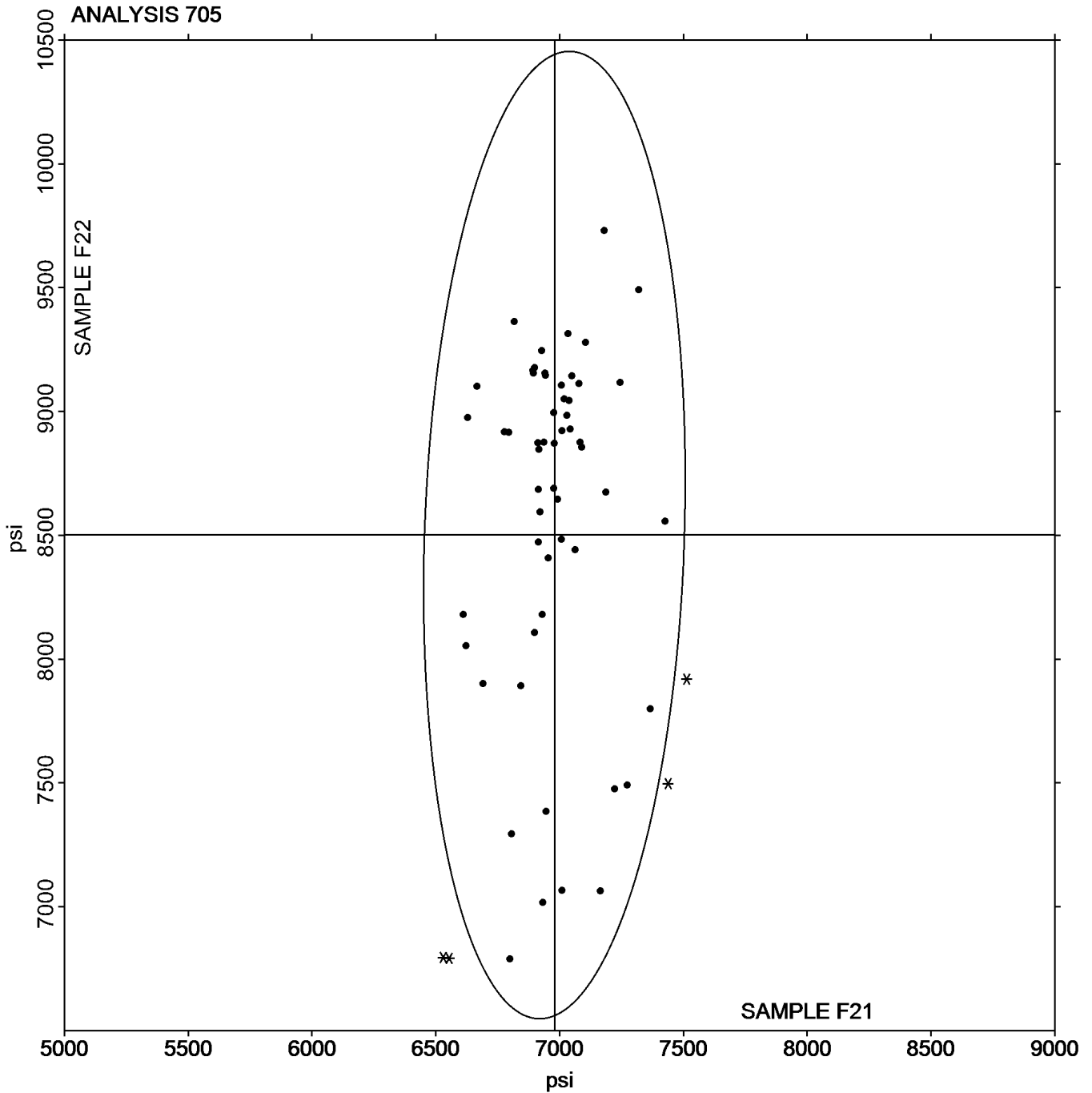
**Comments on assigned Data Flags for Test #705**

- BGHL26 (X) - Low data for Sample F21. Inconsistent in testing within Sample F21.
- DVRBQG (M) - Laboratory did not submit data for Sample F22.
- EAAGLG (X) - High data for Sample F21.
- H62B97 (X) - Low data for all samples. Also Inconsistent in testing within Sample F21.
- PGD328 (M) - Laboratory did not submit data for Sample F22.
- UF6LQ6 (X) - High data for Sample F21.

Analysis 705

Tensile Stress at Break - psi

Grand Mean Sample F21: 6,979.15 psi    Grand Mean Sample F22: 8,501.24 psi



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

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

WebCode	Data Flag	Sample F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GE2ZX		3.520	-0.213	-1.89	4.072	-0.209	-1.69
2WMWBJ	X	39.400	35.667	315.90	106.000	101.719	822.03
3GP8UD		3.658	-0.075	-0.66	4.416	0.135	1.09
3LJ4GJ		3.674	-0.059	-0.52	4.246	-0.035	-0.28
4HC6JV		3.860	0.127	1.12	4.300	0.019	0.16
6TCXRM	X	2.718	-1.015	-8.99	3.338	-0.943	-7.62
6UVQUK		3.612	-0.121	-1.07	4.176	-0.105	-0.85
6WQT7Y		3.624	-0.109	-0.97	4.182	-0.099	-0.80
73XEZM		3.894	0.161	1.43	4.522	0.241	1.95
83WWLP		4.002	0.269	2.38	4.532	0.251	2.03
8B89NN		3.766	0.033	0.29	4.282	0.001	0.01
8YE2EQ		3.594	-0.139	-1.23	4.190	-0.091	-0.73
A4DANQ		3.792	0.059	0.52	4.360	0.079	0.64
AYLXVF		3.773	0.039	0.35	4.245	-0.036	-0.29
B7WL3L		3.718	-0.015	-0.13	4.316	0.035	0.28
BGHL26		3.480	-0.253	-2.24	4.045	-0.235	-1.90
BV37JC		3.874	0.141	1.25	4.462	0.181	1.46
BYM7KE		3.652	-0.081	-0.72	4.230	-0.051	-0.41
CAGVQD	X	4.190	0.457	4.05	4.356	0.075	0.61
CFJZM4	X	7.108	3.375	29.89	8.192	3.911	31.61
CQK8KN		3.764	0.031	0.27	4.352	0.071	0.58
CTCJ4U		3.798	0.065	0.58	4.242	-0.039	-0.31
D3D7T7	X	10.774	7.041	62.36	11.096	6.815	55.08
D8LPRY		3.750	0.017	0.15	4.316	0.035	0.28
DEMWFE	X	3.058	-0.675	-5.98	3.510	-0.771	-6.23
DRWJLQ	X	3.640	-0.093	-0.82	3.712	-0.569	-4.60
DVRBQG		3.774	0.041	0.36	4.324	0.043	0.35
EDPTFC	*	3.640	-0.093	-0.82	3.994	-0.287	-2.32
ET42FF		4.008	0.275	2.44	4.538	0.257	2.08
FWGEHE		3.778	0.045	0.40	4.264	-0.017	-0.14
FYNEWU	X	3.288	-0.445	-3.94	3.742	-0.539	-4.35
H62B97		3.616	-0.117	-1.04	4.144	-0.137	-1.11



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

WebCode	Data Flag	Sample F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
H8EW88		3.792	0.059	0.52	4.288	0.007	0.06
HEA4HZ	*	3.592	-0.141	-1.25	4.408	0.127	1.03
JNDFCA		3.563	-0.171	-1.51	4.208	-0.073	-0.59
KT3GQT	X	2.942	-0.791	-7.01	2.618	-1.663	-13.44
L32CKH	X	4.078	0.345	3.06	5.180	0.899	7.27
LBXACQ	X	6.654	2.921	25.87	7.074	2.793	22.57
LDLLAB		3.834	0.101	0.89	4.330	0.049	0.40
LUPDVD		3.648	-0.085	-0.75	4.164	-0.117	-0.94
MNJ7N9		3.680	-0.053	-0.47	4.340	0.059	0.48
MUPTKJ	X	8.310	4.577	40.54	9.202	4.921	39.77
N2K2KF		3.752	0.019	0.17	4.266	-0.015	-0.12
N9PPP3		3.708	-0.025	-0.22	4.352	0.071	0.58
NAFXP7		3.752	0.019	0.17	4.238	-0.043	-0.35
PGD328		3.820	0.087	0.77	4.400	0.119	0.96
Q2VLK4	X	3.924	0.191	1.69	3.930	-0.351	-2.83
RCCCKXC		3.840	0.107	0.95	4.420	0.139	1.13
RFBYJG		3.634	-0.099	-0.88	4.162	-0.119	-0.96
T29QWY		3.680	-0.053	-0.47	4.152	-0.129	-1.04
TAZ6Z6		3.860	0.127	1.12	4.200	-0.081	-0.65
U2MVPG		3.660	-0.073	-0.65	4.182	-0.099	-0.80
UF6LQ6	X	1.868	-1.865	-16.52	1.800	-2.481	-20.05
UJNHEV		3.758	0.025	0.22	4.214	-0.067	-0.54
UTCEDB	X	4.620	0.887	7.86	5.040	0.759	6.14
V392KX		3.640	-0.093	-0.82	4.158	-0.123	-0.99
VFYNVY		3.830	0.097	0.86	4.288	0.007	0.06
WHJ3UT	X	2.890	-0.843	-7.47	3.408	-0.873	-7.05
XD869R		3.778	0.045	0.40	4.316	0.035	0.28
XTG6RV		3.738	0.005	0.04	4.494	0.213	1.72
YMLQML		3.726	-0.007	-0.06	4.332	0.051	0.41
ZZNKC2		3.816	0.083	0.73	4.252	-0.029	-0.23

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

Summary Statistics			
Grand Means	3.7331	Percent	4.2807
			Percent
Std Dev Btwn Labs	0.1129	Percent	0.1237
			Percent
Statistics based on 46 of 62 reporting participants			

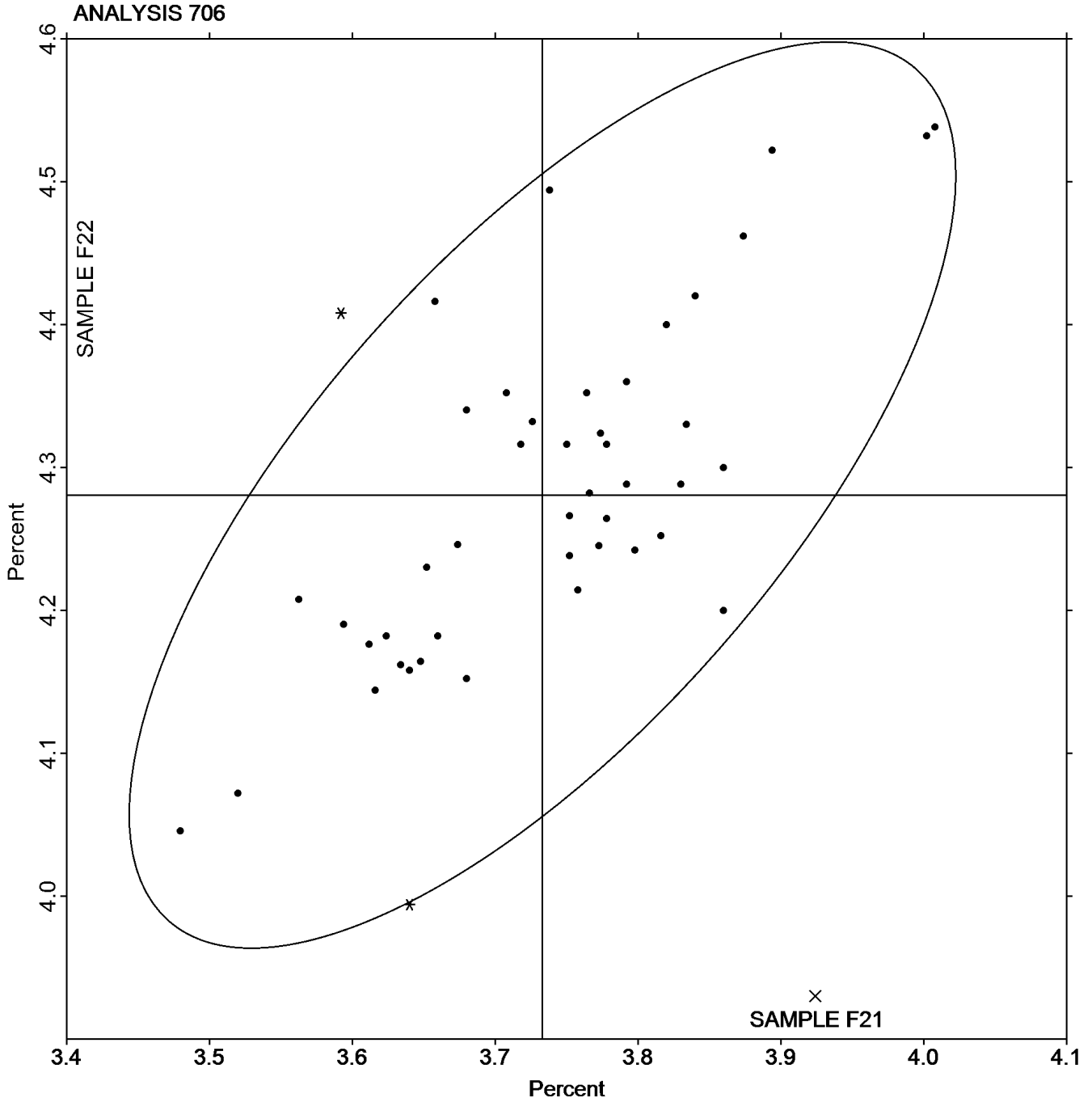
Sample F21: ABS/PC & Sample F22: ABS/PC

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

- 2WMWBJ (X) - Data for both samples are high. Also Inconsistent in testing within both samples.
- 6TCXRM (X) - Data for both samples are low.
- CAGVQD (X) - Inconsistent in testing between samples, data for Sample F21 are high. Also Inconsistent in testing within Sample F21.
- CFJZM4 (X) - Data for both samples are high. Also Inconsistent in testing within both samples.
- D3D7T7 (X) - Data for both samples are high.
- DEMWFE (X) - Data for both samples are low. Also Inconsistent in testing within Sample F21.
- DRWJLQ (X) - Inconsistent in testing between samples, data for Sample F22 are low.
- FYNEWU (X) - Data for both samples are low.
- KT3GQT (X) - Data for both samples are low.
- L32CKH (X) - Data for both samples are high. Also Inconsistent in testing within Sample F22.
- LBXACQ (X) - Data for both samples are high.
- MUPTKJ (X) - Data for both samples are high. Also Inconsistent in testing within both samples.
- Q2VLK4 (X) - Inconsistent in testing between samples, data for Sample F22 are low. Also Inconsistent in testing within both samples.
- UF6LQ6 (X) - Data for both samples are low.
- UTCEDB (X) - Data for both samples are high.
- WHJ3UT (X) - Data for both samples are low.

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

Grand Mean Sample F21: 3.7331 Percent    Grand Mean Sample F22: 4.2807 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 F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GE2ZX		412.56	12.55	0.58	362.62	6.87	0.37
3GP8UD		371.68	-28.33	-1.32	340.70	-15.05	-0.81
3LJ4GJ		411.60	11.59	0.54	346.60	-9.15	-0.49
44LYWV		403.58	3.57	0.17	365.58	9.83	0.53
4HC6JV		395.72	-4.28	-0.20	355.75	0.00	0.00
6TCXRM		415.62	15.61	0.72	373.38	17.63	0.95
6UVQUK		416.20	16.20	0.75	370.55	14.80	0.79
6WQT7Y		435.55	35.54	1.65	379.48	23.73	1.27
73XEZM		367.93	-32.08	-1.49	339.47	-16.28	-0.87
8B89NN		404.60	4.59	0.21	366.20	10.45	0.56
8YE2EQ		406.08	6.07	0.28	355.54	-0.21	-0.01
A4DANQ		406.14	6.13	0.28	362.64	6.89	0.37
AYLXVF		412.52	12.51	0.58	369.12	13.37	0.72
B7WL3L		356.77	-43.24	-2.01	316.04	-39.71	-2.13
BGHL26	X	424.69	24.68	1.15	293.35	-62.40	-3.35
BV37JC		411.25	11.24	0.52	362.44	6.69	0.36
BYM7KE	X	481.92	81.91	3.80	424.16	68.41	3.67
CAGVQD		354.84	-45.17	-2.10	311.30	-44.45	-2.39
CFJZM4	X	167.60	-232.41	-10.79	161.60	-194.15	-10.43
CQK8KN	X	389.95	-10.05	-0.47	401.45	45.70	2.45
CTCJ4U		380.36	-19.65	-0.91	337.28	-18.47	-0.99
D3D7T7	X	125.50	-274.51	-12.74	121.18	-234.57	-12.60
D8LPRY		410.92	10.91	0.51	370.96	15.21	0.82
DEMWFE	X	2,612.96	2,212.95	102.73	880.56	524.81	28.19
DRWJLQ	X	409.81	9.80	0.46	408.25	52.50	2.82
DVRBQG		402.60	2.59	0.12	360.34	4.59	0.25
EDPTFC		381.39	-18.61	-0.86	352.57	-3.18	-0.17
FWGEHE		412.26	12.25	0.57	359.74	3.99	0.21
GPT3VX	X	258.86	-141.15	-6.55	249.64	-106.11	-5.70
H62B97		414.23	14.22	0.66	367.49	11.74	0.63
H8EW88		435.41	35.40	1.64	372.40	16.65	0.89
HEA4HZ		414.26	14.25	0.66	374.94	19.19	1.03

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

WebCode	Data Flag	Sample F21			Sample F22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
JNDFCA		413.98	13.97	0.65	367.40	11.65	0.63
KT3GQT	X	359.12	-40.89	-1.90	362.68	6.93	0.37
L32CKH	*	353.65	-46.35	-2.15	308.48	-47.27	-2.54
LBXACQ	X	189.71	-210.30	-9.76	173.58	-182.17	-9.78
LDLLAB		416.20	16.20	0.75	376.29	20.54	1.10
LUPDVD		410.26	10.25	0.48	382.50	26.75	1.44
MNJ7N9		398.60	-1.41	-0.07	343.76	-11.99	-0.64
MUPTKJ		358.36	-41.65	-1.93	318.00	-37.75	-2.03
N2K2KF		413.92	13.91	0.65	371.74	15.99	0.86
NAFXP7		406.92	6.91	0.32	360.58	4.83	0.26
PGD328		412.60	12.59	0.58	366.00	10.25	0.55
Q2VLK4	X	337.19	-62.82	-2.92	378.52	22.77	1.22
RCCKXC		383.62	-16.39	-0.76	343.54	-12.21	-0.66
RFBYJG		402.89	2.88	0.13	354.13	-1.62	-0.09
T29QWY		380.82	-19.19	-0.89	333.46	-22.29	-1.20
TAZ6Z6		393.96	-6.05	-0.28	350.46	-5.29	-0.28
U2MVPG	X	422.60	22.59	1.05	403.50	47.75	2.56
UF6LQ6		423.06	23.05	1.07	375.32	19.57	1.05
UJNHEV		403.00	2.99	0.14	353.60	-2.15	-0.12
UTCEDB	*	352.76	-47.25	-2.19	330.14	-25.61	-1.38
V392KX		424.02	24.01	1.11	377.94	22.19	1.19
VFYNVY	X	402.14	2.13	0.10	394.94	39.19	2.10
WHJ3UT	X	3.80	-396.21	-18.39	3.75	-352.00	-18.90
XD869R		398.22	-1.79	-0.08	354.62	-1.13	-0.06
XTG6RV		411.00	10.99	0.51	349.40	-6.35	-0.34
YMLQML		408.46	8.45	0.39	362.48	6.73	0.36
ZZNKC2	X	485.60	85.59	3.97	449.06	93.31	5.01

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

		Summary Statistics	
Grand Means	400.009 ksi		355.749 ksi
Std Dev Btwn Labs	21.541 ksi		18.620 ksi
Statistics based on 44 of 59 reporting participants			

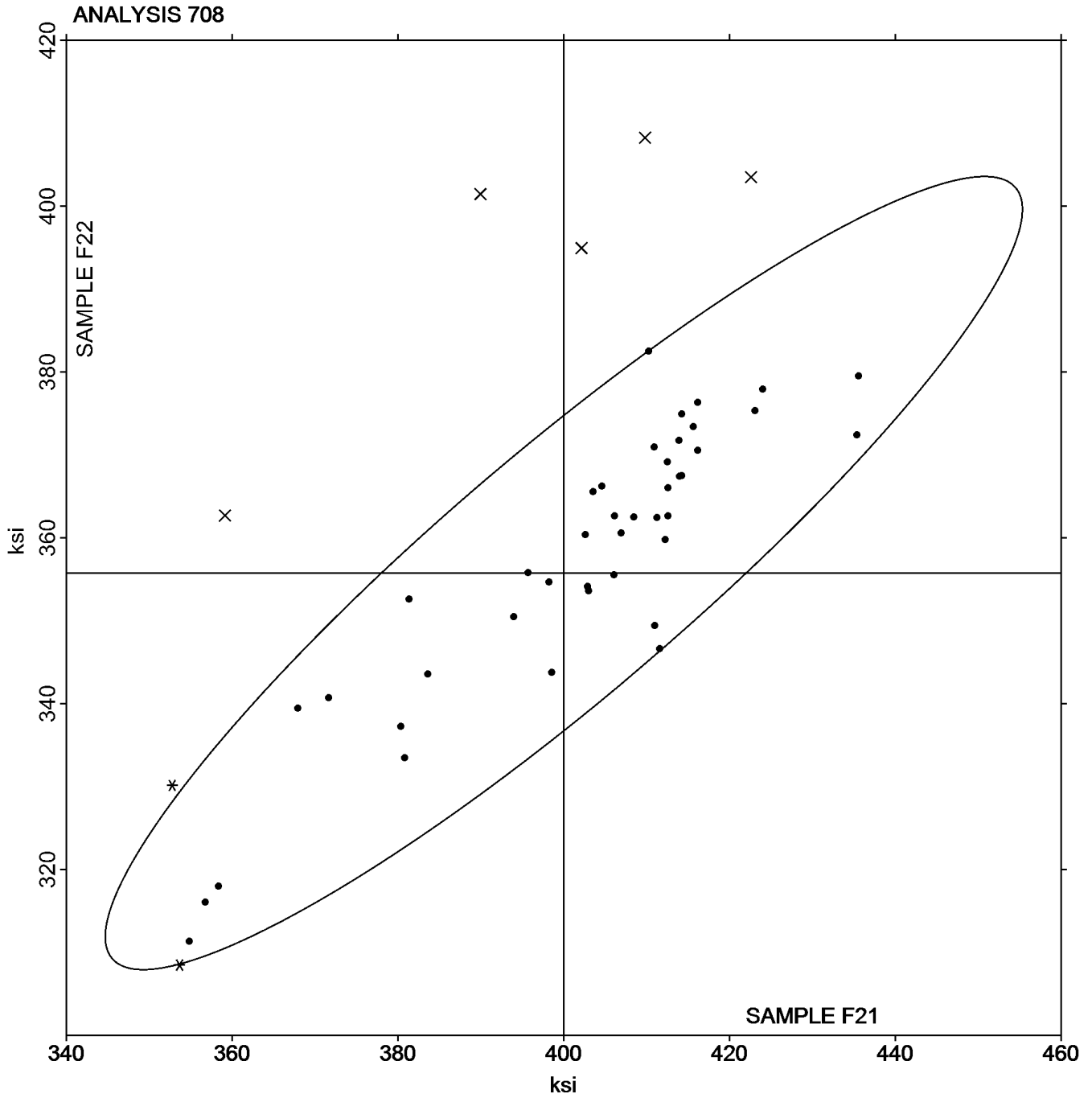
Sample F21: ABS/PC & Sample F22: ABS/PC

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

- BGHL26 (X) - Inconsistent in testing between samples, data for Sample F22 are low. Also Inconsistent in testing within both samples.
- BYM7KE (X) - Data for both samples are high.
- CFJZM4 (X) - Data for both samples are low.
- CQK8KN (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.
- D3D7T7 (X) - Data for both samples are low.
- DEMWFE (X) - Data for both samples are high. Also Inconsistent in testing within both samples.
- DRWJLQ (X) - Inconsistent in testing between samples, data for Sample F22 are high.
- GPT3VX (X) - Data for both samples are low.
- KT3GQT (X) - Inconsistent in testing between samples.
- LBXACQ (X) - Data for both samples are low.
- Q2VLK4 (X) - Inconsistent in testing between samples, data for Sample F21 are low. Also Inconsistent in testing within both samples.
- U2MVPG (X) - Inconsistent in testing between samples and inconsistent in testing within Sample F21.
- VFYNVY (X) - Inconsistent in testing between samples.
- WHJ3UT (X) - Extreme data.
- ZZNKC2 (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

Plastics Interlaboratory Testing Program  
Analysis 708  
Modulus of Elasticity - ksi

Grand Mean Sample F21: 400.01 ksi    Grand Mean Sample F22: 355.75 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 C21			Sample C22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2H48HA		26.80	1.11	1.60	26.62	0.91	1.22
2ZJKRQ		25.70	0.01	0.01	25.16	-0.55	-0.74
3EY2EM		24.78	-0.91	-1.32	25.02	-0.68	-0.92
3LJ4GJ		25.54	-0.15	-0.22	25.60	-0.11	-0.15
3VP4WC		26.57	0.88	1.27	26.49	0.78	1.05
3WKJAA		25.23	-0.46	-0.66	25.48	-0.22	-0.30
44YWJR		24.91	-0.78	-1.12	25.63	-0.08	-0.11
4XVTVE		25.38	-0.31	-0.44	24.62	-1.08	-1.45
633RRQ		25.74	0.05	0.07	25.74	0.03	0.05
68XB4W		26.04	0.35	0.51	25.98	0.27	0.37
6Q4ZZQ		26.32	0.63	0.91	26.61	0.91	1.22
73XEZM		25.59	-0.10	-0.15	25.60	-0.11	-0.15
7FP2BP		26.04	0.35	0.51	26.14	0.43	0.58
7NERTB		26.18	0.49	0.70	26.32	0.61	0.82
8N94MG		26.68	0.99	1.43	26.97	1.26	1.69
8YWTNB		25.38	-0.31	-0.45	25.55	-0.16	-0.21
96G76P		25.57	-0.12	-0.18	25.77	0.06	0.08
A78VLN		24.90	-0.79	-1.14	24.78	-0.93	-1.25
AMTG28		25.11	-0.58	-0.83	24.79	-0.92	-1.23
AY96JL		26.42	0.73	1.05	26.49	0.78	1.05
AYLXVF		26.06	0.37	0.53	26.18	0.47	0.63
B7WL3L		26.46	0.77	1.11	26.77	1.07	1.43
B8VM9D		25.42	-0.27	-0.39	25.57	-0.14	-0.19
BV37JC		24.79	-0.90	-1.30	24.93	-0.78	-1.04
BX6968	*	23.75	-1.94	-2.80	23.62	-2.08	-2.79
DF34WP		26.36	0.67	0.96	26.64	0.93	1.25
EAAGLG		25.33	-0.36	-0.52	25.36	-0.35	-0.47
FFEJ33		24.99	-0.70	-1.01	25.02	-0.68	-0.92
FKJMNU		25.90	0.21	0.31	25.57	-0.14	-0.18
FMV8KB	*	24.52	-1.17	-1.69	23.85	-1.86	-2.49
FYNEWU		26.49	0.80	1.16	26.71	1.00	1.35
G8CRBJ		26.20	0.51	0.74	26.08	0.37	0.50



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

WebCode	Data Flag	Sample C21			Sample C22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
GC9FRQ		25.30	-0.39	-0.57	25.57	-0.14	-0.19
HNEQWT		26.16	0.47	0.68	26.18	0.47	0.63
JDT9BY		26.46	0.77	1.12	25.82	0.11	0.15
LGPCCKX		24.91	-0.78	-1.13	25.33	-0.38	-0.50
LM83LH		26.60	0.91	1.31	26.78	1.07	1.44
LRLHCA		25.58	-0.11	-0.16	25.56	-0.14	-0.19
MWTJV6		24.92	-0.77	-1.11	25.58	-0.12	-0.17
MZUER2		26.35	0.66	0.95	26.05	0.34	0.46
N2K2KF		25.58	-0.11	-0.16	25.65	-0.06	-0.08
NEBQH2		24.52	-1.17	-1.69	24.62	-1.09	-1.46
NXLLCT	X	23.03	-2.66	-3.85	23.74	-1.96	-2.63
P8Q4B3		25.51	-0.18	-0.26	25.24	-0.47	-0.62
PGD328	X	24.52	-1.17	-1.69	26.12	0.41	0.55
Q2UNA9		26.02	0.33	0.48	26.46	0.75	1.00
Q9BG7P		25.16	-0.53	-0.76	25.33	-0.38	-0.51
QXF7XH		25.71	0.02	0.03	25.50	-0.21	-0.28
RFBYJG		25.10	-0.59	-0.85	25.22	-0.49	-0.65
TDFZF3		26.06	0.37	0.54	26.22	0.51	0.68
TJ92J3	X	26.62	0.93	1.35	25.54	-0.17	-0.23
TLUNCP		25.21	-0.48	-0.70	25.77	0.07	0.09
UJNHEV		27.20	1.51	2.18	27.00	1.29	1.73
UMK69J		26.38	0.69	1.00	26.38	0.67	0.90
VCXMQW		25.79	0.10	0.14	26.16	0.45	0.60
VNDG7V		26.29	0.60	0.86	25.58	-0.13	-0.17
VTMQGX		25.02	-0.67	-0.97	24.39	-1.32	-1.77
WBLANK		26.70	1.01	1.45	26.74	1.03	1.39
YMLQML		25.42	-0.27	-0.40	25.24	-0.47	-0.63
ZU76T4		25.25	-0.44	-0.64	25.29	-0.42	-0.56

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

**Summary Statistics**

Grand Means	25.690 MPa	25.707 MPa
Std Dev Btwn Labs	0.692 MPa	0.746 MPa
Statistics based on 57 of 60 reporting participants		

Sample C21: HIPS & Sample C22: HIPS

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

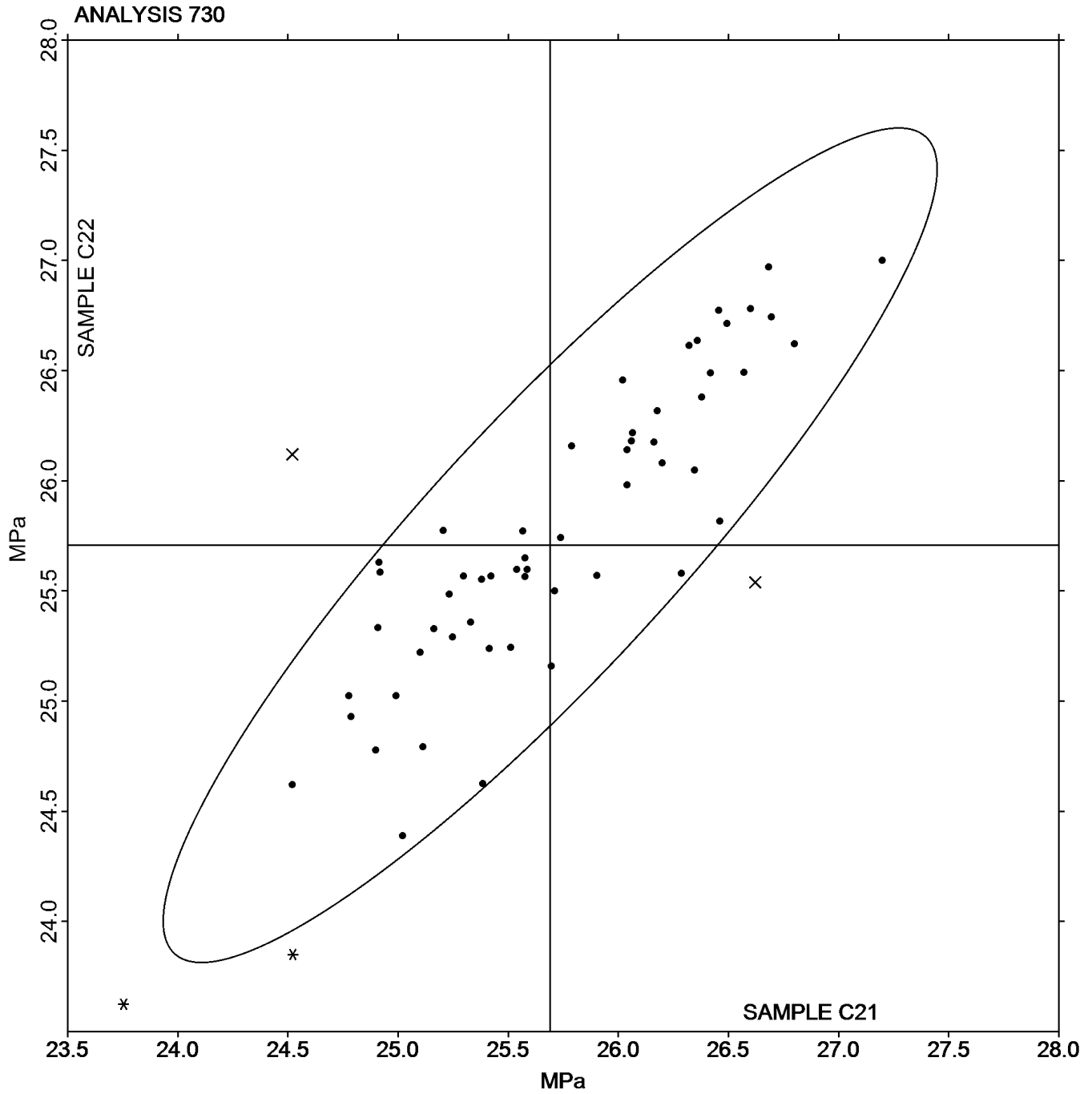
NXLLCT (X) - Inconsistent in testing between samples, data for Sample C21 are low. Also Inconsistent in testing within Sample C21.

PGD328 (X) - Inconsistent in testing between samples and inconsistent in testing within Sample C21.

TJ92J3 (X) - Inconsistent in testing between samples.

Analysis 730  
Tensile Stress at Yield - MPa

Grand Mean Sample C21: 25.690 MPa    Grand Mean Sample C22: 25.707 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 C21			Sample C22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2H48HA		20.54	0.51	0.84	20.42	0.30	0.43
2ZJKRQ		19.60	-0.43	-0.72	19.32	-0.80	-1.16
3EY2EM		19.88	-0.15	-0.25	20.31	0.19	0.28
3LJ4GJ		19.98	-0.05	-0.09	19.75	-0.37	-0.53
3VP4WC		20.99	0.95	1.59	20.93	0.81	1.18
3WKJAA		19.34	-0.69	-1.15	19.50	-0.62	-0.89
44YWJR		19.58	-0.46	-0.76	20.10	-0.02	-0.02
4XVTVE		20.18	0.15	0.24	19.49	-0.63	-0.90
633RRQ	X	19.60	-0.43	-0.72	17.11	-3.01	-4.36
68XB4W		18.90	-1.13	-1.89	18.74	-1.38	-1.99
6Q4ZZQ		19.88	-0.16	-0.26	20.03	-0.09	-0.13
73XEZM		20.12	0.09	0.14	20.28	0.16	0.23
7FP2BP		20.22	0.19	0.31	20.52	0.40	0.58
7NERTB		20.22	0.19	0.31	20.61	0.49	0.71
8N94MG		20.82	0.79	1.31	21.16	1.04	1.51
8YWTNB		20.16	0.13	0.21	20.52	0.40	0.58
96G76P		19.80	-0.24	-0.39	20.39	0.27	0.39
A78VLN		20.05	0.01	0.02	20.18	0.06	0.09
AMTG28		19.38	-0.65	-1.08	18.96	-1.16	-1.68
AY96JL		20.67	0.64	1.06	20.68	0.56	0.81
AYLXVF		20.20	0.17	0.28	20.54	0.42	0.61
B7WL3L		20.24	0.20	0.34	19.99	-0.13	-0.18
B8VM9D		19.44	-0.59	-0.98	19.99	-0.13	-0.19
BV37JC		19.28	-0.76	-1.26	19.61	-0.51	-0.74
BX6968		18.78	-1.25	-2.08	18.68	-1.44	-2.09
DF34WP		20.49	0.46	0.77	20.77	0.65	0.94
FFEJ33		18.62	-1.41	-2.35	18.79	-1.33	-1.92
FKJMNU		19.94	-0.10	-0.16	19.50	-0.62	-0.90
FMV8KB		18.89	-1.15	-1.91	18.52	-1.60	-2.32
FYNEWU		20.58	0.55	0.91	20.90	0.78	1.13
G8CRBJ		20.44	0.41	0.68	20.16	0.04	0.06
GC9FRQ		20.21	0.18	0.29	20.38	0.26	0.38



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

633RRQ (X) - Inconsistent in testing between samples, data for Sample C22 are low. Also Inconsistent in testing within Sample C22.

MWTJV6 (X) - Inconsistent in testing between samples, data for Sample C22 are high.

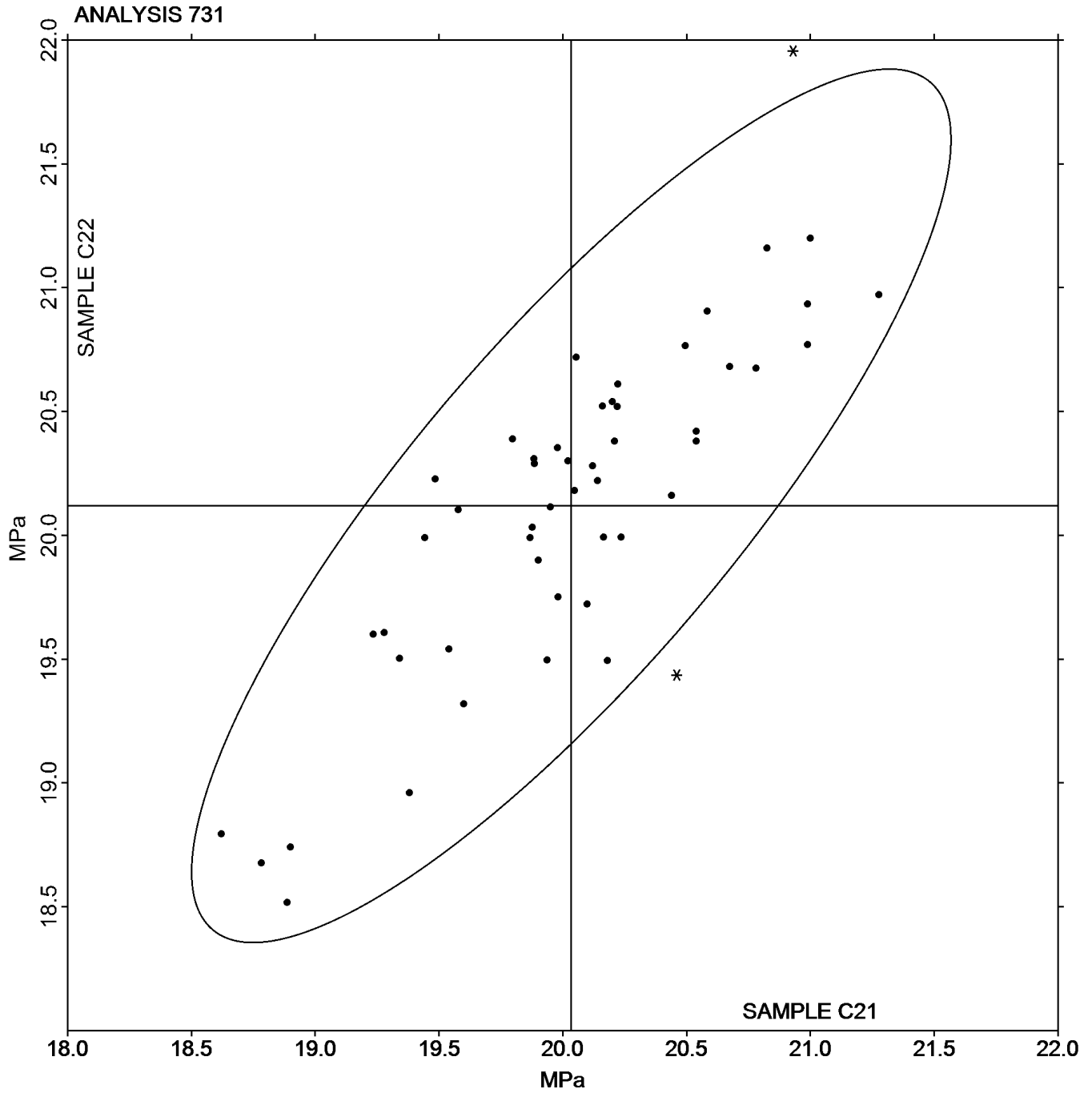
PGD328 (M) - Laboratory did not submit data for Sample C22.

VNDG7V (X) - Inconsistent in testing between samples, data for Sample C21 are high. Also Inconsistent in testing within Sample C21.

Analysis 731

Tensile Stress at Break - MPa

Grand Mean Sample C21: 20.034 MPa Grand Mean Sample C22: 20.119 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 C21			Sample C22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2H48HA		1.400	0.030	0.37	1.400	0.037	0.44
2ZJKRQ		1.366	-0.004	-0.05	1.356	-0.007	-0.09
3EY2EM		1.270	-0.100	-1.25	1.286	-0.077	-0.93
3LJ4GJ		1.354	-0.016	-0.20	1.344	-0.019	-0.23
3VP4WC		1.364	-0.006	-0.08	1.340	-0.023	-0.28
3WKJAA		1.374	0.004	0.05	1.352	-0.011	-0.14
44YWJR		1.480	0.110	1.37	1.492	0.129	1.55
4XVTVE	*	1.518	0.148	1.85	1.446	0.083	1.00
633RRQ		1.400	0.030	0.37	1.394	0.031	0.37
68XB4W		1.422	0.052	0.65	1.414	0.051	0.61
6Q4ZZQ		1.520	0.150	1.87	1.520	0.157	1.89
73XEZM		1.299	-0.071	-0.88	1.301	-0.062	-0.75
7FP2BP		1.430	0.060	0.75	1.438	0.075	0.90
7NERTB		1.356	-0.014	-0.17	1.358	-0.005	-0.06
8N94MG		1.310	-0.060	-0.75	1.298	-0.065	-0.79
8YWTNB		1.365	-0.005	-0.07	1.353	-0.011	-0.13
96G76P	*	1.251	-0.120	-1.50	1.190	-0.174	-2.10
A78VLN		1.442	0.072	0.90	1.448	0.085	1.02
AMTG28	X	2.208	0.838	10.47	2.136	0.773	9.33
AY96JL		1.478	0.108	1.35	1.486	0.123	1.48
AYLXVF		1.380	0.010	0.12	1.380	0.017	0.20
B7WL3L		1.384	0.014	0.17	1.390	0.027	0.32
B8VM9D		1.346	-0.024	-0.30	1.360	-0.003	-0.04
BV37JC		1.382	0.012	0.15	1.378	0.015	0.18
DF34WP		1.418	0.048	0.60	1.430	0.067	0.81
FFEJ33	X	0.520	-0.850	-10.63	0.700	-0.663	-8.01
FKJMNU		1.388	0.018	0.22	1.382	0.019	0.23
FMV8KB		1.354	-0.016	-0.20	1.292	-0.071	-0.86
FYNEWU	*	1.114	-0.256	-3.20	1.118	-0.245	-2.96
G8CRBJ		1.400	0.030	0.37	1.400	0.037	0.44
GC9FRQ		1.388	0.018	0.22	1.434	0.071	0.85
HNEQWT		1.368	-0.002	-0.03	1.392	0.029	0.35



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

WebCode	Data Flag	Sample C21			Sample C22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
JDT9BY		1.388	0.018	0.22	1.324	-0.039	-0.48
LGPCKX	*	1.184	-0.186	-2.33	1.210	-0.153	-1.85
LM83LH	X	0.980	-0.390	-4.88	0.960	-0.403	-4.87
LRLHCA	*	1.302	-0.068	-0.85	1.364	0.001	0.01
MWTJV6	X	0.894	-0.476	-5.95	0.894	-0.469	-5.67
MZUER2	*	1.200	-0.170	-2.13	1.140	-0.223	-2.70
N2K2KF		1.420	0.050	0.62	1.378	0.015	0.18
NEBQH2		1.400	0.030	0.37	1.400	0.037	0.44
NXLLCT		1.460	0.090	1.12	1.460	0.097	1.17
P8Q4B3		1.282	-0.088	-1.10	1.262	-0.101	-1.22
PGD328		1.280	-0.090	-1.13	1.280	-0.083	-1.01
Q2UNA9		1.442	0.072	0.90	1.428	0.065	0.78
QXF7XH		1.388	0.018	0.22	1.372	0.009	0.10
RFBYJG		1.250	-0.120	-1.50	1.260	-0.103	-1.25
TDFZF3		1.406	0.036	0.45	1.378	0.015	0.18
TJ92J3		1.362	-0.008	-0.10	1.326	-0.038	-0.46
TLUNCP		1.424	0.054	0.67	1.432	0.069	0.83
UJNHEV		1.360	-0.010	-0.13	1.360	-0.003	-0.04
UMK69J		1.366	-0.004	-0.05	1.354	-0.009	-0.11
VCXMQW		1.370	0.000	0.00	1.378	0.015	0.18
VNDG7V		1.464	0.094	1.17	1.430	0.067	0.81
WBLANK		1.444	0.074	0.92	1.458	0.095	1.14
YMLQML		1.364	-0.006	-0.08	1.364	0.001	0.01

Summary Statistics			
Grand Means	1.3701	Percent	1.3633
			Percent
Std Dev Btwn Labs	0.0800	Percent	0.0828
			Percent
Statistics based on 51 of 55 reporting participants			

Sample C21: HIPS & Sample C22: HIPS

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

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

AMTG28 (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

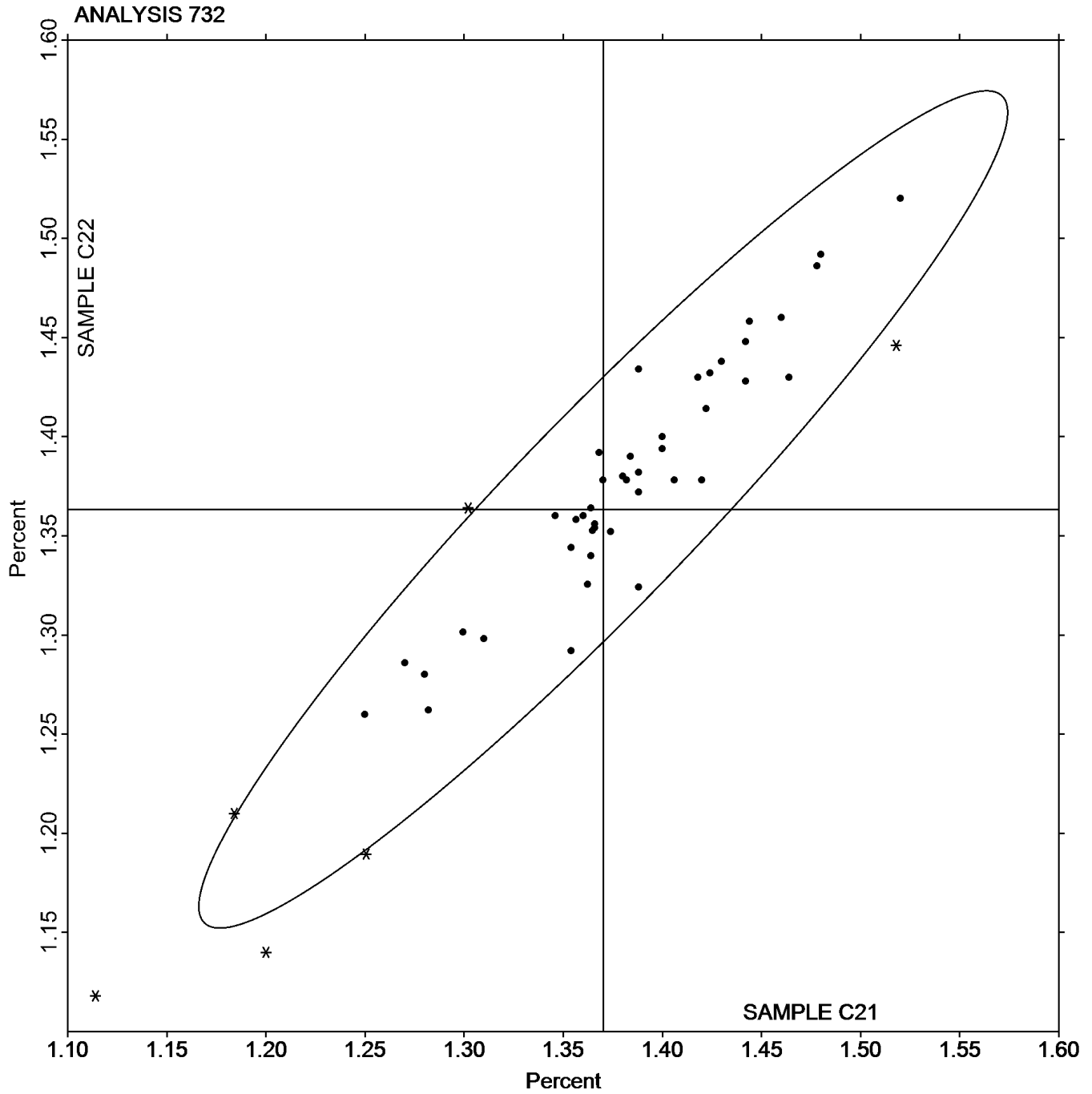
FFEJ33 (X) - Data for both samples are low. Also Inconsistent in testing within both samples.

LM83LH (X) - Data for both samples are low.

MWTJV6 (X) - Data for both samples are low.

Analysis 732  
Percent Strain at Yield

Grand Mean Sample C21: 1.3701 Percent    Grand Mean Sample C22: 1.3633 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 C21			Sample C22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2H48HA		2,040	-51	-0.67	2,036	-57	-0.73
2ZJKRQ	X	2,471	380	4.96	2,446	353	4.49
3EY2EM		2,165	74	0.97	2,180	87	1.11
3LJ4GJ		2,014	-77	-1.01	1,990	-103	-1.31
3VP4WC		1,974	-117	-1.53	2,021	-72	-0.92
3WKJAA		2,089	-2	-0.03	2,118	25	0.32
44YWJR		2,072	-19	-0.25	2,053	-40	-0.51
4XVTVE		2,045	-46	-0.60	2,076	-17	-0.22
633RRQ	*	2,021	-70	-0.92	1,951	-142	-1.81
68XB4W		2,005	-86	-1.13	2,015	-78	-0.99
6Q4ZZQ	X	1,563	-528	-6.90	1,843	-250	-3.17
73XEZM		2,164	73	0.96	2,177	84	1.07
7FP2BP		2,137	46	0.61	2,117	24	0.30
7NERTB	X	2,071	-20	-0.27	2,196	103	1.31
8N94MG	*	2,336	245	3.20	2,327	234	2.98
8YWTNB		2,056	-35	-0.46	2,071	-22	-0.27
96G76P		2,067	-24	-0.31	2,070	-23	-0.29
A78VLN		1,969	-122	-1.60	1,952	-141	-1.79
AMTG28	X	1,202	-889	-11.61	1,227	-866	-11.00
AY96JL		2,065	-26	-0.34	2,036	-57	-0.72
AYLXVF		2,149	58	0.76	2,152	59	0.75
B7WL3L		2,195	104	1.36	2,189	96	1.23
B8VM9D		2,158	67	0.87	2,136	43	0.55
BV37JC		2,028	-63	-0.82	2,038	-55	-0.69
DF34WP		2,094	3	0.04	2,106	13	0.17
FKJMNU		2,031	-60	-0.78	2,051	-42	-0.53
FMV8KB		2,046	-45	-0.58	2,022	-71	-0.90
G8CRBJ		2,050	-41	-0.54	2,042	-51	-0.65
GC9FRQ		2,053	-38	-0.50	2,092	-1	-0.01
HNEQWT		2,112	21	0.27	2,097	4	0.05
JDT9BY		2,166	75	0.97	2,204	111	1.41
LGPCXX		2,106	15	0.19	2,133	40	0.51

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

WebCode	Data Flag	Sample C21			Sample C22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LM83LH		2,257	166	2.17	2,216	123	1.57
LRLHCA		1,992	-99	-1.30	1,956	-137	-1.74
MWTJV6	X	3,184	1,093	14.27	3,124	1,031	13.11
MZUER2	X	2,510	419	5.47	2,554	461	5.86
N2K2KF		2,090	-1	-0.01	2,084	-9	-0.11
NEBQH2	X	2,592	501	6.54	2,545	452	5.75
NXLLCT		2,021	-70	-0.92	2,061	-32	-0.41
P8Q4B3		2,187	96	1.25	2,195	102	1.30
PGD328		2,078	-13	-0.17	2,114	21	0.27
Q2UNA9		2,067	-24	-0.31	2,081	-12	-0.15
QXF7XH		2,106	15	0.20	2,060	-33	-0.42
RFBYJG		1,993	-98	-1.28	1,991	-102	-1.29
TDFZF3		2,034	-57	-0.74	2,063	-30	-0.38
TJ92J3		2,155	64	0.84	2,148	55	0.70
TLUNCP		2,013	-78	-1.02	2,049	-44	-0.56
UJNHEV		2,187	96	1.25	2,189	96	1.23
UMK69J	X	0	-2,091	-27.30	0	-2,093	-26.61
V3AUH7		2,162	71	0.93	2,216	123	1.57
VNDG7V		2,134	43	0.56	2,120	27	0.34
WBLANK		2,122	31	0.40	2,089	-4	-0.05
YMLQML		2,091	0	0.00	2,096	3	0.04

Summary Statistics	
Grand Means	2,091.0 MPa      2,093.0 MPa
Std Dev Btwn Labs	76.6 MPa      78.7 MPa
Statistics based on 45 of 53 reporting participants	

Sample C21: HIPS & Sample C22: HIPS

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

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

6Q4ZZQ (X) - Data for both samples are low. Also Inconsistent in testing within both samples.

7NERTB (X) - Inconsistent in testing between samples.

AMTG28 (X) - Data for both samples are low.

MWTJV6 (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

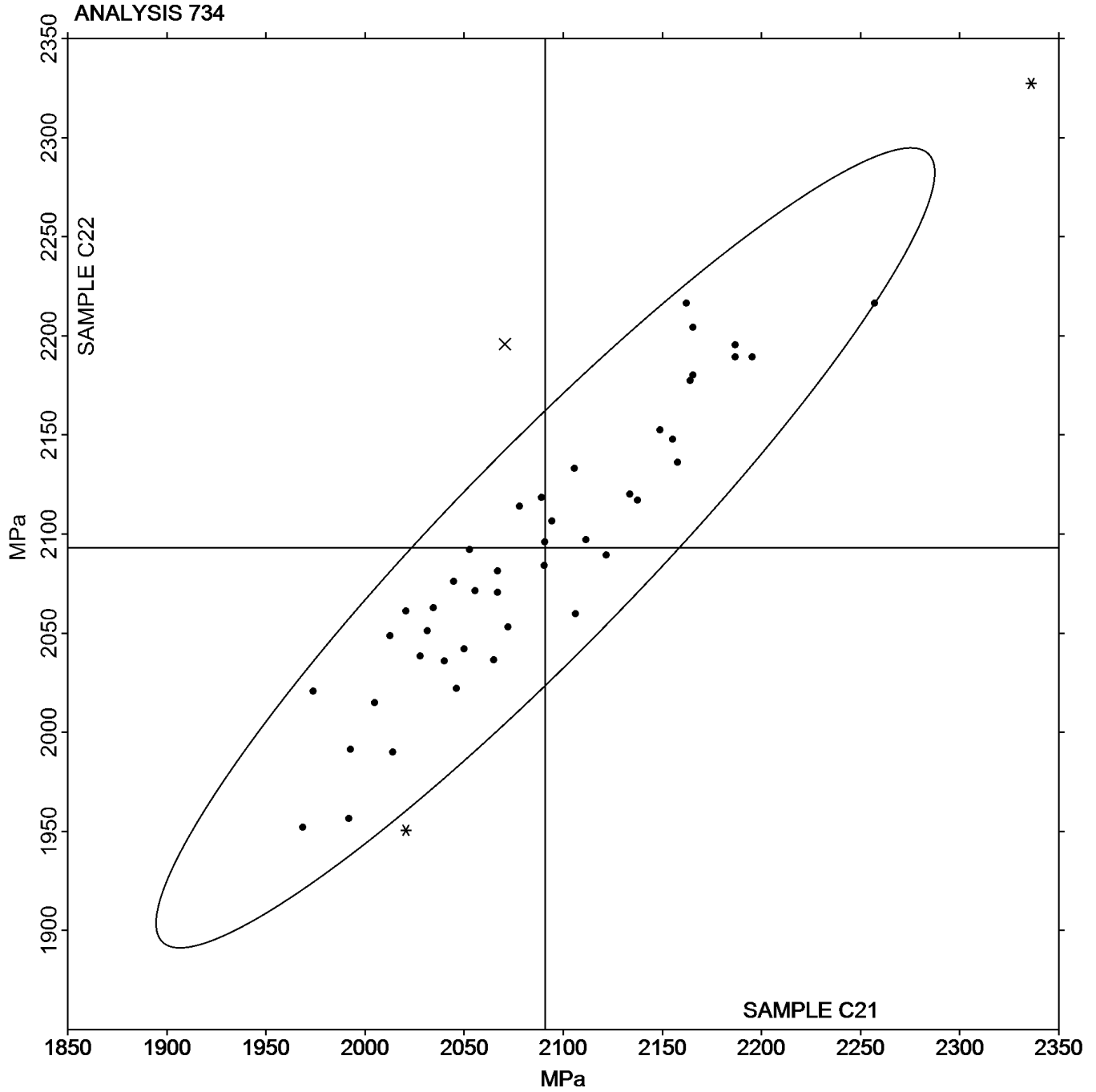
MZUER2 (X) - Data for both samples are high. Also Inconsistent in testing within Sample C21.

NEBQH2 (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

UMK69J (X) - Extremely low data for all samples.

Plastics Interlaboratory Testing Program  
Analysis 734  
Modulus of Elasticity - MPa

Grand Mean Sample C21: 2,090.98 MPa    Grand Mean Sample C22: 2,093.03 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 J21			Sample J22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
38ZEK3		364.7	1.9	0.12	365.5	2.6	0.16
3GP8UD		362.6	-0.2	-0.01	369.6	6.7	0.41
3VP4WC	*	367.5	4.8	0.30	360.5	-2.5	-0.15
44LYWV		363.0	0.2	0.02	365.0	2.1	0.13
44YWJR		358.0	-4.8	-0.30	362.4	-0.5	-0.03
4HC6JV		338.8	-24.0	-1.52	334.8	-28.1	-1.71
6EBJ8J		361.5	-1.3	-0.08	365.9	2.9	0.18
6TCXRM		358.1	-4.7	-0.30	359.9	-3.1	-0.19
6UVQUK		345.1	-17.7	-1.12	344.6	-18.4	-1.12
73XEZM		356.7	-6.1	-0.39	355.8	-7.1	-0.43
83WWLP		363.5	0.7	0.05	363.7	0.8	0.05
8B89NN		380.6	17.8	1.13	382.6	19.6	1.19
8YE2EQ		378.7	15.9	1.01	378.6	15.6	0.95
9D67CL		371.2	8.4	0.54	374.0	11.1	0.67
A4DANQ		354.3	-8.5	-0.54	348.3	-14.7	-0.89
AYLXVF		359.6	-3.2	-0.20	356.9	-6.0	-0.36
B7WL3L		329.4	-33.4	-2.13	327.6	-35.3	-2.14
BV37JC		370.0	7.2	0.46	370.4	7.5	0.45
BYM7KE	X	182.0	-180.8	-11.50	183.2	-179.8	-10.91
C2NDKH		361.0	-1.7	-0.11	361.8	-1.1	-0.07
CAGVQD	X	373.6	10.9	0.69	364.4	1.5	0.09
CTCJ4U		380.5	17.7	1.13	376.5	13.6	0.82
CYUWXM		360.0	-2.8	-0.18	355.1	-7.8	-0.47
D3D7T7		345.4	-17.3	-1.10	344.6	-18.4	-1.11
D8LPRY		372.3	9.6	0.61	371.4	8.5	0.51
DEMWFE		342.2	-20.5	-1.31	341.6	-21.4	-1.30
EAAGLG		353.6	-9.2	-0.58	351.9	-11.1	-0.67
ET42FF		355.0	-7.8	-0.50	353.5	-9.4	-0.57
FP2KHC		373.8	11.0	0.70	372.6	9.7	0.59
FWGEHE		391.5	28.7	1.83	391.1	28.2	1.71
G74NEM		358.8	-4.0	-0.25	360.0	-2.9	-0.18
GGYU9L		347.8	-15.0	-0.95	352.4	-10.5	-0.64



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

WebCode	Data Flag	Sample J21			Sample J22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
H8EW88		350.8	-12.0	-0.76	353.1	-9.9	-0.60
HEA4HZ		366.0	3.2	0.21	365.2	2.3	0.14
JJ386D		362.8	0.0	0.00	362.2	-0.8	-0.05
JNDFCA	*	405.2	42.4	2.70	410.3	47.3	2.87
L32CKH		360.7	-2.1	-0.13	358.2	-4.7	-0.29
LDLLAB	*	356.8	-6.0	-0.38	364.0	1.0	0.06
MHEZHJ		352.9	-9.9	-0.63	354.4	-8.6	-0.52
MNJ7N9	X	462.0	99.2	6.31	430.5	67.6	4.10
MUPTKJ		338.6	-24.2	-1.54	339.5	-23.4	-1.42
N2K2KF		390.5	27.7	1.76	389.6	26.7	1.62
N9PPP3		346.9	-15.8	-1.01	347.4	-15.5	-0.94
NAFXP7		363.2	0.4	0.03	363.8	0.9	0.05
PGD328	X	301.6	-61.2	-3.89	290.2	-72.7	-4.42
Q2UNA9		360.0	-2.7	-0.17	357.5	-5.5	-0.33
Q9BG7P		353.9	-8.9	-0.57	353.0	-10.0	-0.61
QWKMUW		357.4	-5.4	-0.34	358.5	-4.5	-0.27
QZ6F7Y		380.1	17.3	1.10	380.0	17.1	1.04
RFBYJG		344.9	-17.9	-1.14	347.9	-15.1	-0.92
RJN227		375.9	13.1	0.84	376.9	13.9	0.84
T29QWY	*	405.7	42.9	2.73	408.9	46.0	2.79
TAZ6Z6		362.3	-0.4	-0.03	363.9	0.9	0.06
UF6LQ6		357.5	-5.3	-0.34	359.5	-3.4	-0.21
UJNHEV		377.0	14.3	0.91	379.0	16.0	0.97
UPABQU	X	504.8	142.0	9.04	498.0	135.1	8.20
UU2MJ7	X	267.8	-95.0	-6.04	268.6	-94.3	-5.72
V392KX		362.9	0.2	0.01	367.2	4.3	0.26
VCXMQW		379.4	16.6	1.06	380.1	17.1	1.04
VFYNVY		377.4	14.7	0.93	378.4	15.5	0.94
WHJ3UT		339.5	-23.3	-1.48	336.0	-26.9	-1.63
WJG7UV		358.0	-4.8	-0.30	353.2	-9.7	-0.59
XD869R		361.3	-1.5	-0.09	358.0	-4.9	-0.30
XN3MEK		387.8	25.1	1.59	389.7	26.7	1.62

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

WebCode	Data Flag	Sample J21			Sample J22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XTG6RV		368.4	5.6	0.36	368.4	5.5	0.33
XXT9KJ		362.8	0.0	0.00	364.2	1.3	0.08
XZHGTY	X	299.7	-63.1	-4.02	305.2	-57.8	-3.51
YAHCK3		385.4	22.7	1.44	388.3	25.4	1.54
YMLQML		377.2	14.5	0.92	372.6	9.6	0.58
Z4QEGX		343.7	-19.1	-1.21	342.7	-20.2	-1.23
ZU76T4		339.1	-23.7	-1.51	338.8	-24.1	-1.46
ZZNKC2	X	357.6	-5.2	-0.33	330.2	-32.7	-1.99
ZZPFXR		342.8	-20.0	-1.27	342.4	-20.6	-1.25

**Summary Statistics**

Grand Means

362.77 ksi

362.94 ksi

Stnd Dev Btwn Labs

15.72 ksi

16.48 ksi

Statistics based on 65 of 73 reporting participants

Sample J21: ABS &amp; Sample J22: ABS

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

BYM7KE (X) - Data for both samples are low.

CAGVQD (X) - Inconsistent in testing between samples.

MNJ7N9 (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

PGD328 (X) - Data for both samples are low. Also Inconsistent in testing within Sample J22.

UPABQU (X) - Data for both samples are high. Also Inconsistent in testing within Sample J21.

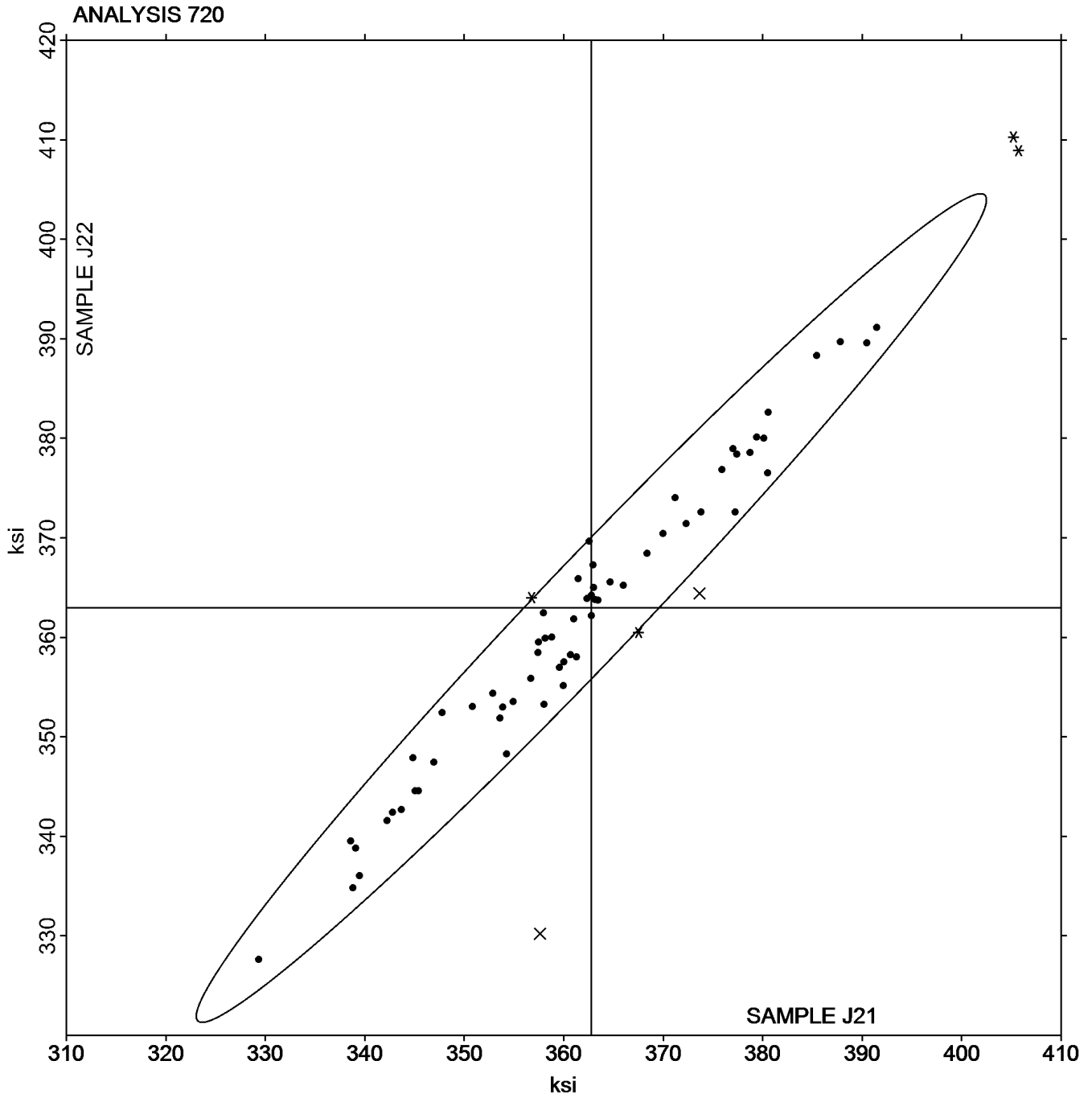
UU2MJ7 (X) - Data for both samples are low. Also Inconsistent in testing within both samples.

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

ZZNKC2 (X) - Inconsistent in testing between samples and inconsistent in testing within Sample J21.

Plastics Interlaboratory Testing Program  
Analysis 720  
Flexural Modulus- ksi

Grand Mean Sample J21: 362.77 ksi    Grand Mean Sample J22: 362.94 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 721

## Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J21			Sample J22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
38ZEK3		10,850	1	0.00	10,615	-222	-0.53
3GP8UD		10,968	118	0.30	11,064	227	0.54
3VP4WC		10,771	-79	-0.20	10,751	-86	-0.21
44LYWV		11,011	161	0.41	11,155	318	0.76
44YWJR		11,000	150	0.38	11,029	191	0.46
4HC6JV		11,223	373	0.96	11,145	307	0.74
6EBJ8J	X	11,690	840	2.15	12,130	1,293	3.10
6TCXRM		10,768	-81	-0.21	10,970	133	0.32
6UVQUK		11,182	332	0.85	11,155	317	0.76
73XEZM		10,668	-182	-0.47	10,776	-62	-0.15
83WWLP		10,906	56	0.14	10,985	148	0.35
8B89NN		11,219	370	0.95	11,284	446	1.07
8YE2EQ		10,778	-71	-0.18	10,850	12	0.03
A4DANQ		10,755	-95	-0.24	10,669	-169	-0.40
AYLXVF		11,167	317	0.81	10,955	117	0.28
B7WL3L		10,284	-566	-1.45	10,228	-610	-1.46
BV37JC		11,043	193	0.50	11,049	212	0.51
BYM7KE	X	7,858	-2,992	-7.67	7,913	-2,925	-7.01
C2NDKH		10,815	-35	-0.09	10,846	8	0.02
CTCJ4U		10,962	112	0.29	10,984	147	0.35
CYUWXM		10,324	-526	-1.35	10,242	-595	-1.43
DEMWFE		10,546	-304	-0.78	10,486	-352	-0.84
ET42FF		10,647	-203	-0.52	10,640	-198	-0.47
FWGEHE		10,895	46	0.12	10,922	84	0.20
GGYU9L		11,401	551	1.41	11,431	593	1.42
HEA4HZ		10,014	-836	-2.14	9,990	-847	-2.03
JJ386D		11,779	929	2.38	11,764	927	2.22
JNDFCA		11,492	642	1.65	11,524	687	1.65
L32CKH	X	9,344	-1,506	-3.86	9,582	-1,256	-3.01
MHEZHJ	X	9,429	-1,421	-3.64	8,037	-2,800	-6.71
MNJ7N9	X	11,760	910	2.33	11,464	626	1.50
MUPTKJ		10,101	-748	-1.92	10,047	-790	-1.89

## Plastics Interlaboratory Testing Program

## Analysis 721

## Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J21			Sample J22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
N2K2KF		11,219	370	0.95	11,195	358	0.86
N9PPP3		10,927	77	0.20	10,973	136	0.33
NAFXP7		10,852	2	0.01	10,857	20	0.05
Q2UNA9		10,746	-104	-0.27	10,725	-112	-0.27
QWKMUW		10,256	-594	-1.52	10,229	-608	-1.46
QZ6F7Y		11,244	394	1.01	11,218	380	0.91
RFBYJG		10,518	-332	-0.85	10,388	-450	-1.08
RJN227		11,033	183	0.47	11,121	283	0.68
T29QWY		11,518	669	1.71	11,575	737	1.77
UF6LQ6		10,687	-163	-0.42	10,522	-315	-0.76
UJNHEV		11,144	295	0.75	11,213	376	0.90
UPABQU	X	13,773	2,923	7.49	13,863	3,025	7.25
UU2MJ7		10,566	-284	-0.73	10,411	-426	-1.02
V392KX		10,718	-132	-0.34	10,841	4	0.01
VFYNVY		10,936	86	0.22	10,936	98	0.24
WHJ3UT		10,178	-671	-1.72	10,150	-687	-1.65
WJG7UV		10,898	48	0.12	10,874	36	0.09
XD869R		10,833	-17	-0.04	10,768	-69	-0.17
XN3MEK		11,149	299	0.77	11,202	364	0.87
XTG6RV		11,356	506	1.30	11,405	567	1.36
XXT9KJ		9,914	-936	-2.40	9,900	-937	-2.25
YMLQML		11,040	190	0.49	10,873	35	0.08
Z4QEGX		10,700	-150	-0.38	10,700	-137	-0.33
ZZNKC2		10,907	57	0.15	10,704	-133	-0.32
ZZPFXR		10,431	-419	-1.07	10,373	-464	-1.11

Analysis 721  
Flexural Stress at 5% Strain - psi

## Summary Statistics

Grand Means	10,849.8 psi	10,837.4 psi
Std Dev Btwn Labs	390.3 psi	417.4 psi
Statistics based on 51 of 57 reporting participants		

Sample J21: ABS & Sample J22: ABS

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

6EBJ8J (X) - Inconsistent in testing between samples, data for Sample J22 are high. Also Inconsistent in testing within Sample J21.

BYM7KE (X) - Data for both samples are low.

L32CKH (X) - Data for both samples are low. Also Inconsistent in testing within both samples.

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

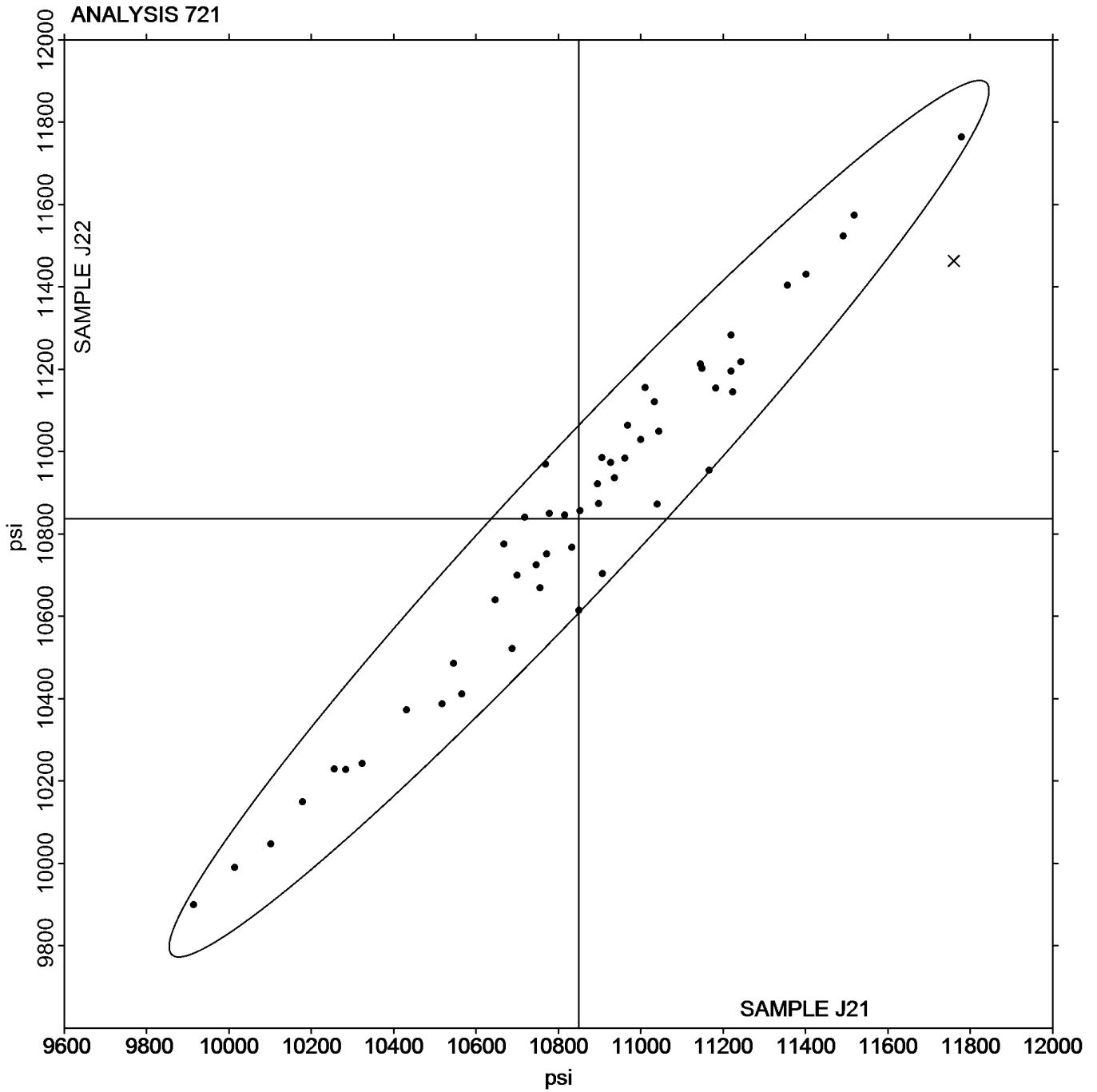
MNJ7N9 (X) - Inconsistent in testing between samples and inconsistent in testing within Sample J21.

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

Analysis 721

Flexural Stress at 5% Strain - psi

Grand Mean Sample J21: 10,849.83 psi    Grand Mean Sample J22: 10,837.36 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 J21			Sample J22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
38ZEK3		10,915	64	0.15	10,707	-129	-0.29
3GP8UD		11,065	213	0.50	11,158	322	0.73
3VP4WC		10,817	-35	-0.08	10,783	-53	-0.12
44LYWV		11,002	151	0.35	11,096	260	0.59
44YWJR		10,982	131	0.31	11,032	196	0.45
4HC6JV		11,223	372	0.87	11,145	309	0.70
6EBJ8J	X	11,690	838	1.97	12,130	1,294	2.95
6TCXRM		10,794	-58	-0.14	10,997	161	0.37
6UVQUK		11,220	368	0.86	11,185	350	0.80
73XEZM		10,735	-116	-0.27	10,800	-36	-0.08
83WWLP		10,946	94	0.22	11,006	170	0.39
8B89NN		11,254	402	0.94	11,312	476	1.08
8YE2EQ		10,845	-7	-0.02	10,913	77	0.18
A4DANQ		10,802	-50	-0.12	10,709	-127	-0.29
AYLXVF	*	11,220	369	0.87	10,974	138	0.31
B7WL3L		10,297	-555	-1.30	10,250	-586	-1.33
BV37JC		11,097	246	0.58	11,108	272	0.62
C2NDKH		10,826	-25	-0.06	10,853	17	0.04
CAGVQD	*	11,001	149	0.35	10,730	-106	-0.24
CTCJ4U		11,004	152	0.36	11,013	178	0.40
CYUWXM		10,324	-527	-1.24	10,241	-595	-1.35
D3D7T7		10,460	-392	-0.92	10,466	-370	-0.84
D8LPRY		10,811	-41	-0.10	10,792	-44	-0.10
DEMWFE		10,550	-302	-0.71	10,490	-346	-0.79
ET42FF		10,727	-125	-0.29	10,718	-117	-0.27
FP2KHC		11,237	386	0.91	11,156	320	0.73
FWGEHE		10,989	138	0.32	11,005	169	0.38
G74NEM		10,660	-192	-0.45	10,680	-156	-0.35
GGYU9L		11,858	1,007	2.36	11,895	1,060	2.41
H8EW88		10,704	-148	-0.35	10,878	42	0.10
HEA4HZ		10,140	-712	-1.67	10,080	-756	-1.72
JJ386D		11,824	973	2.28	11,794	958	2.18



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

WebCode	Data Flag	Sample J21			Sample J22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
JNDFCA		11,512	660	1.55	11,528	692	1.57
L32CKH	X	9,480	-1,371	-3.22	9,758	-1,078	-2.45
MHEZHJ	X	9,492	-1,360	-3.19	8,152	-2,684	-6.11
MNJ7N9	X	11,875	1,024	2.40	11,546	711	1.62
MUPTKJ		10,111	-741	-1.74	10,069	-767	-1.75
N2K2KF		11,245	394	0.92	11,221	385	0.88
NAFXP7		10,898	46	0.11	10,903	67	0.15
PGD328	*	10,040	-812	-1.91	10,180	-656	-1.49
QWKMUW		10,690	-161	-0.38	10,649	-187	-0.43
QZ6F7Y		11,275	424	1.00	11,241	406	0.92
RFBYJG		10,562	-290	-0.68	10,437	-399	-0.91
RJN227		11,092	240	0.56	11,161	326	0.74
T29QWY		11,524	672	1.58	11,569	733	1.67
UF6LQ6		10,766	-85	-0.20	10,580	-256	-0.58
UJNHEV		11,172	320	0.75	11,240	404	0.92
UPABQU	X	13,869	3,017	7.08	13,930	3,094	7.04
UU2MJ7		10,587	-264	-0.62	10,495	-340	-0.77
V392KX		10,752	-100	-0.23	10,895	59	0.13
VCXMQW		10,872	20	0.05	10,850	14	0.03
VFYNVY		11,008	157	0.37	11,013	178	0.40
WHJ3UT		10,278	-574	-1.35	10,219	-617	-1.40
XD869R		10,853	2	0.00	10,787	-49	-0.11
XN3MEK		11,049	197	0.46	11,079	243	0.55
XXT9KJ		10,024	-828	-1.94	10,046	-790	-1.80
XZHGTY	*	9,593	-1,259	-2.96	9,552	-1,284	-2.92
YAHCK3		11,267	415	0.98	11,301	465	1.06
YMLQML		11,065	214	0.50	10,890	55	0.12
Z4QEGX		10,740	-112	-0.26	10,700	-136	-0.31
ZZNKC2		10,733	-119	-0.28	10,646	-190	-0.43
ZZPFXR		10,500	-352	-0.83	10,423	-413	-0.94

## Analysis 722

## Flexural Stress at Yield - psi

## Summary Statistics

Grand Means

10,851.5 psi

10,835.8 psi

Std Dev Btwn Labs

425.9 psi

439.5 psi

Statistics based on 57 of 62 reporting participants

Sample J21: ABS &amp; Sample J22: ABS

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

6EBJ8J (X) - Inconsistent in testing between samples, data for Sample J22 are high. Also Inconsistent in testing within Sample J21.

L32CKH (X) - Inconsistent in testing between samples, data for Sample J21 are low. Also Inconsistent in testing within Sample J22.

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

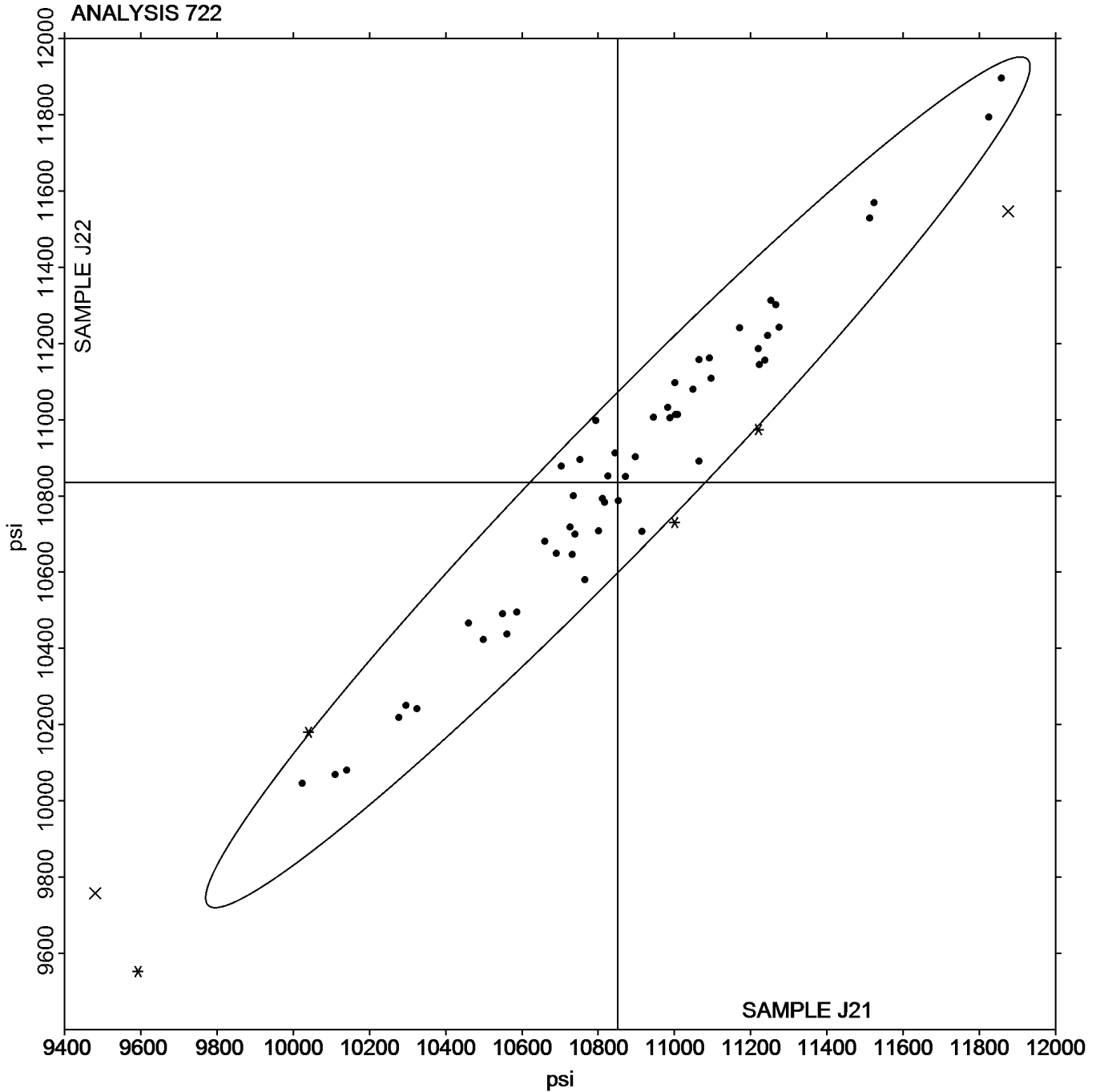
MNJ7N9 (X) - Inconsistent in testing between samples and inconsistent in testing within Sample J21.

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

Analysis 722

Flexural Stress at Yield - psi

Grand Mean Sample J21: 10,851.53 psi    Grand Mean Sample J22: 10,835.79 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 K21			Sample K22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2H48HA		2,305	-94	-1.20	2,312	-91	-1.10
2ZJKRQ	X	2,036	-363	-4.62	2,056	-347	-4.19
3EY2EM		2,416	17	0.21	2,436	32	0.39
633RRQ		2,350	-50	-0.63	2,341	-62	-0.75
68XB4W		2,279	-120	-1.53	2,272	-131	-1.58
6Q4ZZQ		2,448	48	0.62	2,469	65	0.79
73XEZM		2,509	110	1.39	2,546	142	1.71
7FP2BP		2,341	-58	-0.74	2,389	-15	-0.18
7NERTB	*	2,176	-223	-2.84	2,172	-231	-2.79
8N94MG		2,439	40	0.51	2,442	38	0.46
96G76P		2,447	48	0.61	2,455	51	0.62
A78VLN	X	2,348	-52	-0.66	2,226	-177	-2.14
AT2Z7R		2,380	-20	-0.25	2,372	-31	-0.38
AY96JL		2,433	33	0.43	2,421	18	0.21
AYLXVF	*	2,206	-194	-2.46	2,222	-181	-2.19
B7WL3L		2,370	-29	-0.37	2,350	-53	-0.64
B8VM9D		2,462	63	0.80	2,442	38	0.46
BV37JC		2,357	-42	-0.54	2,365	-39	-0.47
C2NDKH		2,450	51	0.65	2,420	16	0.20
DF34WP		2,354	-45	-0.57	2,360	-43	-0.52
FYNEWU		2,400	1	0.01	2,406	2	0.03
G8CRBJ		2,430	31	0.39	2,448	44	0.53
GC9FRQ		2,416	17	0.22	2,448	45	0.54
HF6LLM		2,542	143	1.82	2,581	177	2.13
LGPCKX		2,345	-54	-0.69	2,351	-53	-0.64
LRLHCA	X	2,367	-32	-0.41	2,459	55	0.67
MWTJV6		2,381	-18	-0.23	2,359	-45	-0.54
MZUER2		2,417	18	0.23	2,417	13	0.16
N2K2KF		2,322	-77	-0.98	2,332	-72	-0.87
P8Q4B3		2,525	125	1.60	2,521	118	1.42
PB6LK7		2,338	-62	-0.78	2,335	-69	-0.83
PGD328		2,396	-3	-0.04	2,360	-44	-0.53

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

WebCode	Data Flag	Sample K21			Sample K22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
Q2UNA9		2,398	-1	-0.01	2,403	0	0.00
QXF7XH		2,414	15	0.19	2,397	-6	-0.08
RFBYJG		2,385	-15	-0.19	2,399	-5	-0.06
RU7KEB		2,426	27	0.34	2,445	42	0.50
TDFZF3		2,360	-39	-0.50	2,374	-30	-0.36
TJ92J3		2,426	26	0.34	2,462	58	0.70
UJNHEV		2,589	189	2.41	2,610	207	2.49
UMK69J		2,458	59	0.75	2,460	56	0.67
V3AUH7		2,404	5	0.06	2,401	-3	-0.03
VCXMQW		2,461	62	0.79	2,448	45	0.54
VNDG7V		2,437	38	0.48	2,413	10	0.12
YMLQML		2,375	-24	-0.30	2,394	-10	-0.12

**Summary Statistics**

Grand Means

2,399.1 MPa

2,403.6 MPa

Std Dev Btwn Labs

78.6 MPa

82.9 MPa

Statistics based on 41 of 44 reporting participants

Sample K21: ABS &amp; Sample K22: ABS

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

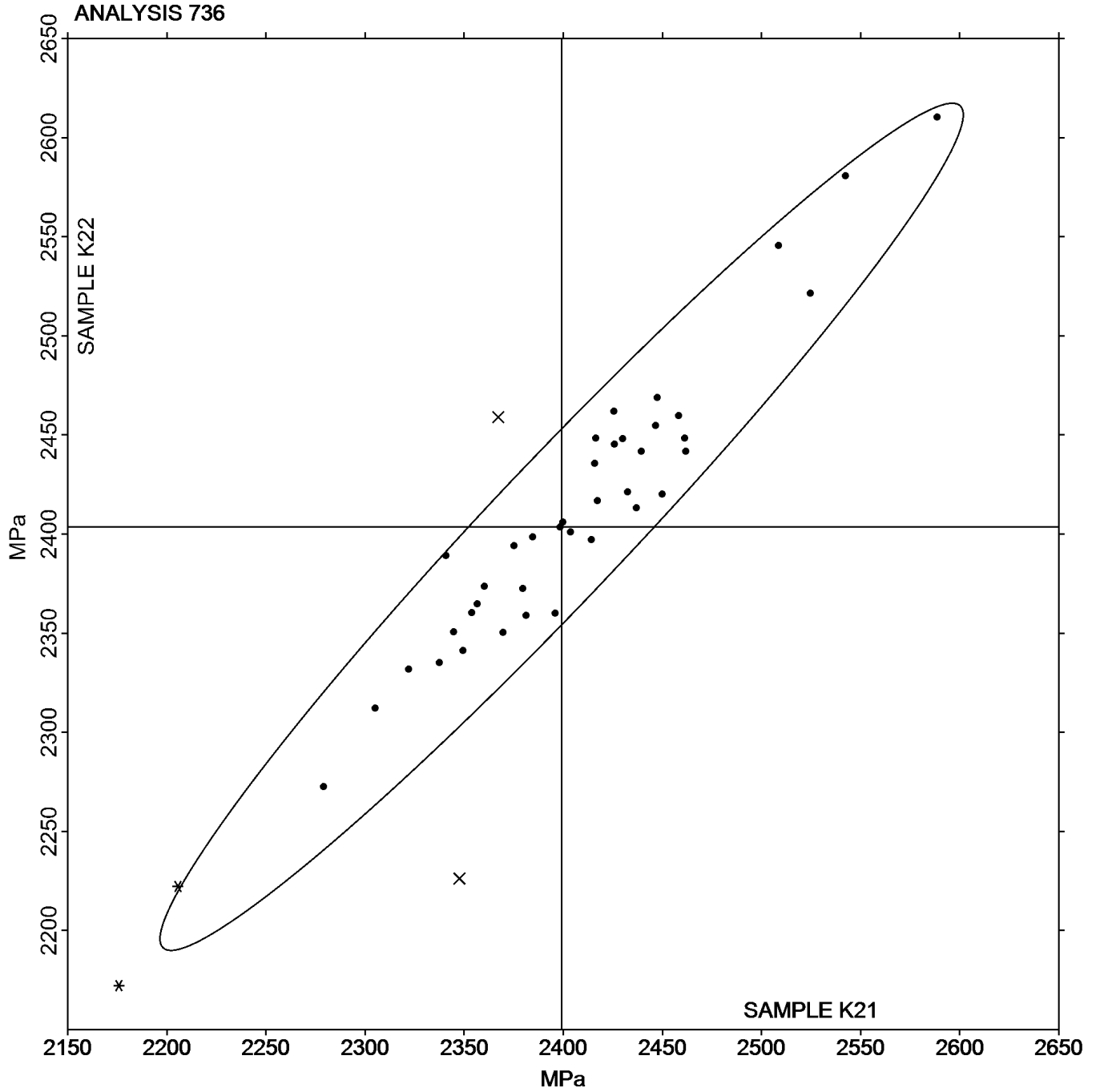
2ZJKRQ (X) - Data for both samples are low.

A78VLN (X) - Inconsistent in testing between samples and inconsistent in testing within both samples.

LRLHCA (X) - Inconsistent in testing between samples.

Analysis 736  
Flexural Modulus - MPa

Grand Mean Sample K21: 2,399.15 MPa    Grand Mean Sample K22: 2,403.65 MPa



## Plastics Interlaboratory Testing Program

## Analysis 737

## Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K21			Sample K22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2H48HA		69.04	-2.55	-1.56	68.98	-2.86	-1.49
2ZJKRQ		67.75	-3.84	-2.35	67.86	-3.98	-2.08
3EY2EM		71.05	-0.53	-0.33	72.16	0.31	0.16
633RRQ		72.09	0.50	0.31	72.56	0.72	0.38
68XB4W		71.28	-0.31	-0.19	71.64	-0.20	-0.11
6Q4ZZQ		73.07	1.49	0.91	73.60	1.76	0.92
73XEZM		73.05	1.46	0.89	73.92	2.08	1.09
7FP2BP		74.31	2.73	1.67	75.57	3.72	1.94
7NERTB	*	71.01	-0.58	-0.35	69.73	-2.11	-1.10
8N94MG		71.00	-0.59	-0.36	71.42	-0.43	-0.22
96G76P		74.06	2.47	1.51	75.10	3.26	1.70
A78VLN		72.43	0.84	0.52	72.46	0.62	0.32
AT2Z7R		72.40	0.81	0.50	72.25	0.40	0.21
AY96JL		75.25	3.67	2.25	75.64	3.79	1.98
AYLXVF		71.85	0.26	0.16	71.98	0.13	0.07
B7WL3L		69.95	-1.64	-1.00	70.08	-1.77	-0.92
B8VM9D		70.72	-0.87	-0.53	70.27	-1.57	-0.82
BV37JC		73.05	1.47	0.90	73.38	1.54	0.80
C2NDKH		72.78	1.19	0.73	72.08	0.24	0.12
DF34WP		71.75	0.16	0.10	71.63	-0.22	-0.11
G8CRBJ		72.52	0.93	0.57	73.00	1.16	0.61
GC9FRQ		71.96	0.37	0.23	72.88	1.04	0.54
HF6LLM	*	74.40	2.82	1.72	76.20	4.36	2.27
LGPCCKX		70.39	-1.19	-0.73	70.53	-1.31	-0.69
LRLHCA		70.67	-0.92	-0.56	70.93	-0.92	-0.48
MWTJV6		70.41	-1.18	-0.72	69.65	-2.20	-1.15
MZUER2		70.87	-0.72	-0.44	70.66	-1.18	-0.61
N2K2KF		70.00	-1.59	-0.97	70.32	-1.52	-0.79
P8Q4B3		72.05	0.46	0.28	71.91	0.07	0.04
PGD328		69.58	-2.01	-1.23	70.22	-1.62	-0.85
Q2UNA9		69.82	-1.76	-1.08	70.03	-1.82	-0.95
QXF7XH		71.02	-0.56	-0.34	71.11	-0.73	-0.38

## Analysis 737

## Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K21			Sample K22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RFBYJG		71.76	0.18	0.11	72.20	0.36	0.19
RU7KEB		69.01	-2.57	-1.58	68.88	-2.96	-1.55
TDFZF3		72.05	0.46	0.28	72.43	0.59	0.31
UJNHEV		74.24	2.66	1.63	74.46	2.62	1.37
UMK69J		71.87	0.28	0.17	72.41	0.57	0.30
V3AUH7		69.57	-2.02	-1.23	69.98	-1.86	-0.97
VNDG7V		72.12	0.54	0.33	71.80	-0.04	-0.02
YMLQML		71.24	-0.35	-0.21	71.79	-0.06	-0.03

## Summary Statistics

Grand Means

71.585 MPa

71.842 MPa

Std Dev Btwn Labs

1.633 MPa

1.916 MPa

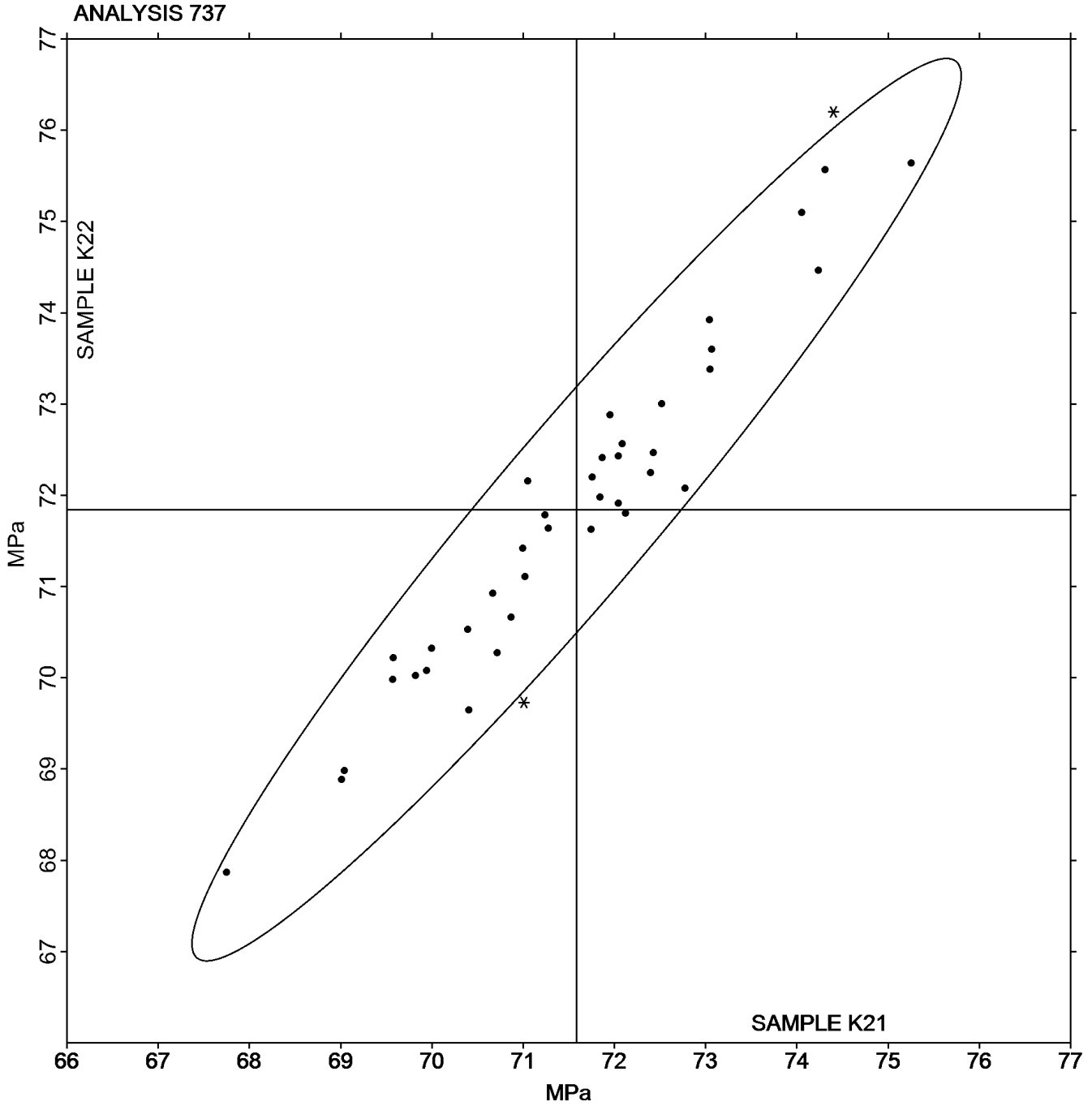
Statistics based on 40 of 40 reporting participants

Sample K21: ABS &amp; Sample K22: ABS



Analysis 737  
Flexural Stress at 3.5% Strain - MPa

Grand Mean Sample K21: 71.585 MPa    Grand Mean Sample K22: 71.842 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 K21			Sample K22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2H48HA		71.04	-2.18	-1.52	70.88	-2.72	-1.52
2ZJKRQ	*	70.03	-3.19	-2.23	70.96	-2.64	-1.48
3EY2EM		72.63	-0.59	-0.41	73.63	0.03	0.02
633RRQ		73.78	0.57	0.39	74.34	0.75	0.42
68XB4W		73.12	-0.10	-0.07	74.16	0.56	0.32
6Q4ZZQ		73.07	-0.15	-0.10	73.60	0.00	0.00
73XEZM		74.31	1.10	0.76	75.40	1.80	1.01
7FP2BP	*	76.97	3.75	2.62	79.10	5.51	3.08
8N94MG		71.79	-1.42	-0.99	72.48	-1.12	-0.63
96G76P		74.06	0.84	0.58	75.10	1.50	0.84
A78VLN		74.69	1.47	1.03	74.64	1.05	0.59
AT2Z7R		73.81	0.59	0.41	73.57	-0.02	-0.01
AYLXVF		73.87	0.65	0.45	74.24	0.64	0.36
B7WL3L		73.36	0.14	0.10	73.18	-0.42	-0.24
B8VM9D		71.82	-1.39	-0.97	71.38	-2.22	-1.24
BV37JC		75.03	1.81	1.26	75.71	2.12	1.19
DF34WP		72.98	-0.23	-0.16	72.88	-0.71	-0.40
FYNEWU		73.06	-0.15	-0.11	73.16	-0.44	-0.25
G8CRBJ		74.99	1.77	1.24	76.35	2.76	1.54
GC9FRQ		74.34	1.12	0.78	75.21	1.62	0.90
HF6LLM	X	5.00	-68.22	-47.59	5.00	-68.60	-38.40
LRLHCA		72.03	-1.19	-0.83	72.15	-1.44	-0.81
MWTJV6		71.80	-1.42	-0.99	71.17	-2.43	-1.36
MZUER2		71.73	-1.49	-1.04	71.68	-1.92	-1.07
N2K2KF		72.20	-1.02	-0.71	72.42	-1.17	-0.66
P8Q4B3		72.99	-0.23	-0.16	72.94	-0.65	-0.37
Q2UNA9		71.81	-1.41	-0.98	71.34	-2.26	-1.26
QXF7XH		72.37	-0.85	-0.59	72.62	-0.98	-0.55
RFBYJG		73.50	0.28	0.20	74.22	0.62	0.35
RU7KEB		72.52	-0.69	-0.48	72.53	-1.06	-0.59
TDFZF3		73.83	0.61	0.43	74.40	0.80	0.45
UJNHEV		75.83	2.62	1.82	75.90	2.30	1.29

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

WebCode	Data Flag	Sample K21			Sample K22		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
VCXMQW		71.89	-1.33	-0.93	72.07	-1.53	-0.86
VNDG7V		74.80	1.58	1.10	74.84	1.24	0.70
YMLQML		73.37	0.15	0.10	74.01	0.42	0.23

**Summary Statistics**

Grand Means

73.219 MPa

73.596 MPa

Std Dev Btwn Labs

1.433 MPa

1.786 MPa

Statistics based on 34 of 35 reporting participants

Sample K21: ABS &amp; Sample K22: ABS

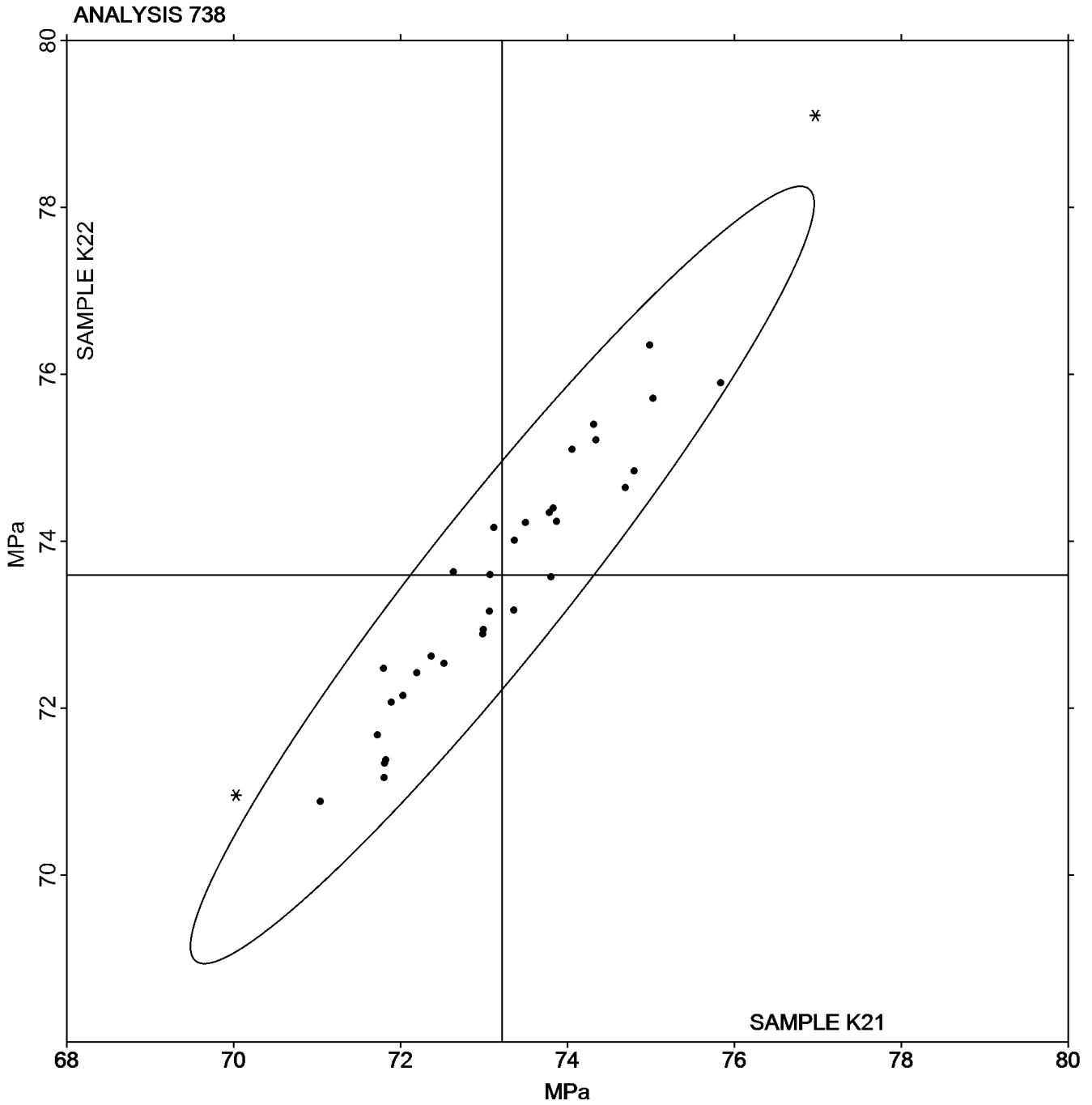
**Comments on assigned Data Flags for Test #738**

HF6LLM (X) - Extremely low data for all samples.

Analysis 738

Flexural Stress at Yield - MPa

Grand Mean Sample K21: 73.219 MPa    Grand Mean Sample K22: 73.596 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 S21			Sample S22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
44LYWV		7.12	0.11	0.26	7.10	0.05	0.12	TM
4HC6JV		6.16	-0.85	-2.02	6.12	-0.94	-2.38	WZ
633RRQ	X	5.39	-1.61	-3.83	5.10	-1.95	-4.96	CE
6UVQUK		7.74	0.73	1.73	7.81	0.76	1.92	CE
73XEZM		7.20	0.19	0.45	7.06	0.01	0.02	TM
7NV6WE		7.23	0.22	0.53	7.28	0.22	0.57	TM
83WWLP		7.19	0.18	0.42	7.18	0.13	0.32	TO
8923TF		6.47	-0.54	-1.28	6.70	-0.36	-0.92	TM
8YE2EQ		6.91	-0.09	-0.22	6.85	-0.20	-0.51	CE
9UZLKT	X	9.39	2.39	5.66	9.21	2.16	5.48	TO
A4DANQ		7.10	0.10	0.23	7.21	0.15	0.39	TO
AEGD3L		6.67	-0.34	-0.80	6.79	-0.26	-0.67	TO
AYLXVF		6.72	-0.29	-0.68	6.85	-0.21	-0.52	TM
AZJ2UH		6.87	-0.14	-0.33	6.88	-0.18	-0.45	TO
B7WL3L		7.18	0.17	0.40	7.32	0.26	0.67	CE
BV37JC		6.78	-0.23	-0.54	6.55	-0.51	-1.30	WZ
BYM7KE		7.09	0.08	0.19	7.39	0.34	0.85	CE
CAGQHW		7.55	0.54	1.28	7.47	0.41	1.04	TO
CAGVQD		7.47	0.47	1.11	7.39	0.34	0.86	XX
CQK8KN		7.18	0.17	0.40	7.42	0.36	0.92	CE
CTCJ4U		6.45	-0.56	-1.33	6.45	-0.61	-1.55	XX
D3D7T7		6.39	-0.62	-1.48	6.42	-0.64	-1.62	TM
D8LPRY		6.85	-0.16	-0.37	7.00	-0.06	-0.15	TO
EAAGLG		7.07	0.06	0.14	7.27	0.21	0.53	XX
ET42FF		6.75	-0.25	-0.60	6.91	-0.15	-0.37	TM
FP2KHC	*	7.52	0.51	1.21	7.12	0.07	0.17	CE
FWGEHE		6.67	-0.33	-0.79	6.76	-0.29	-0.75	CE
G74NEM		7.09	0.08	0.20	7.22	0.16	0.41	TM
G8CRBJ		7.49	0.48	1.14	7.40	0.35	0.88	CE
GC9FRQ	*	6.76	-0.25	-0.59	7.22	0.16	0.41	CS
H8EW88		7.44	0.43	1.03	7.20	0.14	0.36	TO
JNDFCA		6.73	-0.28	-0.66	6.79	-0.26	-0.67	TO

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

WebCode	Data Flag	Sample S21			Sample S22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
LDLLAB		6.80	-0.21	-0.49	6.98	-0.08	-0.20	TM
LKQDMF	*	6.04	-0.96	-2.29	6.38	-0.67	-1.71	TO
LRLHCA		7.02	0.02	0.04	7.07	0.01	0.03	TO
LUPDVD		6.54	-0.47	-1.12	6.49	-0.56	-1.43	CE
M9Q6GH		6.69	-0.31	-0.75	6.78	-0.27	-0.70	TO
MUPTKJ		7.80	0.79	1.88	7.81	0.76	1.92	CE
MWTJV6		6.71	-0.29	-0.70	7.00	-0.06	-0.15	TO
N2K2KF		7.53	0.52	1.23	7.61	0.55	1.41	TM
N9PPP3		7.31	0.30	0.71	7.20	0.15	0.38	TO
NAFXP7		6.79	-0.22	-0.51	6.99	-0.07	-0.17	WZ
NCKK4V		6.95	-0.06	-0.13	6.87	-0.19	-0.48	BA
P8Q4B3		6.94	-0.06	-0.15	7.15	0.09	0.23	TO
PGD328	X	7.19	0.18	0.43	5.87	-1.19	-3.02	TO
Q2UNA9		7.10	0.09	0.22	7.26	0.20	0.52	TO
QXF7XH		7.45	0.45	1.06	7.53	0.47	1.20	TO
RFBYJG		6.88	-0.12	-0.29	6.60	-0.46	-1.16	TY
TDFZF3		7.02	0.01	0.02	7.17	0.11	0.28	TM
UJNHEV		6.61	-0.40	-0.95	6.65	-0.41	-1.04	CE
UTCEDB		6.89	-0.12	-0.27	6.89	-0.16	-0.42	XX
V392KX		6.96	-0.05	-0.12	6.99	-0.06	-0.16	TO
VCXMQW		6.07	-0.94	-2.22	6.33	-0.73	-1.85	CE
VFYNVY		7.10	0.09	0.21	7.11	0.06	0.14	TO
VGTE2E	X	1.18	-5.82	-13.83	1.19	-5.87	-14.91	TM
VLN9XF		7.73	0.72	1.70	7.64	0.59	1.49	TM
WHJ3UT	X	7.32	0.31	0.74	7.98	0.92	2.34	CS
WJG7UV		6.90	-0.11	-0.25	6.94	-0.12	-0.31	TO
WJX2F4		6.82	-0.19	-0.45	6.81	-0.24	-0.62	DS
WUW82P		6.82	-0.19	-0.45	6.75	-0.31	-0.78	TY
XJWQX7		7.71	0.70	1.66	7.54	0.48	1.22	TO
XMFQBZ		7.15	0.14	0.33	7.15	0.10	0.24	TM
XN3MEK		6.63	-0.38	-0.89	6.63	-0.42	-1.08	IN
XTG6RV		7.34	0.34	0.80	7.56	0.50	1.27	XX

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

WebCode	Data Flag	Sample S21			Sample S22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
XZHGTY	*	8.09	1.08	2.57	8.16	1.10	2.79	WY
YMLQML		6.74	-0.26	-0.63	6.93	-0.13	-0.33	TM
ZU76T4		7.52	0.51	1.22	7.39	0.34	0.85	XX

**Summary Statistics**

Grand Means

7.008 ft.lbf/in

7.056 ft.lbf/in

Std Dev Btwn Labs

0.421 ft.lbf/in

0.394 ft.lbf/in

Statistics based on 62 of 67 reporting participants

Sample S21: ABS &amp; Sample S22: ABS

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

633RRQ (X) - Data for both samples are low.

9UZLKT (X) - Data for both samples are high.

PGD328 (X) - Inconsistent in testing between samples, data for Sample S22 are low.

VGTE2E (X) - Data for both samples are low.

WHJ3UT (X) - Inconsistent in testing between samples and inconsistent in testing within Sample S22.

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

(BA) - Baldwin

(CE) - Ceast

(CS) - CSI

(DS) - Dynisco

(IN) - Instron

(TM) - TMI

(TO) - Tinius Olsen

(TY) - Toyoseiki

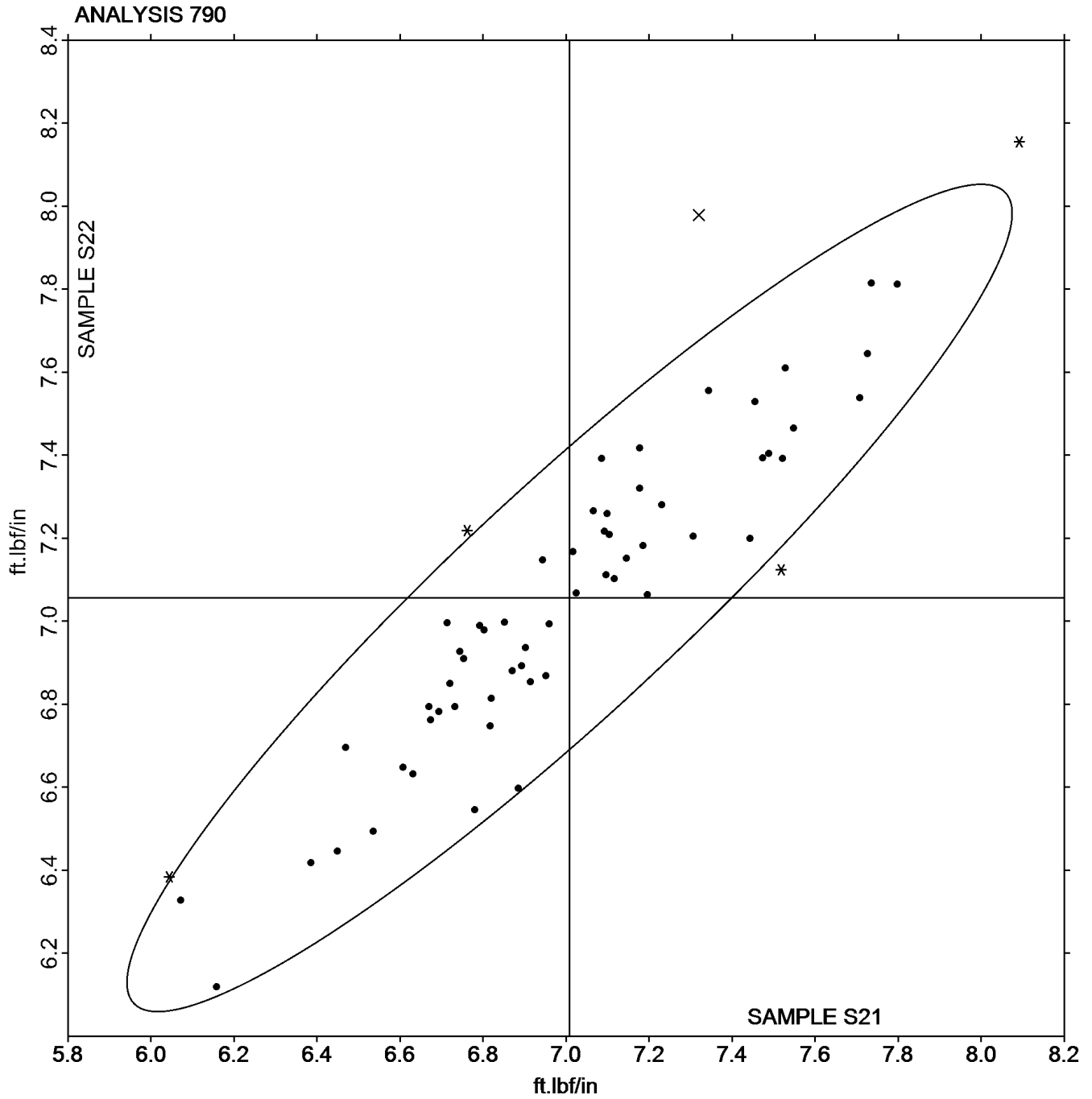
(WY) - Yasuda Seiki

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample S21: 7.0080 ft.lbf/in    Grand Mean Sample S22: 7.0562 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 Z21			Sample Z22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2H48HA		16.14000	-3.26665	-0.92	16.76000	-3.46829	-0.72	WZ
2ZJKRQ		18.49000	-0.91665	-0.26	18.38000	-1.84829	-0.38	TO
38ZEK3		15.81800	-3.58865	-1.01	15.54600	-4.68229	-0.97	CE
6Q4ZZQ		17.72200	-1.68465	-0.47	19.17200	-1.05629	-0.22	CE
8DTA8G		16.80000	-2.60665	-0.73	16.10000	-4.12829	-0.86	TM
8N94MG		20.74360	1.33695	0.38	21.86480	1.63651	0.34	TO
96G76P		21.01460	1.60795	0.45	22.44000	2.21171	0.46	CE
B8VM9D		17.84000	-1.56665	-0.44	19.42500	-0.80329	-0.17	WZ
BV37JC		16.37820	-3.02845	-0.85	17.08440	-3.14389	-0.65	XX
FYNEWU		21.10400	1.69735	0.48	20.65720	0.42891	0.09	XX
M9Q6GH		20.78000	1.37335	0.39	21.02000	0.79171	0.16	TO
MZUER2		22.11660	2.70995	0.76	22.66960	2.44131	0.51	TO
RFBYJG		15.52400	-3.88265	-1.09	17.74000	-2.48829	-0.52	XX
TJ92J3		18.94400	-0.46265	-0.13	19.93600	-0.29229	-0.06	XX
UMK69J		24.20000	4.79335	1.35	24.68000	4.45171	0.92	XX
VNDG7V	*	29.21800	9.81135	2.76	35.60400	15.37571	3.19	XX
YMLQML		17.08000	-2.32665	-0.65	14.80200	-5.42629	-1.12	XX

Summary Statistics	
Grand Means	
19.406647 kJ/m <sup>2</sup>	20.228294 kJ/m <sup>2</sup>
Std Dev Btwn Labs	
3.553811 kJ/m <sup>2</sup>	4.824089 kJ/m <sup>2</sup>
Statistics based on 17 of 17 reporting participants	

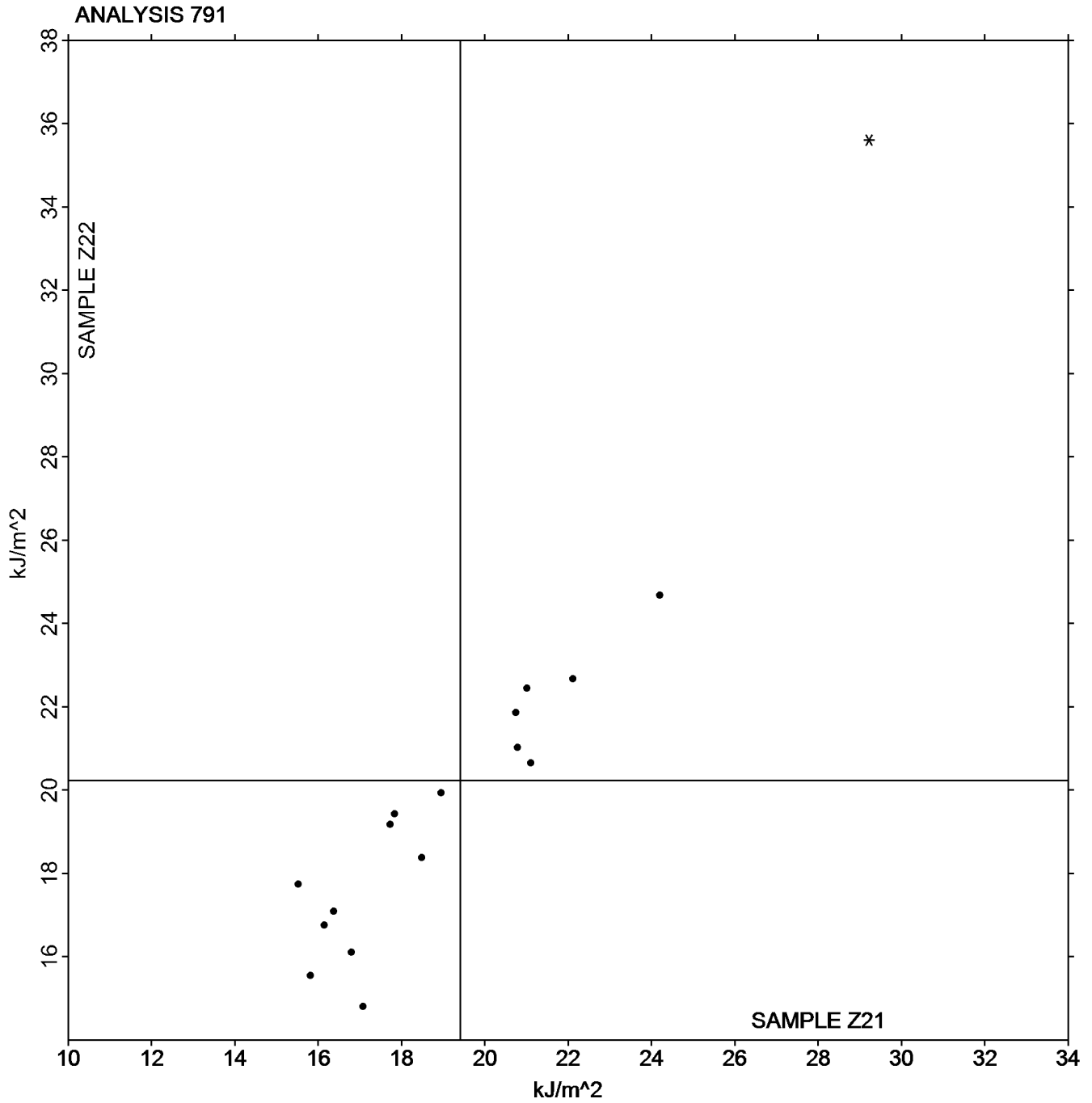
Sample Z21: ABS/PC & Sample Z22: ABS/PC

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

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

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

Grand Mean Sample Z21: 19.407 kJ/m<sup>2</sup> Grand Mean Sample Z22: 20.228 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 792**  
**Notched Charpy Impact - kJ/m<sup>2</sup>**

WebCode	Data Flag	Sample M21			Sample M22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2H48HA		26.04	-0.88	-0.88	26.38	-0.54	-0.42	WZ
3VP4WC	*	24.20	-2.72	-2.72	23.22	-3.70	-2.90	PO
44W34T		26.19	-0.73	-0.73	26.16	-0.76	-0.59	TO
633RRQ		26.92	0.00	0.00	26.48	-0.44	-0.35	CE
68XB4W		25.76	-1.16	-1.16	25.56	-1.36	-1.07	XX
6Q4ZZQ		25.93	-0.99	-1.00	26.35	-0.57	-0.45	CE
73XEZM		28.24	1.32	1.33	27.79	0.87	0.68	TM
7FP2BP		27.48	0.56	0.56	27.69	0.77	0.60	XX
8N94MG		26.51	-0.41	-0.41	26.45	-0.47	-0.37	TO
96G76P		26.34	-0.58	-0.58	26.54	-0.38	-0.30	CE
A78VLN		25.70	-1.22	-1.22	25.68	-1.24	-0.97	TM
AY96JL		27.90	0.98	0.98	27.74	0.82	0.64	WZ
AYLXVF		25.20	-1.72	-1.72	25.14	-1.78	-1.39	TM
B8VM9D		27.24	0.32	0.32	26.19	-0.73	-0.57	WZ
BV37JC		27.91	0.98	0.99	28.97	2.04	1.60	TM
DF34WP		26.85	-0.07	-0.07	27.16	0.24	0.19	WZ
EAAGLG		26.24	-0.68	-0.68	26.30	-0.62	-0.49	XX
EWZPTG	X	36.86	9.94	9.97	36.28	9.36	7.34	XX
FKJMNU		26.03	-0.90	-0.90	25.88	-1.05	-0.82	CE
G8CRBJ		27.70	0.77	0.78	27.82	0.90	0.71	CE
JNDFCA		27.58	0.66	0.66	27.80	0.88	0.69	XX
LGPCCKX		27.73	0.80	0.81	28.87	1.95	1.53	CE
M9Q6GH		27.24	0.32	0.32	28.32	1.40	1.10	TO
MZUER2		26.61	-0.31	-0.31	27.04	0.12	0.09	TO
N9PPP3	X	35.78	8.86	8.88	35.54	8.62	6.75	XX
NAFXP7		26.37	-0.55	-0.55	25.25	-1.68	-1.31	TM
NEBQH2		27.83	0.91	0.91	27.88	0.96	0.75	CE
QRABG4		27.66	0.74	0.74	27.24	0.32	0.25	TM
RFBYJG		27.70	0.78	0.78	26.61	-0.32	-0.25	TY
TAZ6Z6		27.34	0.42	0.42	27.98	1.06	0.83	TO
TJ92J3		26.56	-0.36	-0.36	26.47	-0.45	-0.35	XX
UMK69J		28.20	1.28	1.28	27.86	0.94	0.74	CE

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

WebCode	Data Flag	Sample M21			Sample M22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
VCXMQW		26.24	-0.68	-0.68	26.38	-0.54	-0.42	CE
VHPUDB		27.00	0.08	0.08	25.53	-1.39	-1.09	XX
VTMQGX	*	29.54	2.62	2.63	29.84	2.92	2.29	CE
WBLANK		27.17	0.25	0.25	27.19	0.27	0.21	XX
XMFQBZ		26.41	-0.51	-0.51	26.54	-0.38	-0.30	TM
XN3MEK	*	27.29	0.37	0.37	29.26	2.33	1.83	XX
YMLQML		27.93	1.01	1.01	26.85	-0.07	-0.05	WZ
ZU76T4		26.20	-0.72	-0.72	26.62	-0.30	-0.24	XX

**Summary Statistics**

Grand Means

26.921 kJ/m<sup>2</sup>26.922 kJ/m<sup>2</sup>

Std Dev Btwn Labs

0.997 kJ/m<sup>2</sup>1.276 kJ/m<sup>2</sup>

Statistics based on 38 of 40 reporting participants

Sample M21: ABS &amp; Sample M22: ABS

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

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

N9PPP3 (X) - Data for both samples are high.

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

(CE) - Ceast

(PO) - POE

(TM) - TMI

(TO) - Tinius Olsen

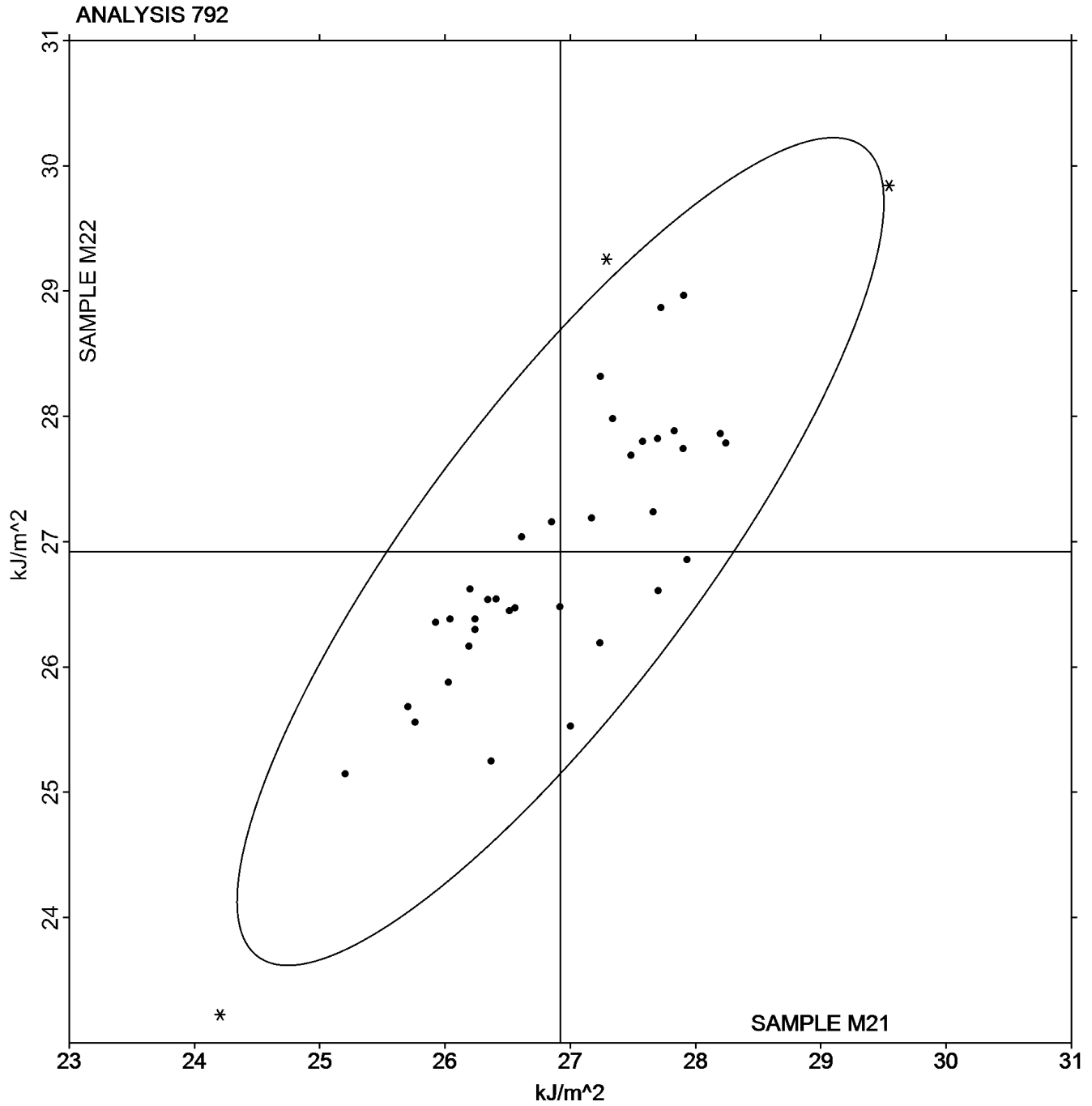
(TY) - Toyoseiki

(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 M21: 26.921 kJ/m<sup>2</sup> Grand Mean Sample M22: 26.922 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 E21			Sample E22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
4HC6JV	*	83.43	2.32	2.20	82.78	2.28	2.62	CE
633RRQ		81.40	0.30	0.28	80.50	0.01	0.01	CE
6UVQUK		81.20	0.10	0.09	80.75	0.26	0.30	CE
83WWLP		80.70	-0.40	-0.38	80.43	-0.07	-0.08	AT
8YE2EQ		81.75	0.65	0.61	80.88	0.38	0.44	CF
A4DANQ		81.38	0.27	0.26	81.68	1.18	1.36	DN
AYLXVF		80.15	-0.95	-0.91	79.25	-1.24	-1.43	XX
B7WL3L		79.15	-1.95	-1.86	78.78	-1.72	-1.97	CE
BV37JC		81.70	0.60	0.57	80.93	0.43	0.50	AT
BYM7KE		79.68	-1.43	-1.36	78.95	-1.54	-1.77	XA
CAGVQD		82.15	1.05	0.99	80.90	0.41	0.47	CE
D8LPRY		82.25	1.15	1.09	81.40	0.91	1.04	XX
FWGEHE		81.30	0.20	0.19	81.08	0.58	0.67	DN
FYNEWU		80.68	-0.43	-0.41	80.65	0.16	0.18	XX
H8EW88		79.93	-1.18	-1.12	79.53	-0.97	-1.11	RO
JNDFCA		81.13	0.02	0.02	79.55	-0.94	-1.08	TO
LDLLAB		81.55	0.45	0.42	80.33	-0.17	-0.19	AT
LM83LH		81.22	0.12	0.11	81.32	0.83	0.95	RO
LRLHCA		82.15	1.05	0.99	79.90	-0.59	-0.68	TO
LUPDVD		80.95	-0.15	-0.15	79.88	-0.62	-0.71	AT
N2K2KF	*	79.05	-2.05	-1.95	80.38	-0.12	-0.13	TO
N9PPP3		81.80	0.70	0.66	81.20	0.71	0.81	TO
NAFXP7		81.50	0.40	0.38	80.43	-0.07	-0.08	TO
NC67Y8		81.10	0.00	0.00	80.45	-0.04	-0.05	ZW
Q2UNA9		78.95	-2.15	-2.05	78.83	-1.67	-1.92	DN
RFBYJG		81.03	-0.08	-0.07	80.23	-0.27	-0.31	TY
TAZ6Z6		82.35	1.25	1.18	81.45	0.96	1.10	CE
V392KX		82.10	1.00	0.95	80.53	0.03	0.04	XX
VCXMQW		80.37	-0.73	-0.70	81.21	0.72	0.82	TO
VFYNVY		79.15	-1.95	-1.86	79.40	-1.09	-1.26	TO
WHJ3UT		82.25	1.15	1.09	80.93	0.43	0.50	RR
XMFQBZ		81.18	0.07	0.07	80.50	0.01	0.01	CE

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

WebCode	Data Flag	Sample E21			Sample E22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
XTG6RV		82.22	1.12	1.06	81.11	0.62	0.71	XX
YF9J6W		80.83	-0.27	-0.26	81.15	0.66	0.76	TO
YMLQML		80.93	-0.18	-0.17	80.03	-0.47	-0.54	AT

### Summary Statistics

Grand Means

81.103 Degrees C

80.492 Degrees C

Std Dev Btwn Labs

1.053 Degrees C

0.870 Degrees C

Statistics based on 35 of 35 reporting participants

Sample E21: ABS &amp; Sample E22: ABS

### 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

(XA) - Special In-House Instrument

(XX) - Instrument manufacturer not specified by lab

(ZW) - Zwick





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

WebCode	Data Flag	Sample G21			Sample G22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
633RRQ		66.3	-1.7	-1.03	67.7	-0.6	-0.37	CE
83WWLP		68.4	0.4	0.26	68.8	0.5	0.28	AT
CAGVQD		67.1	-0.8	-0.50	68.4	0.1	0.04	CE
FP2KHC		65.9	-2.1	-1.27	67.2	-1.1	-0.65	TO
G8CRBJ		69.9	2.0	1.18	69.2	0.9	0.54	RO
JNDFCA		68.1	0.1	0.06	67.2	-1.1	-0.64	TO
MWTJV6		67.8	-0.2	-0.10	66.8	-1.5	-0.92	XX
NAFXP7		67.0	-1.0	-0.58	68.0	-0.3	-0.17	TO
NC67Y8		69.7	1.7	1.04	69.2	0.9	0.54	ZW
QVQWNG		68.0	0.0	-0.01	65.6	-2.7	-1.60	XX
VCXMQW		67.1	-0.9	-0.52	66.4	-1.9	-1.13	TO
VFYNVY		66.3	-1.7	-1.01	67.7	-0.6	-0.35	TO
WHJ3UT		72.1	4.1	2.48	72.0	3.7	2.26	RR
XMFQBZ		69.0	1.0	0.61	69.9	1.6	0.96	CE
XTG6RV		66.9	-1.0	-0.61	70.3	2.0	1.21	XX

### Summary Statistics

Grand Means

67.96 Degrees C

68.28 Degrees C

Std Dev Btwn Labs

1.67 Degrees C

1.65 Degrees C

Statistics based on 15 of 15 reporting participants

Sample G21: PP &amp; Sample G22: PP

### Instrument Code List as Reported by the Labs

(AT) - Atlas

(CE) - Ceast

(RO) - Rosand

(RR) - Ray-Ran

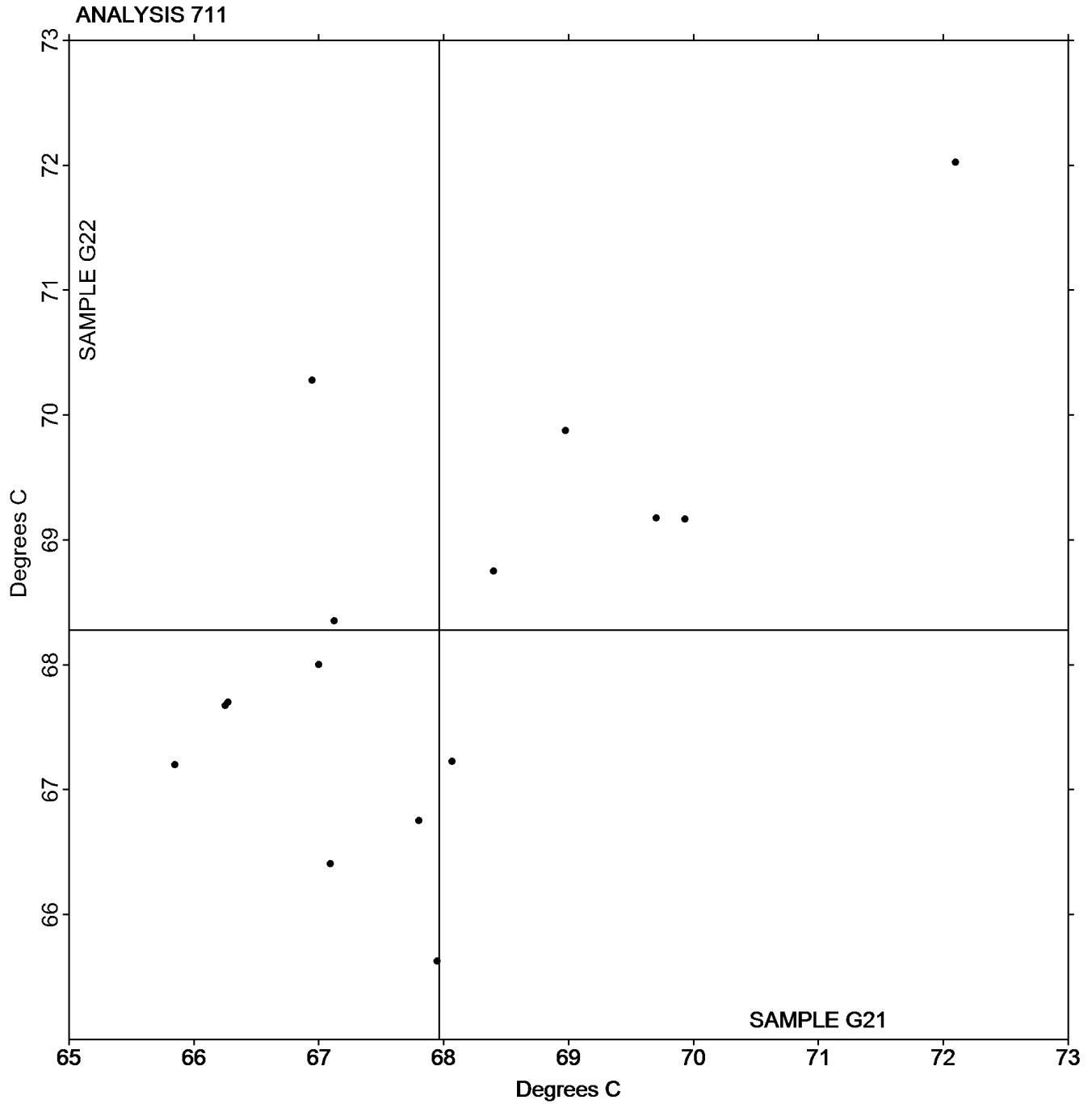
(TO) - Tinius Olsen

(XX) - Instrument manufacturer not specified by lab

(ZW) - Zwick

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

Grand Mean Sample G21: 67.964 Degrees C    Grand Mean Sample G22: 68.280 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 N21			Sample N22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2H48HA		83.05	1.58	1.36	83.33	1.38	1.15	CF
2ZJKRQ		81.20	-0.27	-0.23	80.98	-0.97	-0.81	TO
6Q4ZZQ	*	78.60	-2.87	-2.47	78.25	-3.69	-3.08	CE
73XEZM		82.85	1.38	1.19	83.23	1.28	1.07	AT
747QF4		83.95	2.48	2.14	84.10	2.16	1.80	XX
7FP2BP		83.10	1.63	1.40	83.68	1.73	1.45	XX
8N94MG		81.05	-0.42	-0.36	80.95	-0.99	-0.83	CE
8YWTNB		82.23	0.76	0.65	83.15	1.21	1.01	XX
A78VLN		80.43	-1.04	-0.90	81.23	-0.72	-0.60	CE
AYLXVF		80.18	-1.29	-1.11	80.63	-1.32	-1.10	IN
B8VM9D		81.18	-0.29	-0.25	81.48	-0.47	-0.39	CE
BV37JC		82.23	0.76	0.65	82.48	0.53	0.45	AT
CAGQHW		81.35	-0.12	-0.10	81.33	-0.62	-0.51	CF
EAAGLG		81.15	-0.32	-0.27	82.00	0.06	0.05	XX
FKJMNU		84.13	2.66	2.29	84.13	2.18	1.82	CE
FYNEWU		81.03	-0.44	-0.38	81.88	-0.07	-0.06	CE
G8CRBJ		81.03	-0.44	-0.37	81.70	-0.24	-0.20	CF
MZUER2		81.83	0.36	0.31	81.68	-0.27	-0.22	CE
NC67Y8		81.58	0.11	0.09	82.13	0.18	0.15	ZW
P8Q4B3		80.43	-1.04	-0.90	80.95	-0.99	-0.83	TO
PB6LK7		80.25	-1.22	-1.05	81.13	-0.82	-0.68	XX
Q2UNA9		80.95	-0.52	-0.45	81.00	-0.94	-0.79	DN
QXF7XH		82.00	0.53	0.46	82.60	0.66	0.55	AT
RFBYJG		81.28	-0.19	-0.17	82.08	0.13	0.11	TY
TDFZF3		79.58	-1.89	-1.63	80.53	-1.42	-1.18	CE
UMK69J		81.88	0.41	0.35	82.78	0.83	0.70	AT
VCXMQW		80.31	-1.16	-1.00	81.17	-0.77	-0.64	TO
VHPUDB		81.53	0.06	0.05	81.35	-0.59	-0.49	TO
VNDG7V		82.55	1.08	0.93	83.48	1.53	1.28	TO
WBLANK		81.80	0.33	0.29	82.50	0.56	0.47	XX
XMFQBZ		80.98	-0.49	-0.42	82.53	0.58	0.49	CE
YMLQML		81.33	-0.14	-0.12	81.80	-0.14	-0.12	AT

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

WebCode	Data Flag	Sample N21			Sample N22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
ZU76T4		81.53	0.06	0.05	81.93	-0.02	-0.01	TO

**Summary Statistics**

Grand Means

81.469 Degrees C

81.942 Degrees C

Std Dev Btwn Labs

1.162 Degrees C

1.198 Degrees C

Statistics based on 33 of 33 reporting participants

Sample N21: ABS &amp; Sample N22: ABS

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

(AT) - Atlas

(CE) - Ceast

(CF) - Coesfeld

(DN) - DYNISCO

(IN) - Instron

(TO) - Tinius Olsen

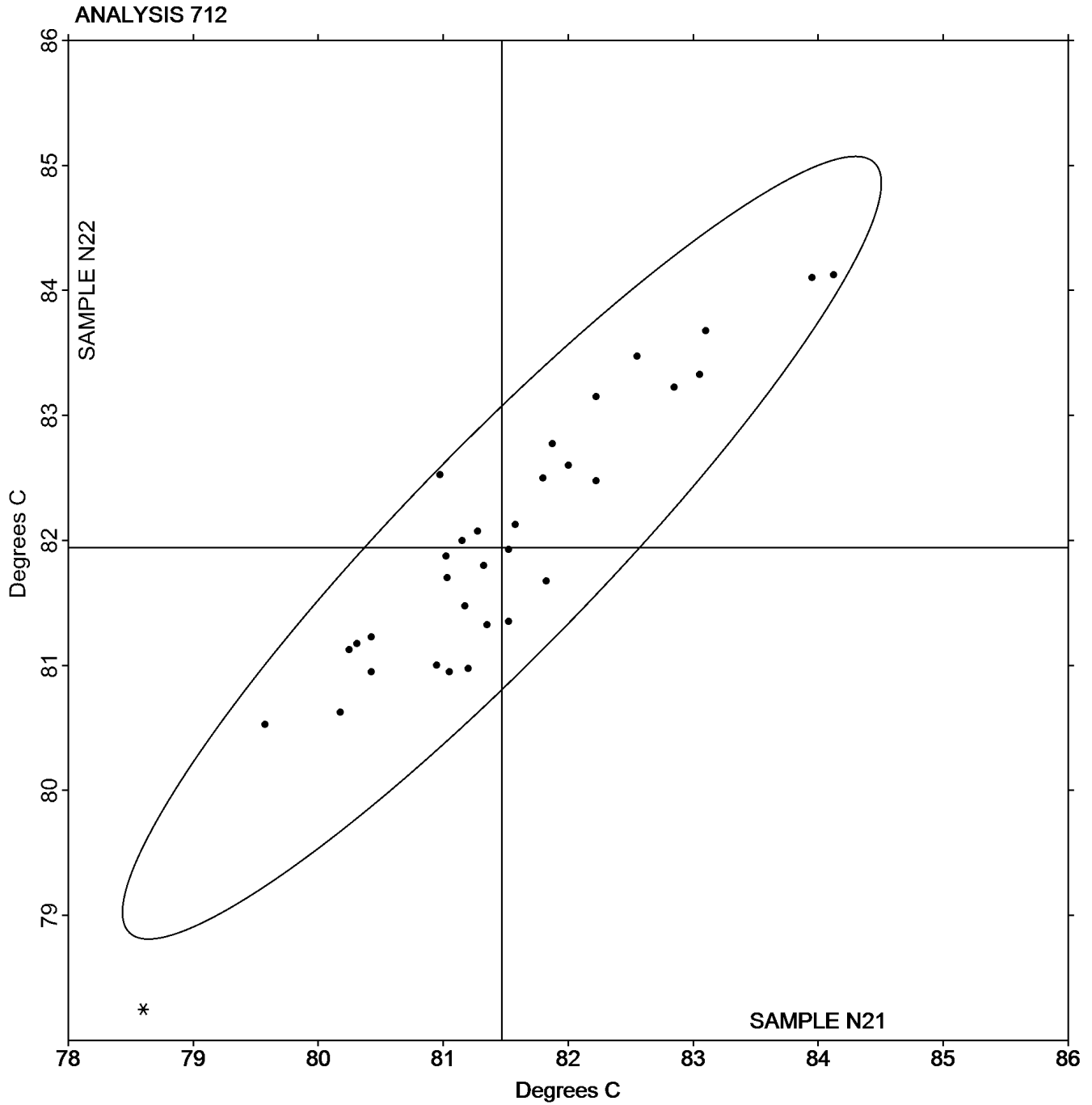
(TY) - Toyoseiki

(XX) - Instrument manufacturer not specified by lab

(ZW) - Zwick

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

Grand Mean Sample N21: 81.469 Degrees C    Grand Mean Sample N22: 81.942 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 H21			Sample H22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2H48HA		100.88	0.67	1.49	100.47	0.24	0.47	CF
2UYKFK		100.22	0.00	0.00	100.27	0.04	0.07	CE
3VP4WC		100.52	0.30	0.67	100.52	0.29	0.57	CE
4BF2ZT	*	100.73	0.52	1.16	101.32	1.09	2.14	CE
4HC6JV		100.37	0.15	0.33	100.47	0.24	0.47	CE
633RRQ		99.97	-0.25	-0.56	99.98	-0.25	-0.48	CE
6UVQUK		100.17	-0.05	-0.11	99.98	-0.25	-0.48	CE
73XEZM		100.48	0.27	0.60	100.72	0.49	0.96	AT
8MX2YW		101.25	1.03	2.31	101.30	1.07	2.11	TO
8YE2EQ		100.37	0.15	0.33	100.12	-0.11	-0.22	CF
9UZLKT		100.02	-0.20	-0.45	99.98	-0.25	-0.48	CE
A4DANQ		100.07	-0.15	-0.34	100.17	-0.06	-0.12	QA
AEGD3L		99.47	-0.75	-1.68	99.42	-0.81	-1.60	CE
B7WL3L		100.10	-0.12	-0.26	100.28	0.05	0.11	CE
BV37JC		100.77	0.55	1.23	100.82	0.59	1.16	AT
CAGQHW		99.37	-0.85	-1.90	99.40	-0.83	-1.63	CF
CQK8KN		100.33	0.12	0.26	100.63	0.40	0.80	CE
FWGEHE		100.25	0.03	0.07	100.33	0.10	0.21	DN
G8CRBJ		100.27	0.05	0.11	100.37	0.14	0.27	CF
H8EW88		100.07	-0.15	-0.34	99.85	-0.38	-0.74	RO
NC67Y8		100.40	0.18	0.41	100.42	0.19	0.37	WZ
P7GUJ6	*	100.30	0.08	0.19	99.70	-0.53	-1.04	TO
PGD328		100.27	0.05	0.11	100.43	0.20	0.40	CE
QRABG4		99.40	-0.82	-1.83	99.60	-0.63	-1.24	CE
QZ6F7Y		99.73	-0.48	-1.08	99.58	-0.65	-1.27	AT
RFBYJG		100.03	-0.18	-0.41	100.18	-0.05	-0.09	TY
UTCEDB		100.37	0.15	0.33	100.15	-0.08	-0.15	XX
VFYNVY		99.97	-0.25	-0.56	99.92	-0.31	-0.61	TO
VHPUDB		100.23	0.02	0.04	100.25	0.02	0.04	XX
WHJ3UT	X	104.83	4.62	10.33	104.48	4.25	8.37	RR
XCQZLM		99.82	-0.40	-0.90	99.83	-0.40	-0.78	TO
XMFQBZ		99.63	-0.58	-1.31	99.57	-0.66	-1.30	CE

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

WebCode	Data Flag	Sample H21			Sample H22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
YMLQML		101.15	0.93	2.09	101.30	1.07	2.11	CF

**Summary Statistics**

Grand Means

100.217 Degrees C

100.229 Degrees C

Std Dev Btwn Labs

0.447 Degrees C

0.508 Degrees C

Statistics based on 32 of 33 reporting participants

Sample H21: HIPS &amp; Sample H22: HIPS

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

WHJ3UT (X) - Data for both samples are high. Also Inconsistent in testing within both samples.

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

(AT) - Atlas

(CE) - Ceast

(CF) - Coesfeld

(DN) - DYNISCO

(QA) - Qualitest

(RO) - Rosand

(RR) - Ray-Ran

(TO) - Tinius Olsen

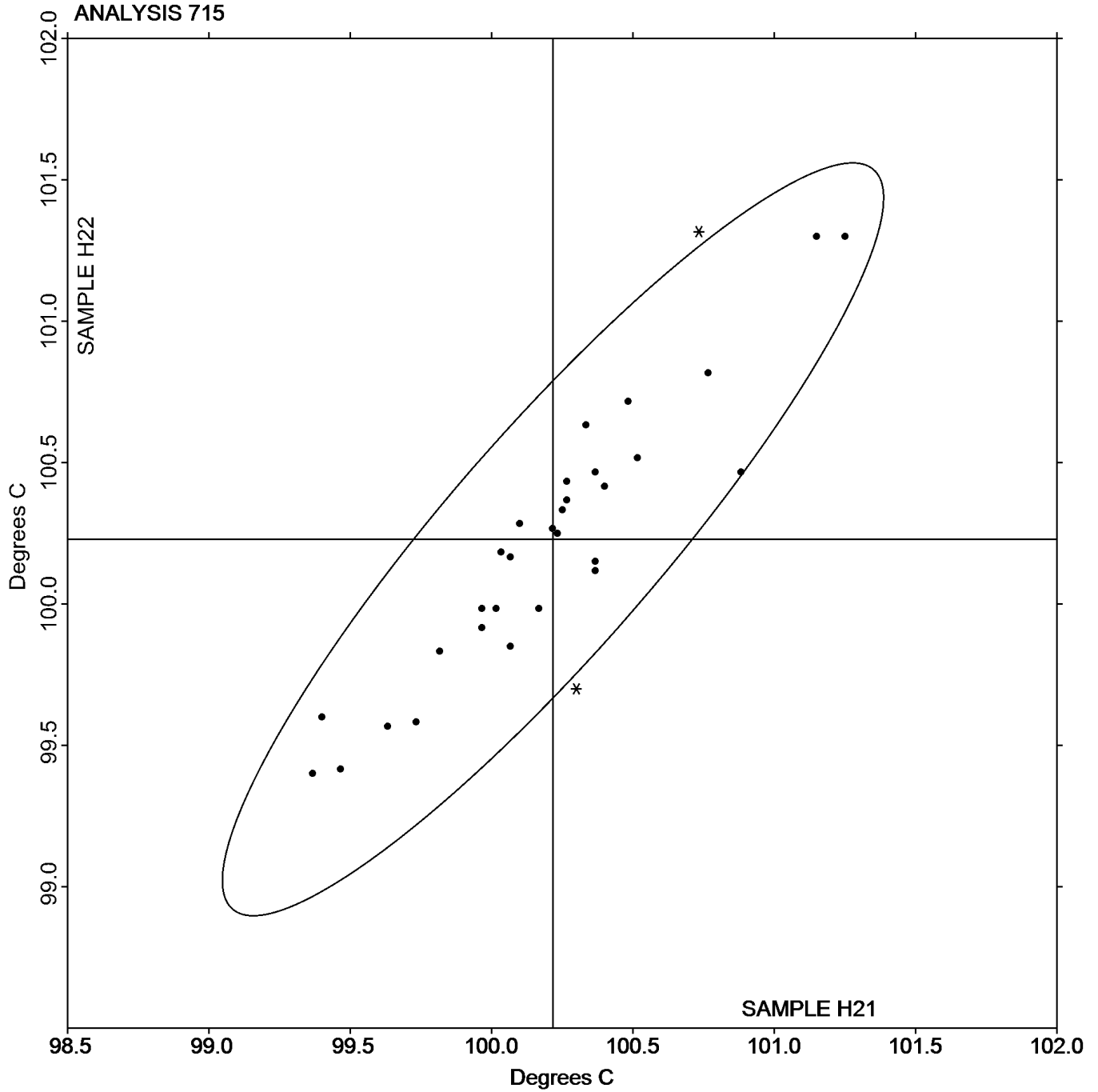
(TY) - Toyoseiki

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample H21: 100.22 Degrees C    Grand Mean Sample H22: 100.23 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 R21			Sample R22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2H48HA		102.20	-0.26	-0.31	102.10	-0.39	-0.48	CF
3VP4WC		102.97	0.51	0.61	103.18	0.70	0.86	CE
4HC6JV		102.73	0.27	0.33	102.95	0.46	0.57	CE
633RRQ		101.90	-0.56	-0.68	101.87	-0.62	-0.76	CE
6UVQUK		102.05	-0.41	-0.49	102.35	-0.13	-0.17	CE
73XEZM		103.25	0.79	0.95	103.33	0.85	1.05	AT
8MX2YW		103.23	0.77	0.93	103.27	0.78	0.96	TO
9UZLKT		102.03	-0.43	-0.51	102.03	-0.45	-0.56	CE
A4DANQ		103.15	0.69	0.83	102.95	0.46	0.57	QA
AEGD3L		101.23	-1.23	-1.48	101.32	-1.17	-1.45	CE
B7WL3L		102.03	-0.43	-0.51	102.35	-0.14	-0.17	CE
BV37JC		103.47	1.01	1.21	103.47	0.98	1.21	AT
CAGVQD		102.13	-0.33	-0.39	102.25	-0.24	-0.29	CE
CQK8KN		102.97	0.51	0.61	102.97	0.48	0.59	CE
FWGEHE		103.05	0.59	0.71	102.88	0.40	0.49	DN
G8CRBJ		102.63	0.17	0.21	102.73	0.25	0.30	CF
H8EW88	*	102.28	-0.18	-0.21	101.90	-0.59	-0.73	RO
N9PPP3		101.13	-1.33	-1.60	101.17	-1.32	-1.63	TO
NC67Y8		102.83	0.37	0.45	102.93	0.45	0.55	WZ
P7GUJ6		101.97	-0.49	-0.59	102.33	-0.15	-0.19	TO
QKAXA9		100.57	-1.89	-2.28	100.62	-1.87	-2.31	TO
QRABG4		101.32	-1.14	-1.38	101.38	-1.11	-1.37	CE
QZ6F7Y		102.05	-0.41	-0.49	102.05	-0.44	-0.54	AT
RFBYJG		102.60	0.14	0.17	102.72	0.23	0.28	TY
UTCEDB		103.45	0.99	1.19	103.42	0.93	1.15	XX
VCXMQW		102.99	0.53	0.64	102.99	0.50	0.62	TO
VFYNVY		101.88	-0.58	-0.69	101.78	-0.70	-0.87	TO
VHPUDB		102.37	-0.09	-0.11	102.22	-0.27	-0.33	XX
VTMQGX		102.73	0.27	0.33	102.85	0.36	0.45	AT
WHJ3UT	*	104.85	2.39	2.88	104.68	2.20	2.72	RR
XCQZLM		101.85	-0.61	-0.74	101.82	-0.67	-0.83	TO
YMLQML		102.82	0.36	0.43	102.72	0.23	0.28	CF

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

**Summary Statistics**

Grand Means	102.460 Degrees C	102.487 Degrees C
Std Dev Btwn Labs	0.830 Degrees C	0.809 Degrees C
Statistics based on 32 of 32 reporting participants		

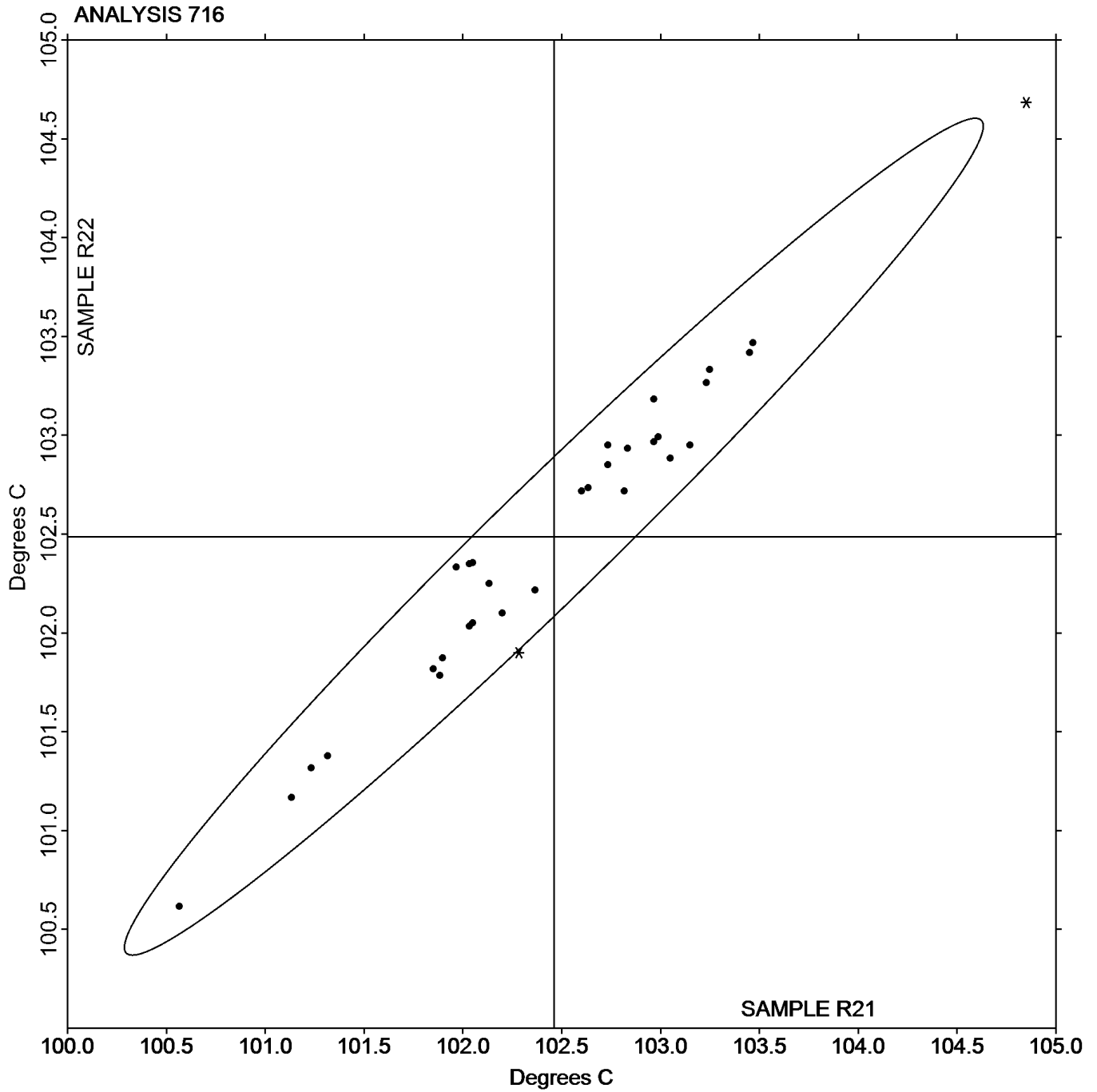
Sample R21: HIPS & Sample R22: HIPS

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

(AT) - Atlas	(CE) - Ceast
(CF) - Coesfeld	(DN) - DYNISCO
(QA) - Qualitest	(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 R21: 102.46 Degrees C    Grand Mean Sample R22: 102.49 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 X21			Sample X22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2H48HA		5.08	0.00	0.01	5.18	0.14	0.58	WZ
2MZ3W3	X	5.11	0.03	0.12	5.78	0.74	3.16	TO
2UXM44	*	4.46	-0.61	-2.58	4.47	-0.57	-2.44	XX
343VKP		5.24	0.16	0.66	5.10	0.05	0.21	DY
3LJ4GJ	X	5.43	0.35	1.48	4.79	-0.26	-1.11	TO
44W34T		5.00	-0.08	-0.32	5.00	-0.04	-0.19	TO
4HC6JV		4.95	-0.13	-0.54	4.95	-0.10	-0.43	GO
633RRQ		5.10	0.02	0.07	5.12	0.08	0.32	DY
73XEZM		4.96	-0.11	-0.48	4.95	-0.09	-0.39	KA
7AE4KG		5.28	0.20	0.83	5.21	0.17	0.71	TO
7FP2BP		5.12	0.04	0.16	5.14	0.09	0.38	XX
83WWLP		5.30	0.22	0.94	5.15	0.11	0.45	TO
8MHVJ8	X	6.40	1.32	5.56	4.90	-0.14	-0.62	TO
8N94MG		4.90	-0.18	-0.76	4.92	-0.12	-0.52	TO
8P86QM	*	4.50	-0.58	-2.42	4.43	-0.61	-2.61	CE
8YE2EQ		4.84	-0.24	-1.02	4.83	-0.21	-0.92	DY
96G76P	*	5.72	0.65	2.71	5.70	0.66	2.80	TO
9UZLKT	*	5.10	0.02	0.10	5.40	0.36	1.52	TO
A78VLN		5.20	0.12	0.52	5.15	0.11	0.45	TO
ABWFMH		4.95	-0.13	-0.54	4.75	-0.29	-1.26	DY
APX6MP		4.85	-0.23	-0.96	4.70	-0.34	-1.47	DY
AY96JL		5.03	-0.05	-0.22	4.91	-0.14	-0.60	DY
AYLXVF		5.30	0.22	0.94	5.35	0.31	1.30	TO
AZJ2UH		5.30	0.22	0.94	5.30	0.26	1.09	TO
B7WL3L		4.80	-0.28	-1.17	4.60	-0.44	-1.90	CE
B7XGMD		5.13	0.05	0.22	5.12	0.08	0.32	TO
B8VM9D		5.05	-0.03	-0.14	4.99	-0.06	-0.26	GO
B9Q6CZ		5.35	0.27	1.15	5.20	0.16	0.66	TO
BLDDBM		5.10	0.02	0.10	5.05	0.01	0.02	DY
BPG7AR		5.05	-0.03	-0.11	5.10	0.05	0.21	DY
BV37JC		5.41	0.34	1.42	5.19	0.15	0.63	TO
BYM7KE	X	12.00	6.92	29.09	12.25	7.21	30.79	TO

## Analysis 750

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

WebCode	Data Flag	Sample X21			Sample X22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
C2NDKH		5.10	0.02	0.10	5.05	0.01	0.02	TO
CAGVQD		5.20	0.12	0.52	5.25	0.21	0.88	CE
CF7D8A	*	4.34	-0.74	-3.12	4.43	-0.62	-2.63	TM
CTCJ4U		5.20	0.12	0.52	5.10	0.06	0.24	XX
DF34WP		5.07	-0.01	-0.04	5.10	0.05	0.22	GO
EAAGLG		5.00	-0.08	-0.32	5.10	0.06	0.24	XX
FP2KHC		4.95	-0.13	-0.54	4.95	-0.09	-0.41	KA
FWGEHE		5.07	-0.01	-0.05	5.11	0.07	0.28	DY
G74NEM	X	4.62	-0.46	-1.94	4.34	-0.71	-3.03	TO
G8CRBJ		4.51	-0.57	-2.38	4.54	-0.50	-2.16	XX
GA7HGY		5.09	0.01	0.05	5.07	0.02	0.09	CE
GC9FRQ	X	5.20	0.12	0.52	5.60	0.56	2.37	AT
H26R88	X	4.96	-0.11	-0.48	5.34	0.30	1.27	DA
H8EW88		5.20	0.12	0.52	5.10	0.06	0.24	TO
HBV4MU		5.44	0.36	1.52	5.46	0.41	1.75	TO
HL9D8D	*	5.14	0.06	0.26	5.39	0.34	1.45	TO
JNDFCA	X	4.08	-1.00	-4.21	4.13	-0.92	-3.92	CS
K3A6R7		5.14	0.06	0.24	5.18	0.14	0.58	DY
KPMP3L	X	4.65	-0.43	-1.80	4.15	-0.89	-3.82	KA
LBXACQ		5.10	0.03	0.11	5.08	0.04	0.17	CE
LKQDMF	*	4.70	-0.38	-1.59	4.95	-0.09	-0.41	TO
LLK4RU		4.80	-0.28	-1.17	4.90	-0.14	-0.62	KA
MWXKZR		5.10	0.02	0.10	4.85	-0.19	-0.83	TO
MZUER2		5.13	0.05	0.21	5.18	0.13	0.56	TO
N9PPP3		4.90	-0.18	-0.75	4.80	-0.24	-1.05	TO
NAFXP7		5.15	0.07	0.31	5.10	0.06	0.24	TO
NCKK4V	X	4.18	-0.90	-3.79	4.82	-0.23	-0.98	TO
NRBMKZ		5.12	0.04	0.18	5.09	0.04	0.17	GO
P8Q4B3		5.05	-0.03	-0.11	5.10	0.06	0.24	TO
PGD328		5.28	0.20	0.83	5.27	0.22	0.94	WZ
Q2UNA9		5.20	0.12	0.52	5.05	0.01	0.02	TO
R33DUW		5.15	0.07	0.28	5.14	0.10	0.41	GO

## Analysis 750

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

WebCode	Data Flag	Sample X21			Sample X22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
RFBYJG		5.17	0.09	0.37	5.01	-0.03	-0.15	TY
RYPDVJ		5.01	-0.07	-0.28	5.03	-0.02	-0.07	TO
T4R4E2		5.39	0.32	1.33	5.30	0.25	1.07	TO
TAZ6Z6		4.80	-0.28	-1.17	4.90	-0.14	-0.62	TO
TJ92J3		5.43	0.35	1.46	5.18	0.13	0.57	TO
U8QLB9		5.44	0.36	1.52	5.34	0.29	1.24	TO
UC3RL9		4.96	-0.12	-0.49	4.85	-0.19	-0.83	TM
UECKTU		5.10	0.02	0.10	5.12	0.08	0.32	DY
UTCEDB	X	4.95	-0.13	-0.54	4.05	-0.99	-4.25	XX
V392KX		5.27	0.19	0.80	5.16	0.11	0.49	TO
VCXMQW		5.29	0.21	0.87	5.07	0.02	0.09	TO
VGTE2E		5.24	0.16	0.66	5.24	0.19	0.81	TO
VJHKJP		5.26	0.18	0.77	5.33	0.28	1.20	TO
VLN9XF		5.12	0.04	0.16	5.14	0.10	0.41	TO
VNDG7V		5.30	0.22	0.94	5.30	0.26	1.09	TO
WJG7UV		5.15	0.07	0.31	5.10	0.06	0.24	TO
X28QXU		5.03	-0.05	-0.22	4.99	-0.05	-0.23	CE
XCBXGZ		4.88	-0.20	-0.85	4.92	-0.12	-0.53	TO
XJWQX7		5.12	0.04	0.16	4.93	-0.11	-0.49	TO
XMFQBZ		5.02	-0.06	-0.26	5.02	-0.02	-0.11	TO
XN3MEK		5.60	0.52	2.20	5.38	0.33	1.43	DY
XTG6RV		4.82	-0.26	-1.10	4.68	-0.37	-1.58	XX
XZHGTY		4.85	-0.23	-0.96	4.60	-0.44	-1.90	TY
YF9J6W		4.71	-0.37	-1.55	4.88	-0.17	-0.72	TO
YMLQML		5.11	0.03	0.12	5.13	0.09	0.37	TO
ZGHY2U		4.87	-0.21	-0.89	4.67	-0.38	-1.61	QT
ZJ4UFM		5.23	0.15	0.64	5.00	-0.04	-0.19	XX
ZU76T4		5.00	-0.08	-0.32	5.15	0.11	0.45	XX

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

Summary Statistics		
Grand Means	5.077 grams/10 mins	5.045 grams/10 mins
Std Dev Btwn Labs	0.238 grams/10 mins	0.234 grams/10 mins
Statistics based on 81 of 92 reporting participants		

Sample X21: LDPE & Sample X22: LDPE

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

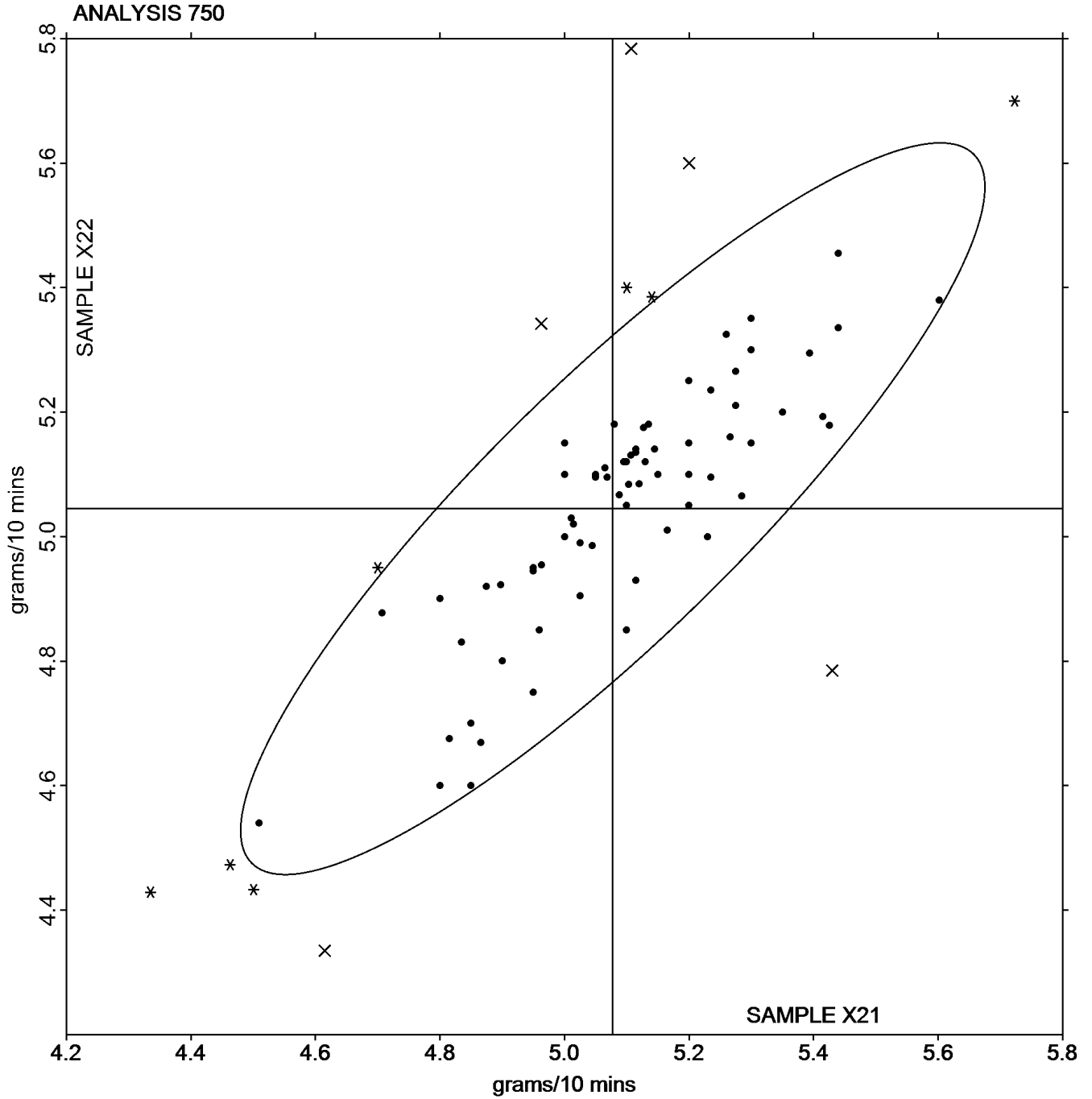
- 2MZ3W3 (X) - Inconsistent in testing between samples, data for Sample X22 are high.
- 3LJ4GJ (X) - Inconsistent in testing between samples.
- 8MHVJ8 (X) - Inconsistent in testing between samples, data for Sample X21 are high.
- BYM7KE (X) - Data for both samples are high.
- G74NEM (X) - Inconsistent in testing between samples, data for Sample X22 are low.
- GC9FRQ (X) - Inconsistent in testing between samples.
- H26R88 (X) - Inconsistent in testing between samples.
- JNDFCA (X) - Data for both samples are low.
- KPMP3L (X) - Inconsistent in testing between samples, data for Sample X22 are low.
- NCKK4V (X) - Inconsistent in testing between samples, data for Sample X21 are low.
- UTCEDB (X) - Inconsistent in testing between samples, data for Sample X22 are low.

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

- |   |                     |
|---|---------------------|
| (AT) - Atlas  | (CE) - Ceast        |
| (CS) - CSI  | (DA) - Davenport    |
| (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 X21: 5.0773 grams/10 mins    Grand Mean Sample X22: 5.0449 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 T21			Sample T22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
343VKP		1.04470	-0.00114	-0.56	1.04483	-0.00087	-0.43	XX
44W34T		1.04663	0.00080	0.39	1.04653	0.00083	0.41	XX
44YWJR		1.04600	0.00016	0.08	1.04600	0.00030	0.15	XX
4HC6JV		1.04210	-0.00374	-1.84	1.04250	-0.00320	-1.57	XX
633RRQ		1.04720	0.00136	0.67	1.04700	0.00130	0.64	XX
6Q4ZZQ		1.04860	0.00276	1.36	1.04883	0.00313	1.54	XX
6UPMTE		1.04470	-0.00114	-0.56	1.04503	-0.00067	-0.33	XX
73XEZM		1.04670	0.00086	0.42	1.04670	0.00100	0.49	XX
77WZLY		1.04527	-0.00056	-0.28	1.04452	-0.00118	-0.58	XX
7FP2BP		1.04687	0.00103	0.51	1.04703	0.00133	0.65	XX
83WWLP		1.04807	0.00223	1.10	1.04697	0.00127	0.62	XX
8N94MG	X	1.03957	-0.00627	-3.08	1.04237	-0.00333	-1.64	XX
8P86QM		1.04507	-0.00077	-0.38	1.04630	0.00060	0.29	XX
8ZRCRX		1.04743	0.00160	0.79	1.04747	0.00177	0.87	XX
96G76P		1.04767	0.00183	0.90	1.04693	0.00123	0.61	XX
9CEZXG		1.04400	-0.00184	-0.90	1.04500	-0.00070	-0.34	XX
A78VLN		1.04767	0.00183	0.90	1.04737	0.00167	0.82	XX
ABWFMH		1.04820	0.00236	1.16	1.04720	0.00150	0.74	XX
APX6MP		1.04787	0.00203	1.00	1.04777	0.00207	1.01	XX
AY96JL		1.04763	0.00180	0.88	1.04833	0.00263	1.29	XX
AYLXVF	X	1.04950	0.00366	1.80	1.05537	0.00967	4.75	XX
AZJ2UH		1.04823	0.00240	1.18	1.04807	0.00237	1.16	XX
B8VM9D		1.04733	0.00150	0.74	1.04700	0.00130	0.64	XX
BLDDBM		1.04737	0.00153	0.75	1.04763	0.00193	0.95	XX
BV37JC		1.04580	-0.00004	-0.02	1.04570	0.00000	0.00	XX
C2MKMA		1.04288	-0.00296	-1.45	1.04359	-0.00211	-1.04	XX
CAGQHW		1.04267	-0.00317	-1.56	1.04200	-0.00370	-1.82	XX
CAGVQD		1.04843	0.00260	1.28	1.04870	0.00300	1.47	XX
CBBGNB		1.04503	-0.00080	-0.39	1.04450	-0.00120	-0.59	XX
CFJZM4	X	1.04553	-0.00030	-0.15	1.04273	-0.00297	-1.46	XX
CRF4RX	X	1.09800	0.05216	25.65	1.04937	0.00367	1.80	XX
CRV8J4		1.04500	-0.00084	-0.41	1.04533	-0.00037	-0.18	XX

## Plastics Interlaboratory Testing Program

## Analysis 718

## Specific Gravity - sp gr 23/23 C

WebCode	Data Flag	Sample T21			Sample T22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
CU7AA9	*	1.04047	-0.00537	-2.64	1.04107	-0.00463	-2.28	XX
D2HJEG		1.04643	0.00060	0.29	1.04617	0.00047	0.23	XX
D3D7T7		1.04933	0.00350	1.72	1.04833	0.00263	1.29	XX
DEMWFEE		1.04730	0.00146	0.72	1.04690	0.00120	0.59	XX
DRWJLQ		1.04333	-0.00250	-1.23	1.04367	-0.00203	-1.00	XX
EAAGLG		1.04713	0.00130	0.64	1.04737	0.00167	0.82	XX
EDPTFC	X	1.04233	-0.00350	-1.72	1.04617	0.00047	0.23	XX
FGMWK4		1.04322	-0.00261	-1.28	1.04224	-0.00346	-1.70	XX
FMV8KB	X	1.05077	0.00493	2.42	1.04523	-0.00047	-0.23	XX
FP2KHC		1.04530	-0.00054	-0.26	1.04377	-0.00193	-0.95	XX
FWGEHE		1.04333	-0.00250	-1.23	1.04433	-0.00137	-0.67	XX
G74NEM		1.04333	-0.00250	-1.23	1.04467	-0.00103	-0.51	XX
G8CRBJ		1.04400	-0.00184	-0.90	1.04300	-0.00270	-1.33	XX
GJTEHY		1.04633	0.00050	0.24	1.04633	0.00063	0.31	XX
GPB8AP		1.04787	0.00203	1.00	1.04770	0.00200	0.98	XX
GYZXUW		1.04757	0.00173	0.85	1.04750	0.00180	0.88	XX
H4C6TF	*	1.04423	-0.00160	-0.79	1.04240	-0.00330	-1.62	XX
H62B97		1.04767	0.00183	0.90	1.04700	0.00130	0.64	XX
JAWHAU		1.04710	0.00126	0.62	1.04777	0.00207	1.01	XX
JNDFCA		1.04610	0.00026	0.13	1.04533	-0.00037	-0.18	XX
L32CKH		1.04500	-0.00084	-0.41	1.04500	-0.00070	-0.34	XX
LDLLAB		1.04703	0.00120	0.59	1.04637	0.00067	0.33	XX
LGPCKX		1.04167	-0.00417	-2.05	1.04263	-0.00307	-1.51	XX
LKQDMF	X	1.04167	-0.00417	-2.05	1.03700	-0.00870	-4.27	XX
LLK4RU		1.04417	-0.00167	-0.82	1.04363	-0.00207	-1.02	XX
LRLHCA		1.04780	0.00196	0.97	1.04853	0.00283	1.39	XX
LWEJDN		1.04677	0.00093	0.46	1.04607	0.00037	0.18	XX
MHEZHJ		1.04653	0.00070	0.34	1.04707	0.00137	0.67	XX
MWTJV6		1.04537	-0.00047	-0.23	1.04473	-0.00097	-0.48	XX
MZUER2		1.04423	-0.00160	-0.79	1.04457	-0.00113	-0.56	XX
N2K2KF		1.04263	-0.00320	-1.58	1.04217	-0.00353	-1.74	XX
N9PPP3	X	1.03537	-0.01047	-5.15	1.03523	-0.01047	-5.14	XX

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

WebCode	Data Flag	Sample T21			Sample T22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
NAFXP7		1.04500	-0.00084	-0.41	1.04500	-0.00070	-0.34	XX
P8Q4B3		1.04507	-0.00077	-0.38	1.04487	-0.00083	-0.41	XX
Q2UNA9		1.04567	-0.00017	-0.08	1.04467	-0.00103	-0.51	XX
QELD8T		1.04587	0.00003	0.01	1.04650	0.00080	0.39	XX
QT4XVT		1.04467	-0.00117	-0.58	1.04500	-0.00070	-0.34	XX
QXF7XH		1.04667	0.00083	0.41	1.04567	-0.00003	-0.02	XX
RAQUT2	*	1.04187	-0.00397	-1.95	1.04347	-0.00223	-1.10	XX
RCKXC		1.04720	0.00136	0.67	1.04560	-0.00010	-0.05	XX
RFBYJG		1.04590	0.00006	0.03	1.04547	-0.00023	-0.12	XX
TAZ6Z6		1.04670	0.00086	0.42	1.04703	0.00133	0.65	XX
TDFZF3		1.04647	0.00063	0.31	1.04683	0.00113	0.56	XX
TJ92J3		1.04500	-0.00084	-0.41	1.04500	-0.00070	-0.34	XX
TKLLEX		1.04393	-0.00190	-0.94	1.04430	-0.00140	-0.69	XX
U62D3R	X	1.03757	-0.00827	-4.07	1.04013	-0.00557	-2.74	XX
U8QLB9		1.04557	-0.00027	-0.13	1.04527	-0.00043	-0.21	XX
UMK69J		1.04423	-0.00160	-0.79	1.04413	-0.00157	-0.77	XX
V392KX	*	1.04200	-0.00384	-1.89	1.04067	-0.00503	-2.47	XX
V3AUH7		1.04803	0.00220	1.08	1.04687	0.00117	0.57	XX
V7TTUF		1.04447	-0.00137	-0.67	1.04530	-0.00040	-0.20	XX
VCXMQW		1.04233	-0.00350	-1.72	1.04150	-0.00420	-2.06	XX
VFYNVY		1.05033	0.00450	2.21	1.05067	0.00497	2.44	XX
VG9KF4		1.04503	-0.00080	-0.39	1.04497	-0.00073	-0.36	XX
VTMQGX		1.04763	0.00180	0.88	1.04730	0.00160	0.79	XX
VXE39N		1.04322	-0.00262	-1.29	1.04323	-0.00247	-1.22	XX
WHJ3UT		1.04870	0.00286	1.41	1.04823	0.00253	1.24	XX
WJG7UV		1.04730	0.00146	0.72	1.04660	0.00090	0.44	XX
X28QXU		1.05000	0.00416	2.05	1.05000	0.00430	2.11	XX
XA3QCL		1.04667	0.00083	0.41	1.04700	0.00130	0.64	XX
XA3QE8	*	1.04404	-0.00180	-0.88	1.04198	-0.00372	-1.83	XX
XMFQBZ		1.04603	0.00020	0.10	1.04660	0.00090	0.44	XX
XNN3NV		1.04627	0.00043	0.21	1.04703	0.00133	0.65	XX

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

WebCode	Data Flag	Sample T21			Sample T22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
XTG6RV		1.04550	-0.00034	-0.17	1.04437	-0.00133	-0.66	XX
XXT9KJ	X	1.03833	-0.00750	-3.69	1.03767	-0.00803	-3.95	XX
XZHGTY		1.04473	-0.00110	-0.54	1.04417	-0.00153	-0.75	XX
YF9J6W	X	1.03733	-0.00850	-4.18	1.04033	-0.00537	-2.64	XX
YMLQML		1.04543	-0.00040	-0.20	1.04597	0.00027	0.13	XX
ZDF8KG		1.05006	0.00423	2.08	1.04989	0.00419	2.06	XX
ZGHY2U		1.04727	0.00143	0.70	1.04677	0.00107	0.52	XX
ZL7TQF		1.04400	-0.00184	-0.90	1.04467	-0.00103	-0.51	XX
ZU76T4		1.04753	0.00170	0.83	1.04647	0.00077	0.38	XX
ZYFGRP	X	1.05083	0.00500	2.46	1.04143	-0.00427	-2.10	XX

Summary Statistics			
Grand Means	1.045836	sp gr 23/23 C	1.045701 sp gr 23/23 C
Std Dev Btwn Labs	0.002033	sp gr 23/23 C	0.002036 sp gr 23/23 C
Statistics based on 93 of 105 reporting participants			

Sample T21: ABS & Sample T22: ABS

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

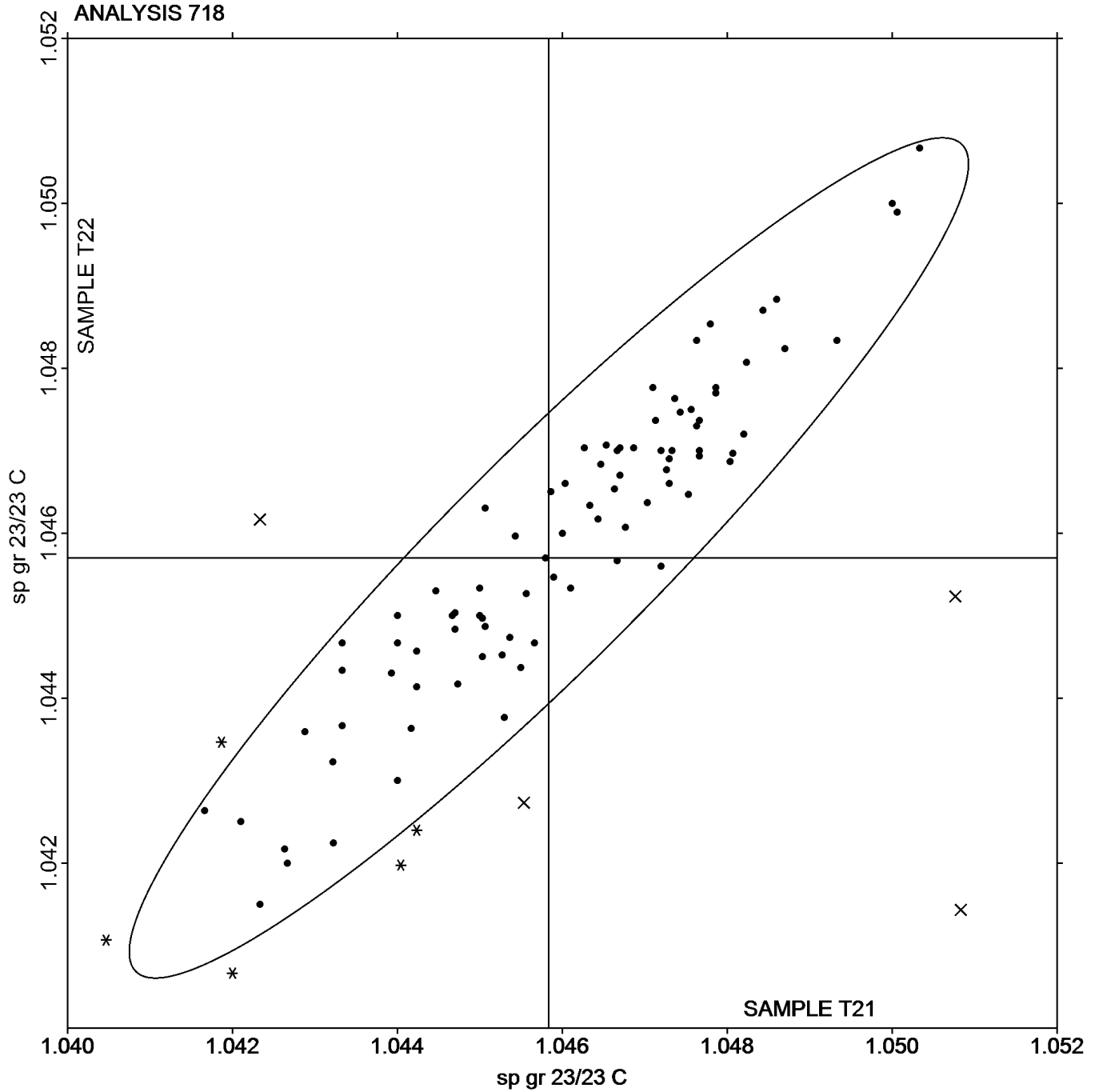
- 8N94MG (X) - Inconsistent in testing between samples, data for Sample T21 are low.
- AYLXVF (X) - Inconsistent in testing between samples, data for Sample T22 are high.
- CFJZM4 (X) - Inconsistent in testing between samples.
- CRF4RX (X) - Inconsistent in testing between samples, data for Sample T21 are high.
- EDPTFC (X) - Inconsistent in testing between samples and inconsistent in testing within Sample T21.
- FMV8KB (X) - Inconsistent in testing between samples and inconsistent in testing within Sample T22.
- LKQDMF (X) - Inconsistent in testing between samples, data for Sample T22 are low.
- N9PPP3 (X) - Data for both samples are low.
- U62D3R (X) - Inconsistent in testing between samples, data for Sample T21 are low.
- XXT9KJ (X) - Data for both samples are low.
- YF9J6W (X) - Inconsistent in testing between samples, data for Sample T21 are low.
- ZYFGRP (X) - Inconsistent in testing between samples.

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

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

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

Grand Mean Sample T21: 1.0458 sp gr 23/23 C    Grand Mean Sample T22: 1.0457 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 L21			Sample L22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2H48HA	X	14.880	-0.275	-4.48	14.935	-0.223	-3.18	XX
2MZ3W3		15.200	0.044	0.72	15.243	0.085	1.22	XX
2UYKFK	X	19.905	4.750	77.32	19.210	4.052	57.90	XX
3EY2EM		15.050	-0.105	-1.71	15.050	-0.108	-1.54	XX
3YUEAF		15.130	-0.025	-0.41	15.100	-0.058	-0.82	XX
44W34T	*	14.995	-0.160	-2.61	14.995	-0.163	-2.32	XX
44YWJR		15.200	0.045	0.73	15.210	0.052	0.75	XX
4HC6JV		15.268	0.112	1.83	15.236	0.078	1.12	XX
633RRQ		15.200	0.045	0.73	15.175	0.017	0.25	XX
7AE4KG		15.190	0.035	0.56	15.210	0.052	0.75	XX
7FP2BP		15.165	0.010	0.16	15.160	0.002	0.03	XX
7NV6WE	X	14.850	-0.305	-4.97	15.020	-0.138	-1.97	XX
83WWLP		15.195	0.040	0.65	15.175	0.017	0.25	XX
8MX2YW		15.090	-0.065	-1.06	15.060	-0.098	-1.40	XX
8N94MG		15.082	-0.073	-1.19	15.122	-0.036	-0.51	XX
8P86QM		15.120	-0.035	-0.57	15.160	0.002	0.03	XX
96G76P		15.092	-0.063	-1.02	15.250	0.092	1.32	XX
A78VLN		15.175	0.020	0.32	15.160	0.002	0.03	XX
ABWFMH		15.170	0.015	0.24	15.190	0.032	0.46	XX
APX6MP		15.175	0.020	0.32	15.200	0.042	0.60	XX
AY96JL		15.220	0.065	1.05	15.285	0.127	1.82	XX
AYLXVF		15.105	-0.050	-0.82	15.105	-0.053	-0.75	XX
B8VM9D		15.135	-0.020	-0.33	15.060	-0.098	-1.40	XX
B9Q6CZ		15.230	0.075	1.22	15.155	-0.003	-0.04	XX
BLDDBM		15.140	-0.015	-0.25	15.195	0.037	0.53	XX
BPG7AR		15.130	-0.025	-0.41	15.195	0.037	0.53	XX
BV37JC		15.181	0.026	0.42	15.034	-0.124	-1.77	XX
CRF4RX		15.200	0.045	0.73	15.200	0.042	0.60	XX
EAAGLG		15.170	0.015	0.24	15.230	0.072	1.03	XX
FMV8KB		15.155	0.000	-0.01	15.145	-0.013	-0.18	XX
FWGEHE		15.185	0.030	0.48	15.145	-0.013	-0.18	XX
FYNEWU		15.160	0.005	0.08	15.265	0.107	1.53	XX

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

WebCode	Data Flag	Sample L21			Sample L22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
G8CRBJ		15.270	0.115	1.87	15.185	0.027	0.39	XX
HBV4MU		15.145	-0.010	-0.17	15.185	0.027	0.39	XX
HF6LLM		15.065	-0.090	-1.47	15.035	-0.123	-1.75	XX
HL9D8D		15.175	0.020	0.32	15.100	-0.058	-0.82	XX
K3A6R7		15.060	-0.095	-1.55	15.195	0.037	0.53	XX
LDLLAB		15.145	-0.010	-0.17	15.205	0.047	0.68	XX
LGPCXX		15.090	-0.065	-1.06	15.025	-0.133	-1.90	XX
LLK4RU		15.095	-0.060	-0.98	15.095	-0.063	-0.90	XX
LM83LH		15.110	-0.045	-0.74	15.080	-0.078	-1.11	XX
MHEZHJ		15.080	-0.075	-1.23	15.110	-0.048	-0.68	XX
MWXKZR		15.214	0.059	0.96	15.211	0.053	0.76	XX
MZUER2		15.141	-0.015	-0.24	15.040	-0.118	-1.69	XX
N2K2KF		15.145	-0.010	-0.17	15.135	-0.023	-0.32	XX
NAFXP7		15.150	-0.005	-0.09	15.110	-0.048	-0.68	XX
P8Q4B3		15.190	0.035	0.56	15.155	-0.003	-0.04	XX
Q2UNA9		15.240	0.085	1.38	15.275	0.117	1.68	XX
QT4XVT		15.100	-0.055	-0.90	15.200	0.042	0.60	XX
RAQUT2		15.280	0.125	2.03	15.155	-0.003	-0.04	XX
RCCKXC		15.175	0.020	0.32	15.165	0.007	0.10	XX
RU7KEB	*	15.310	0.155	2.52	15.335	0.177	2.53	XX
T4R4E2		15.180	0.025	0.40	15.200	0.042	0.60	XX
TDFZF3		15.165	0.010	0.16	15.195	0.037	0.53	XX
TJ92J3		15.080	-0.075	-1.23	15.125	-0.033	-0.47	XX
UU2MJ7		15.135	-0.020	-0.33	15.080	-0.078	-1.11	XX
V392KX		15.218	0.062	1.01	15.168	0.010	0.14	XX
VCMQW		15.120	-0.035	-0.57	15.185	0.027	0.39	XX
VTMQGX		15.060	-0.095	-1.55	15.210	0.052	0.75	XX
WJX2F4	X	15.235	0.080	1.30	15.790	0.632	9.04	XX
X28QXU		15.155	0.000	-0.01	15.145	-0.013	-0.18	XX
XTG6RV	X	14.850	-0.305	-4.97	14.920	-0.238	-3.40	XX
XZHGTY		15.218	0.063	1.02	15.122	-0.036	-0.51	XX
YMLQML	X	14.845	-0.310	-5.05	14.945	-0.213	-3.04	XX

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

WebCode	Data Flag	Sample L21			Sample L22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
ZJ4UFM		15.145	-0.010	-0.17	15.170	0.012	0.18	XX

Summary Statistics			
Grand Means	15.1553	Percent	15.1577 Percent
Stnd Dev Btwn Labs	0.0614	Percent	0.0700 Percent
Statistics based on 59 of 65 reporting participants			

Sample L21: PBT & Sample L22: PBT

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

- 2H48HA (X) - Data for both samples are low.
- 2UYKFK (X) - Data for both samples are high. Also Inconsistent in testing within both samples.
- 7NV6WE (X) - Low data for Sample L21.
- WJX2F4 (X) - High data for Sample L22. Also Inconsistent in testing within both samples.
- XTG6RV (X) - Data for both samples are low.
- YMLQML (X) - Data for both samples are low. Also Inconsistent in testing within Sample L21.

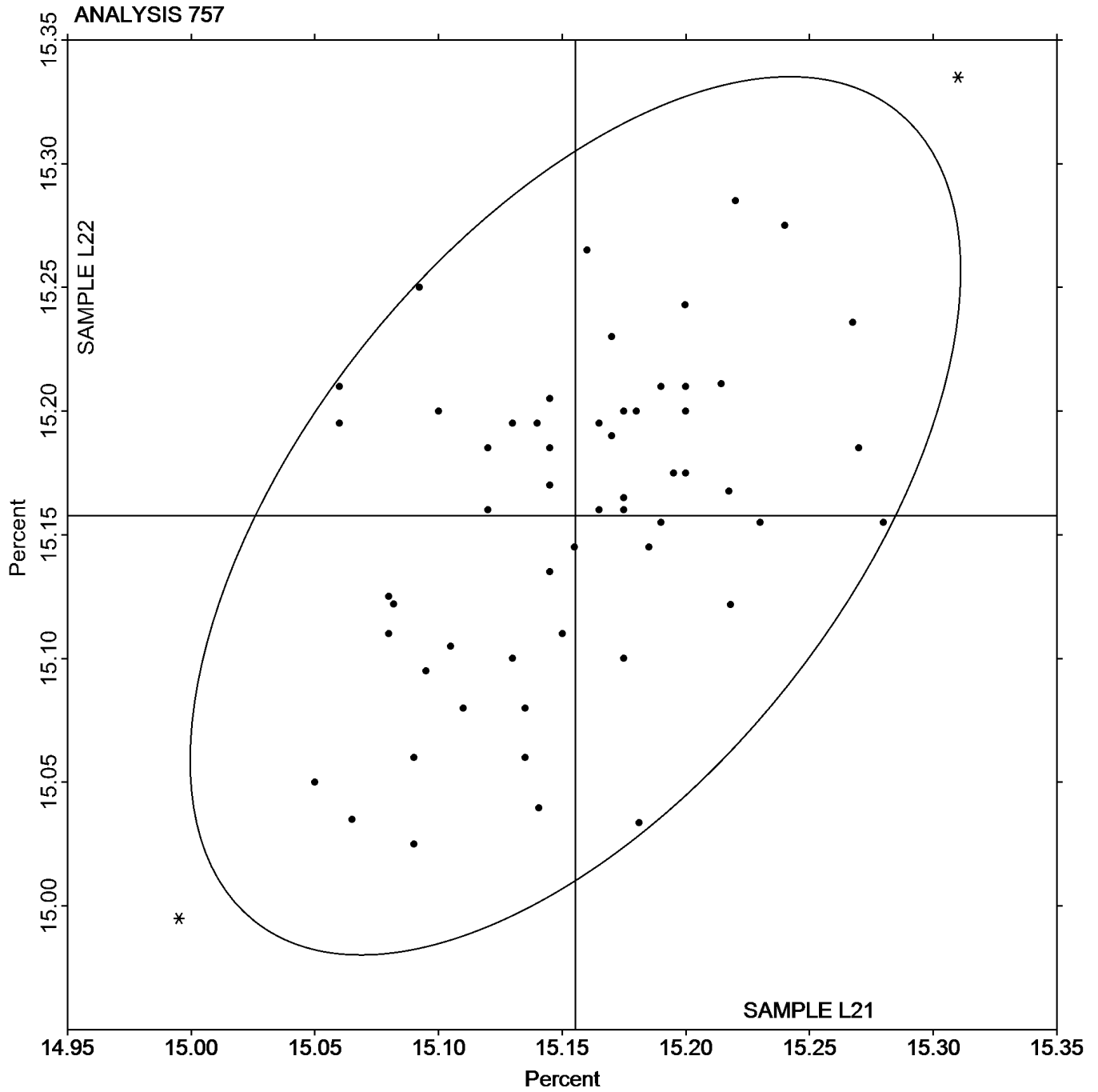
**Instrument Code List as Reported by the Labs**

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



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

Grand Mean Sample L21: 15.155 Percent    Grand Mean Sample L22: 15.158 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 B21			Sample B22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UXN6P		1,532	-158	-1.37	1,484	-214	-1.82	IR
3R9EX9		1,703	13	0.12	1,724	26	0.23	IM
4BF2ZT		1,639	-51	-0.44	1,626	-72	-0.61	IN
4HC6JV		1,842	153	1.32	1,912	215	1.83	WZ
4YKZDQ		1,825	136	1.17	1,786	88	0.75	IN
8DB2K9		1,763	74	0.64	1,753	55	0.47	IN
8MX2YW		1,779	89	0.77	1,826	128	1.09	IN
8YE2EQ		1,399	-291	-2.51	1,452	-246	-2.09	IN
A78VLN		1,695	5	0.05	1,714	16	0.14	IN
AKLWKY		1,770	80	0.70	1,765	67	0.57	IN
FP2KHC		1,602	-88	-0.76	1,661	-37	-0.31	IN
FYNEWU		1,549	-141	-1.22	1,558	-139	-1.19	IN
GA7HGY	X	1,093	-596	-5.16	1,111	-586	-5.00	IN
GG48ZN		1,833	144	1.24	1,813	115	0.98	TH
JFJEUB		1,799	110	0.95	1,774	76	0.65	IN
MWTJV6		1,653	-37	-0.32	1,673	-25	-0.21	XX
NC67Y8		1,714	24	0.21	1,862	164	1.40	IM
UC3RL9		1,655	-35	-0.30	1,651	-47	-0.40	OA
UPABQU		1,717	27	0.24	1,671	-26	-0.22	TY
VFYNVY		1,539	-151	-1.30	1,472	-226	-1.93	MT
WHJ3UT		1,812	122	1.06	1,729	31	0.26	LI
XD869R		1,699	10	0.08	1,681	-17	-0.14	MT
XMFQBZ		1,740	50	0.43	1,726	28	0.24	IN
YV3238		1,760	70	0.61	1,754	56	0.48	ME
ZDCMWE		1,532	-158	-1.36	1,679	-19	-0.16	IN

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

Summary Statistics	
Grand Means	
1,689.6 psi	1,697.6 psi
Stnd Dev Btwn Labs	
115.7 psi	117.3 psi
Statistics based on 24 of 25 reporting participants	

Sample B21: LDPE & Sample B22: LDPE

**Comments on assigned Data Flags for Test #770**

GA7HGY (X) - Data for both samples are low.

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

(IM) - Instru-Met Instruments

(IN) - Instron

(IR) - Instron with retrofit

(LI) - Lloyd Instruments

(ME) - Metrotech

(MT) - MTS/Sintech

(OA) - Oakland Testing

(TH) - Thwing Albert

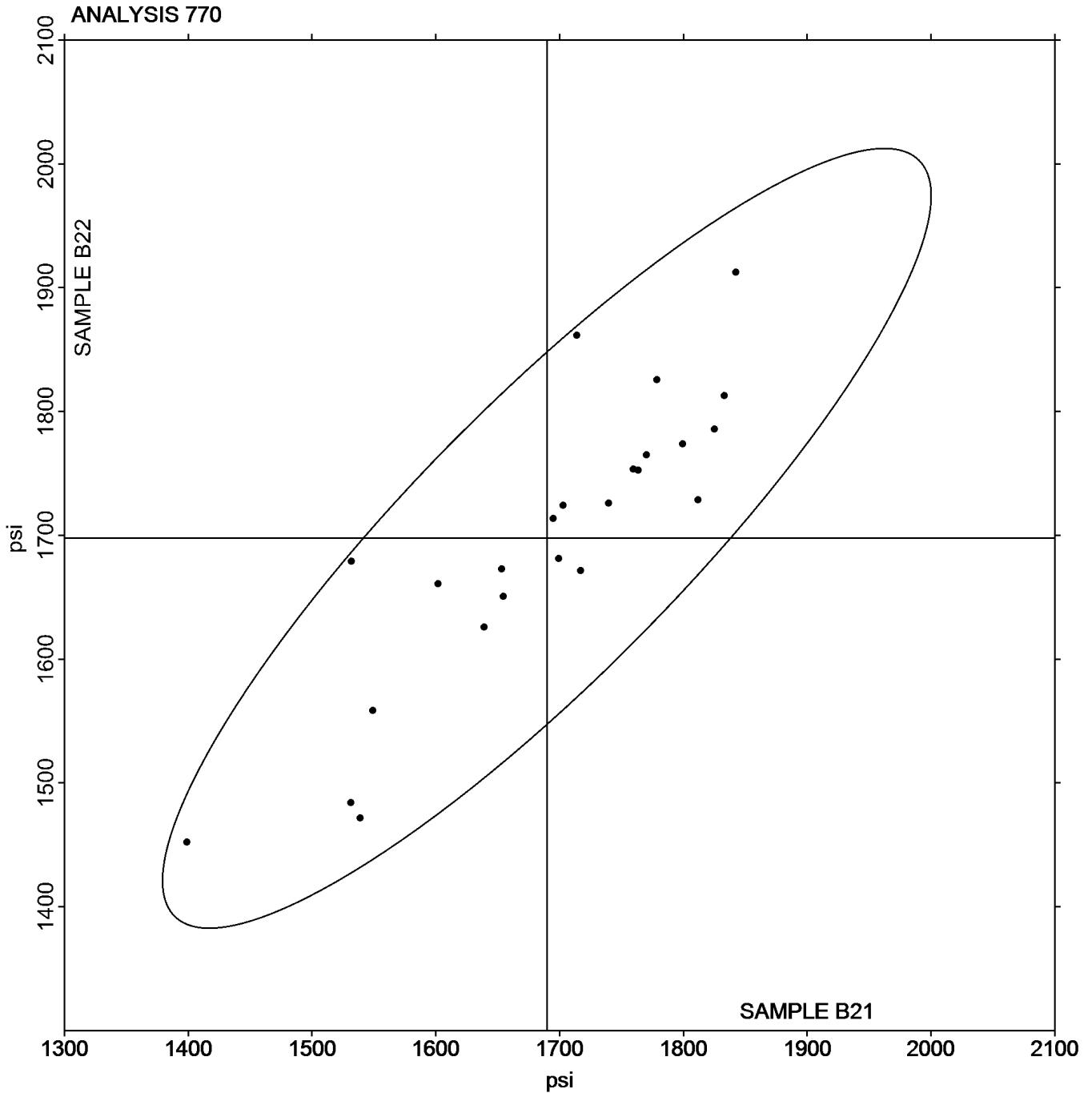
(TY) - Toyoseiki

(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 B21: 1,689.61 psi    Grand Mean Sample B22: 1,697.62 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 B21			Sample B22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UXN6P		3,223	210	0.54	3,178	133	0.33	IN
3R9EX9		3,206	193	0.50	3,234	189	0.47	IM
4BF2ZT		3,137	125	0.32	3,201	156	0.39	IN
4HC6JV		3,324	312	0.80	3,400	355	0.89	WZ
4YKZDQ		3,188	175	0.45	3,173	128	0.32	IN
6XPVZA		2,605	-407	-1.05	2,474	-571	-1.43	IN
7YELKE		2,981	-32	-0.08	3,214	169	0.42	IN
8DB2K9		3,423	410	1.06	3,421	376	0.94	IN
8MX2YW		3,333	320	0.82	3,509	464	1.16	IN
8YE2EQ	*	2,735	-278	-0.72	2,083	-962	-2.40	IN
A78VLN		3,292	279	0.72	3,252	207	0.52	IN
AKLWKY		3,186	173	0.45	3,194	149	0.37	IN
D2HJEG	*	2,450	-563	-1.45	3,146	101	0.25	IN
FP2KHC		3,047	35	0.09	3,205	160	0.40	IN
FYNEWU		2,530	-482	-1.24	2,635	-410	-1.02	IN
GA7HGY		3,008	-5	-0.01	3,127	82	0.21	IN
GG48ZN		3,153	140	0.36	3,059	14	0.04	TH
JFJEUB		3,329	316	0.81	3,376	331	0.83	IN
MWTJV6		2,281	-731	-1.88	2,829	-216	-0.54	XX
NC67Y8	*	1,820	-1,193	-3.07	2,005	-1,040	-2.60	IM
UC3RL9		3,235	222	0.57	3,255	210	0.53	OA
UPABQU		3,171	159	0.41	3,154	109	0.27	TY
VFYNVY		3,290	278	0.71	3,167	122	0.30	MT
WHJ3UT		3,409	396	1.02	3,336	291	0.73	LI
XD869R		2,451	-561	-1.44	2,124	-921	-2.30	MT
XMFQBZ		3,332	319	0.82	3,337	292	0.73	IN
XZHGTY		3,148	136	0.35	3,003	-42	-0.11	SH
YV3238		2,985	-27	-0.07	3,014	-31	-0.08	ME
ZDCMWE		3,094	81	0.21	3,196	151	0.38	IN

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

**Summary Statistics**

Grand Means	3,012.6 psi	3,044.8 psi
Std Dev Btwn Labs	388.6 psi	400.3 psi
Statistics based on 29 of 29 reporting participants		

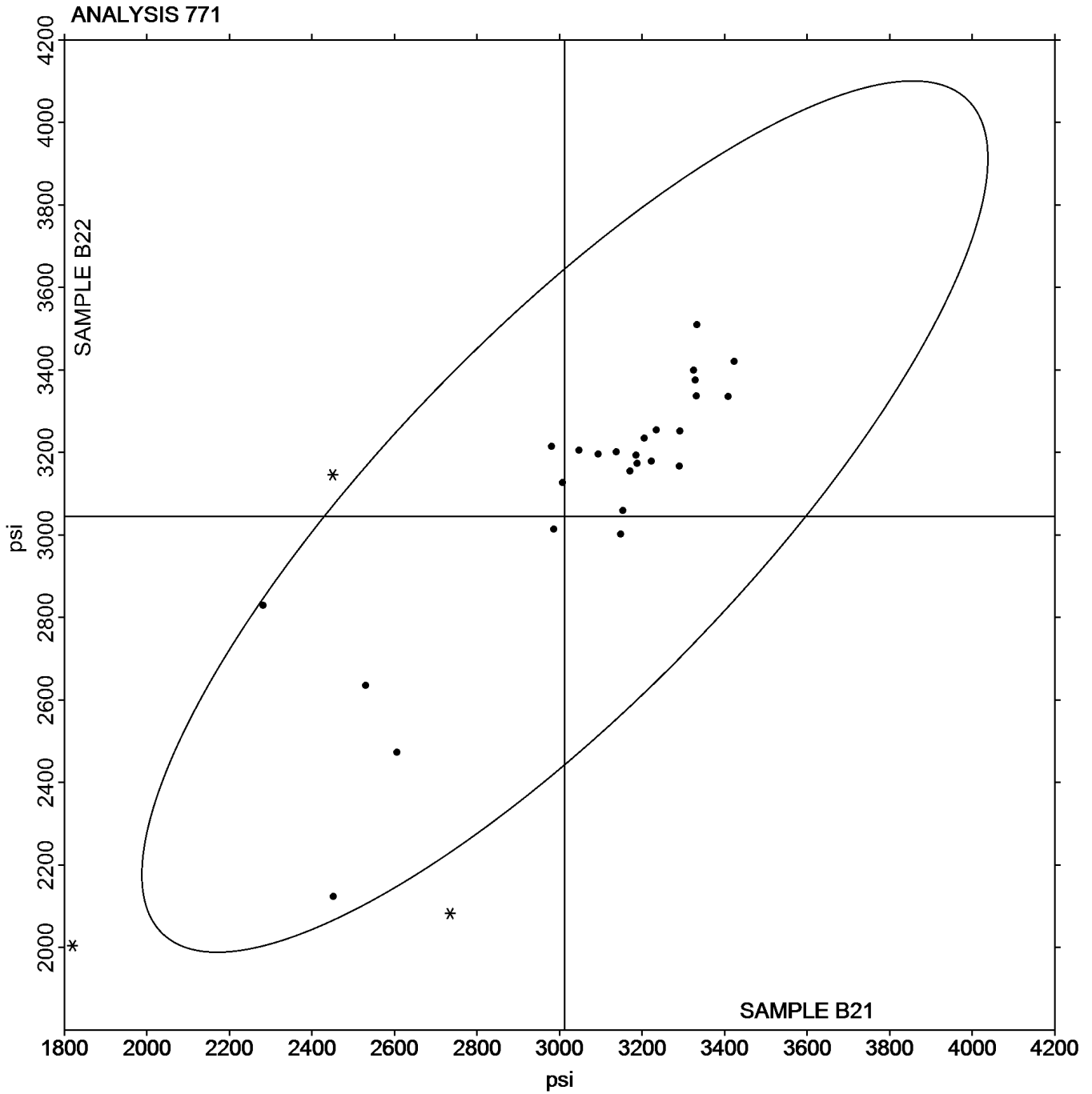
Sample B21: LDPE & Sample B22: LDPE

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

(IM) - Instru-Met Instruments	(IN) - Instron
(LI) - Lloyd Instruments	(ME) - Metrotech
(MT) - MTS/Sintech	(OA) - Oakland Testing
(SH) - Shimadzu	(TH) - Thwing Albert
(TY) - Toyoseiki	(WZ) - Zwick
(XX) - Instrument manufacturer not specified by lab	

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

Grand Mean Sample B21: 3,012.60 psi    Grand Mean Sample B22: 3,044.81 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 B21			Sample B22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UXN6P		62.37	24.40	0.81	63.46	26.63	0.92	IN
3R9EX9		17.11	-20.86	-0.70	16.80	-20.03	-0.69	IM
4BF2ZT		27.53	-10.44	-0.35	26.51	-10.32	-0.36	IN
4HC6JV		17.61	-20.36	-0.68	16.21	-20.62	-0.71	WZ
8DB2K9		70.17	32.19	1.08	71.67	34.84	1.21	IN
8MX2YW	*	89.07	51.10	1.71	80.36	43.53	1.51	IN
8YE2EQ		68.52	30.55	1.02	64.70	27.87	0.96	IN
A78VLN		22.40	-15.57	-0.52	21.73	-15.10	-0.52	IN
AKLWKY		37.90	-0.07	0.00	37.70	0.87	0.03	IN
FP2KHC		11.22	-26.75	-0.89	11.33	-25.50	-0.88	IN
FYNEWU		104.03	66.05	2.21	103.97	67.14	2.32	IN
GA7HGY		9.75	-28.23	-0.94	10.08	-26.75	-0.93	IN
MWTJV6		84.82	46.85	1.56	78.66	41.83	1.45	XX
NC67Y8		17.01	-20.96	-0.70	15.59	-21.24	-0.73	IM
VFYNVY		7.83	-30.14	-1.01	6.63	-30.20	-1.04	MT
WHJ3UT		20.52	-17.45	-0.58	19.30	-17.53	-0.61	LI
XD869R		22.36	-15.61	-0.52	21.09	-15.74	-0.54	MT
XMFQBZ		19.46	-18.51	-0.62	17.92	-18.91	-0.65	IN
YV3238		24.80	-13.17	-0.44	26.90	-9.93	-0.34	ME
ZDCMWE		24.98	-12.99	-0.43	25.96	-10.87	-0.38	IN

Summary Statistics			
Grand Means	37.973	Percent	36.828
			Percent
Stnd Dev Btwn Labs	29.937	Percent	28.903
			Percent
Statistics based on 20 of 20 reporting participants			

Sample B21: LDPE & Sample B22: LDPE



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

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

(IM) - Instru-Met Instruments

(IN) - Instron

(LI) - Lloyd Instruments

(ME) - Metrotech

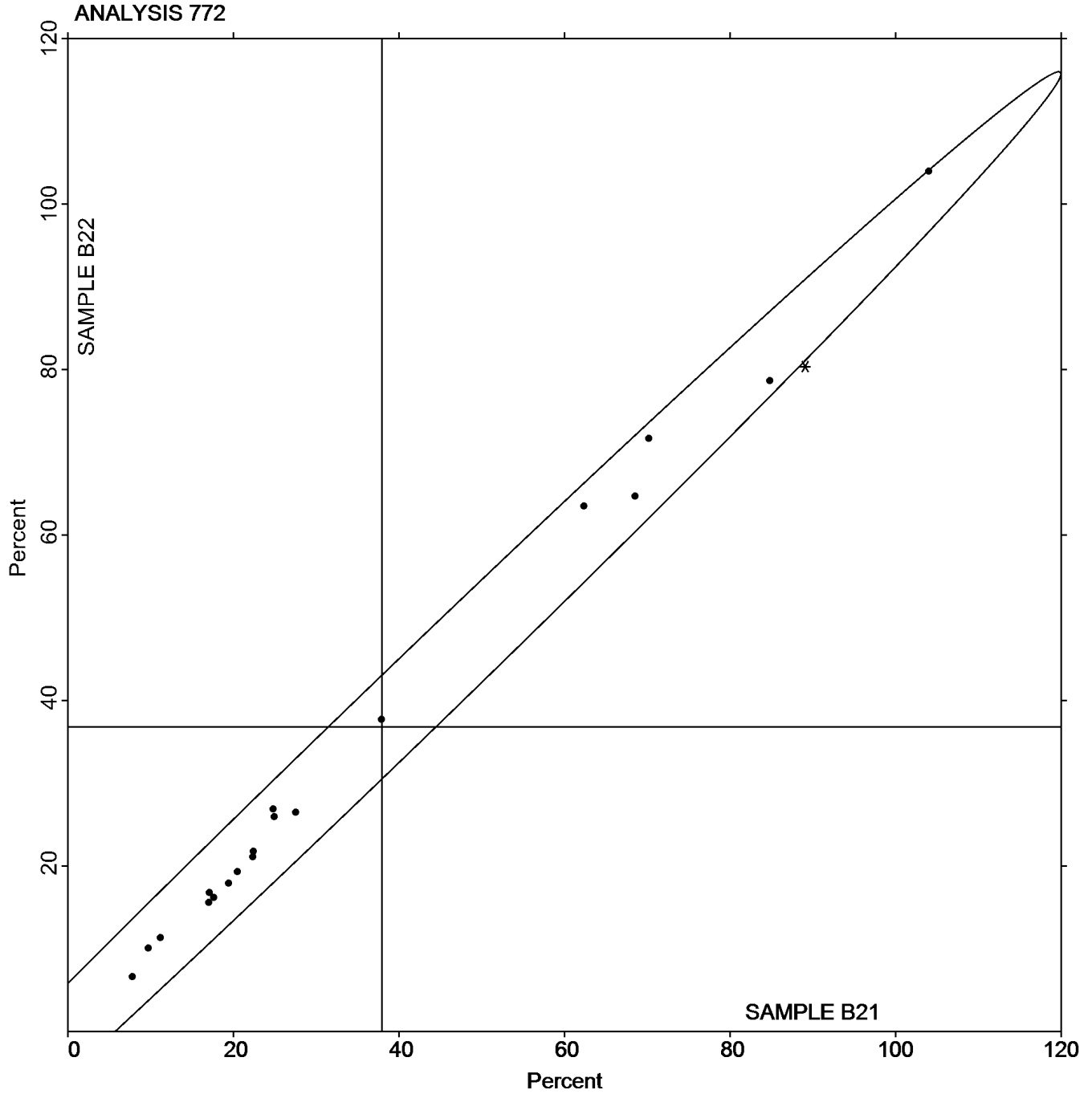
(MT) - MTS/Sintech

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B21: 37.973 Percent    Grand Mean Sample B22: 36.828 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 B21			Sample B22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UXN6P		559.7	-152.5	-0.69	566.1	-182.1	-0.74	IN
3R9EX9		734.7	22.5	0.10	780.7	32.6	0.13	IM
4BF2ZT		937.4	225.2	1.02	978.3	230.2	0.94	IN
4HC6JV		572.0	-140.2	-0.63	556.0	-192.1	-0.78	WZ
4YKZDQ		631.1	-81.1	-0.37	616.4	-131.7	-0.54	IN
6XPVZA		760.0	47.8	0.22	734.3	-13.9	-0.06	IN
7YELKE		720.0	7.8	0.04	817.2	69.1	0.28	IN
8DB2K9		770.4	58.2	0.26	777.5	29.4	0.12	IN
8MX2YW		901.9	189.7	0.86	1,008.5	260.4	1.06	XX
8YE2EQ		719.0	6.8	0.03	644.9	-103.2	-0.42	IN
A78VLN		878.1	165.9	0.75	883.7	135.6	0.55	IN
AKLWKY		392.0	-320.2	-1.45	412.0	-336.1	-1.37	IN
D2HJEG		443.0	-269.2	-1.22	519.0	-229.1	-0.93	IN
FP2KHC		813.1	100.9	0.46	872.6	124.5	0.51	IN
FYNEWU		576.4	-135.8	-0.61	618.3	-129.8	-0.53	IN
GA7HGY		1,184.1	471.9	2.14	1,223.4	475.3	1.93	IN
GG48ZN		552.2	-160.0	-0.72	568.9	-179.2	-0.73	TH
JFJEUB		600.2	-112.0	-0.51	604.8	-143.3	-0.58	IN
MWTJV6	*	544.3	-167.9	-0.76	715.1	-33.0	-0.13	XX
NC67Y8		297.2	-415.0	-1.88	347.0	-401.1	-1.63	IM
UC3RL9		666.8	-45.4	-0.21	676.7	-71.4	-0.29	OA
VFYNVY		616.7	-95.5	-0.43	598.0	-150.1	-0.61	MT
WHJ3UT		810.1	97.9	0.44	820.1	72.0	0.29	LI
XD869R		503.3	-208.9	-0.95	453.7	-294.4	-1.20	MT
XMFQBZ		602.2	-110.0	-0.50	618.6	-129.5	-0.53	IN
XZHGTY		1,240.7	528.5	2.39	1,368.4	620.3	2.52	SH
YV3238		1,013.4	301.2	1.36	1,110.3	362.2	1.47	ME
ZDCMWE		901.6	189.4	0.86	1,057.0	308.9	1.26	IN

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

**Summary Statistics**

Grand Means	712.20 Percent	748.12 Percent
Std Dev Btwn Labs	220.88 Percent	245.71 Percent
Statistics based on 28 of 28 reporting participants		

Sample B21: LDPE & Sample B22: LDPE

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

(IM) - Instru-Met Instruments

(IN) - Instron

(LI) - Lloyd Instruments

(ME) - Metrotech

(MT) - MTS/Sintech

(OA) - Oakland Testing

(SH) - Shimadzu

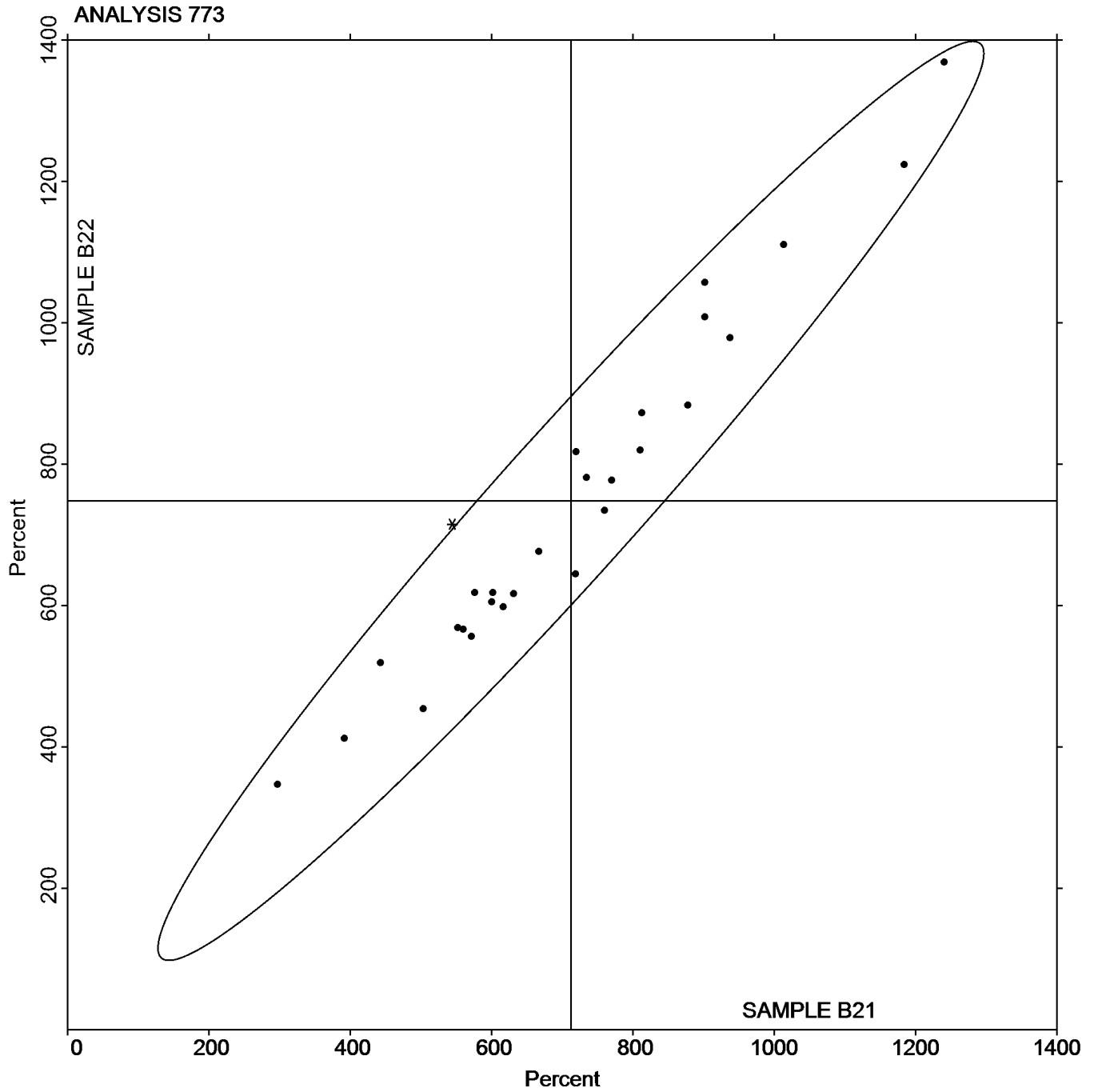
(TH) - Thwing Albert

(WZ) - Zwick

(XX) - Instrument manufacturer not specified by lab

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

Grand Mean Sample B21: 712.20 Percent    Grand Mean Sample B22: 748.12 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 B21			Sample B22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UXN6P		4.0520	-0.1466	-0.70	4.0790	-0.1768	-1.01	XX
3R9EX9		4.0400	-0.1586	-0.76	4.1500	-0.1058	-0.61	XX
4A6GWP		4.3990	0.2004	0.96	4.3690	0.1132	0.65	XX
4BF2ZT		4.0158	-0.1828	-0.87	4.6103	0.3545	2.03	XX
4YKZDQ		4.4880	0.2894	1.38	4.2930	0.0372	0.21	XX
6XPVZA		4.3500	0.1514	0.72	4.2900	0.0342	0.20	XX
7YELKE		4.5920	0.3934	1.88	4.4350	0.1792	1.03	XX
8DB2K9		4.1064	-0.0923	-0.44	4.0867	-0.1691	-0.97	XX
8MX2YW		3.9140	-0.2846	-1.36	3.8700	-0.3858	-2.21	XX
8YE2EQ		4.5450	0.3464	1.66	4.4150	0.1592	0.91	XX
A78VLN		4.2100	0.0114	0.05	4.0700	-0.1858	-1.06	XX
AKLWKY		4.1900	-0.0086	-0.04	4.2500	-0.0058	-0.03	XX
C9KB7Y		3.9350	-0.2636	-1.26	4.5100	0.2542	1.46	XX
D2HJEG		4.0900	-0.1086	-0.52	4.1300	-0.1258	-0.72	XX
FP2KHC		3.9500	-0.2486	-1.19	4.3500	0.0942	0.54	XX
FYNEWU		4.4200	0.2214	1.06	4.4300	0.1742	1.00	XX
GA7HGY		4.4568	0.2581	1.23	4.3269	0.0711	0.41	XX
GG48ZN		4.4200	0.2214	1.06	3.9750	-0.2808	-1.61	XX
JFJEUB		4.4400	0.2414	1.15	4.1010	-0.1548	-0.89	XX
MWTJV6		4.2000	0.0014	0.01	4.3900	0.1342	0.77	XX
NC67Y8		4.0000	-0.1986	-0.95	4.4000	0.1442	0.83	XX
UC3RL9		4.1600	-0.0386	-0.18	4.1300	-0.1258	-0.72	XX
UPABQU		3.9409	-0.2577	-1.23	4.1181	-0.1377	-0.79	XX
VFYNVY		4.4150	0.2164	1.03	4.4580	0.2022	1.16	XX
WHJ3UT		3.9780	-0.2206	-1.05	4.1564	-0.0994	-0.57	XX
XD869R		3.9690	-0.2296	-1.10	4.2100	-0.0458	-0.26	XX
XHGKFB		4.2600	0.0614	0.29	4.3150	0.0592	0.34	XX
XMFQBZ		4.0300	-0.1686	-0.81	4.3850	0.1292	0.74	XX
XZHGTY		4.1102	-0.0884	-0.42	4.1142	-0.1416	-0.81	XX
YV3238		4.4095	0.2109	1.01	4.0709	-0.1848	-1.06	XX
ZDCMWE		4.0709	-0.1277	-0.61	4.4410	0.1852	1.06	XX

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

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Summary Statistics	
Grand Means	
4.19863 mils	4.25579 mils
Std Dev Btwn Labs	
0.20926 mils	0.17471 mils
Statistics based on 31 of 31 reporting participants	

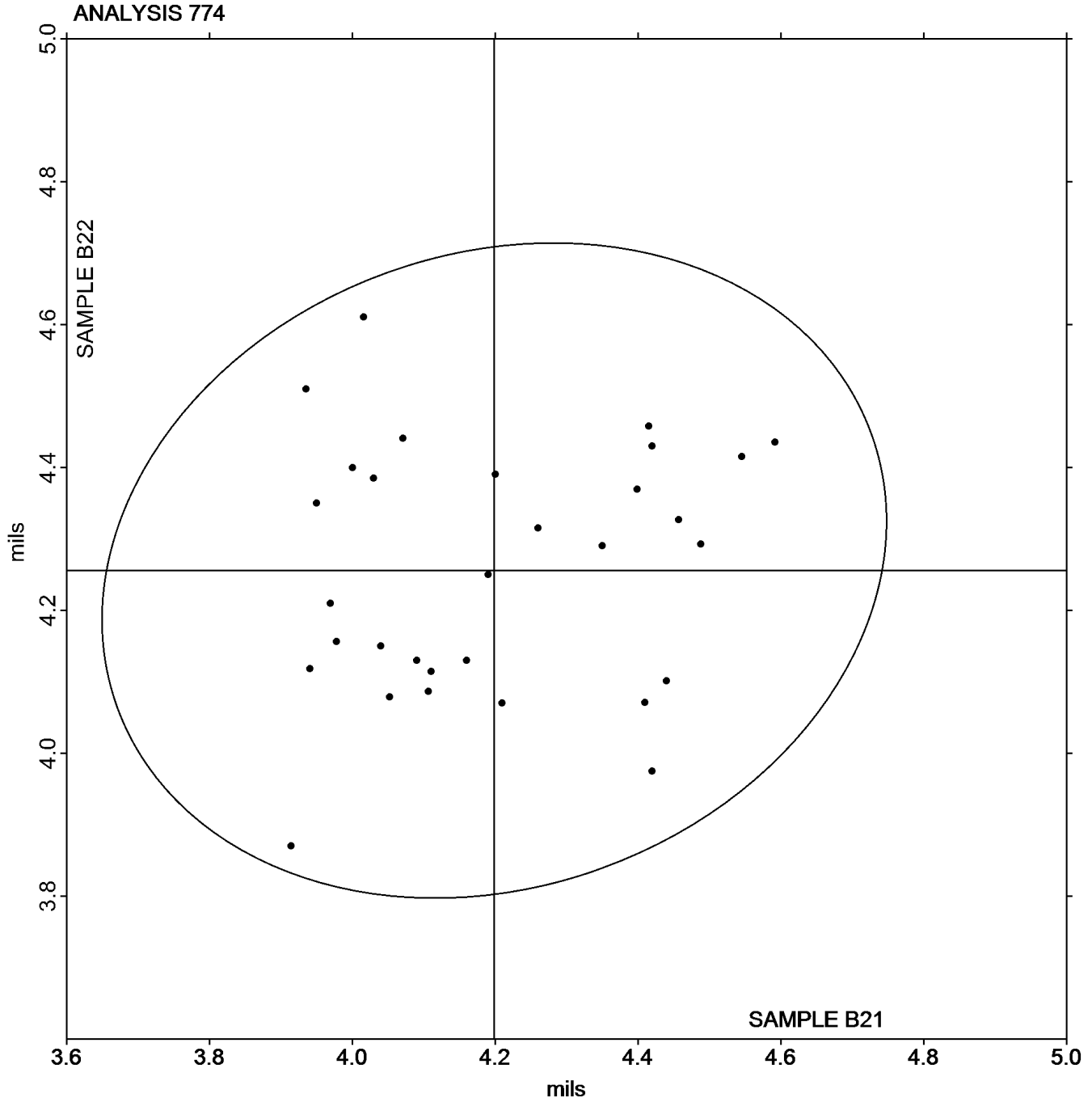
Sample B21: LDPE & Sample B22: LDPE

**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 B21: 4.1986 mils    Grand Mean Sample B22: 4.2558 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 B21			Sample B22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UXN6P		33,382	-9	0.00	33,771	378	0.07	IN
3R9EX9		34,035	645	0.12	33,663	270	0.05	IM
4BF2ZT		26,758	-6,632	-1.26	26,763	-6,630	-1.30	IN
4HC6JV		36,622	3,232	0.61	36,796	3,404	0.67	WZ
4YKZDQ		31,244	-2,146	-0.41	29,851	-3,542	-0.69	IN
8DB2K9		40,409	7,019	1.34	39,617	6,224	1.22	IN
8MX2YW		36,000	2,610	0.50	34,384	992	0.19	IN
8YE2EQ		27,507	-5,883	-1.12	27,310	-6,083	-1.19	IN
A78VLN		31,746	-1,644	-0.31	31,714	-1,679	-0.33	IN
D2HJEG		33,330	-60	-0.01	33,710	317	0.06	IN
FP2KHC		28,212	-5,178	-0.99	29,502	-3,891	-0.76	IN
FYNEWU	*	35,970	2,579	0.49	40,302	6,909	1.35	IN
GG48ZN		33,842	452	0.09	33,699	306	0.06	TH
JFJEUB		31,910	-1,480	-0.28	33,200	-193	-0.04	IN
NC67Y8	*	50,016	16,626	3.16	48,584	15,191	2.98	IM
VFYNVY		31,500	-1,890	-0.36	30,964	-2,428	-0.48	MT
WHJ3UT		30,348	-3,042	-0.58	30,708	-2,685	-0.53	LI
XD869R		33,954	564	0.11	34,689	1,296	0.25	MT
XMFQBZ		32,575	-815	-0.16	32,288	-1,105	-0.22	IN
YV3238		36,464	3,073	0.58	34,195	802	0.16	ME
ZDCMWE		25,370	-8,020	-1.53	25,540	-7,853	-1.54	IN

Summary Statistics	
Grand Means	33,390.2 psi      33,392.8 psi
Std Dev Btwn Labs	5,257.0 psi      5,099.2 psi
Statistics based on 21 of 21 reporting participants	

Sample B21: LDPE & Sample B22: LDPE

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

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

(IM) - Instru-Met Instruments

(IN) - Instron

(LI) - Lloyd Instruments

(ME) - Metrotech

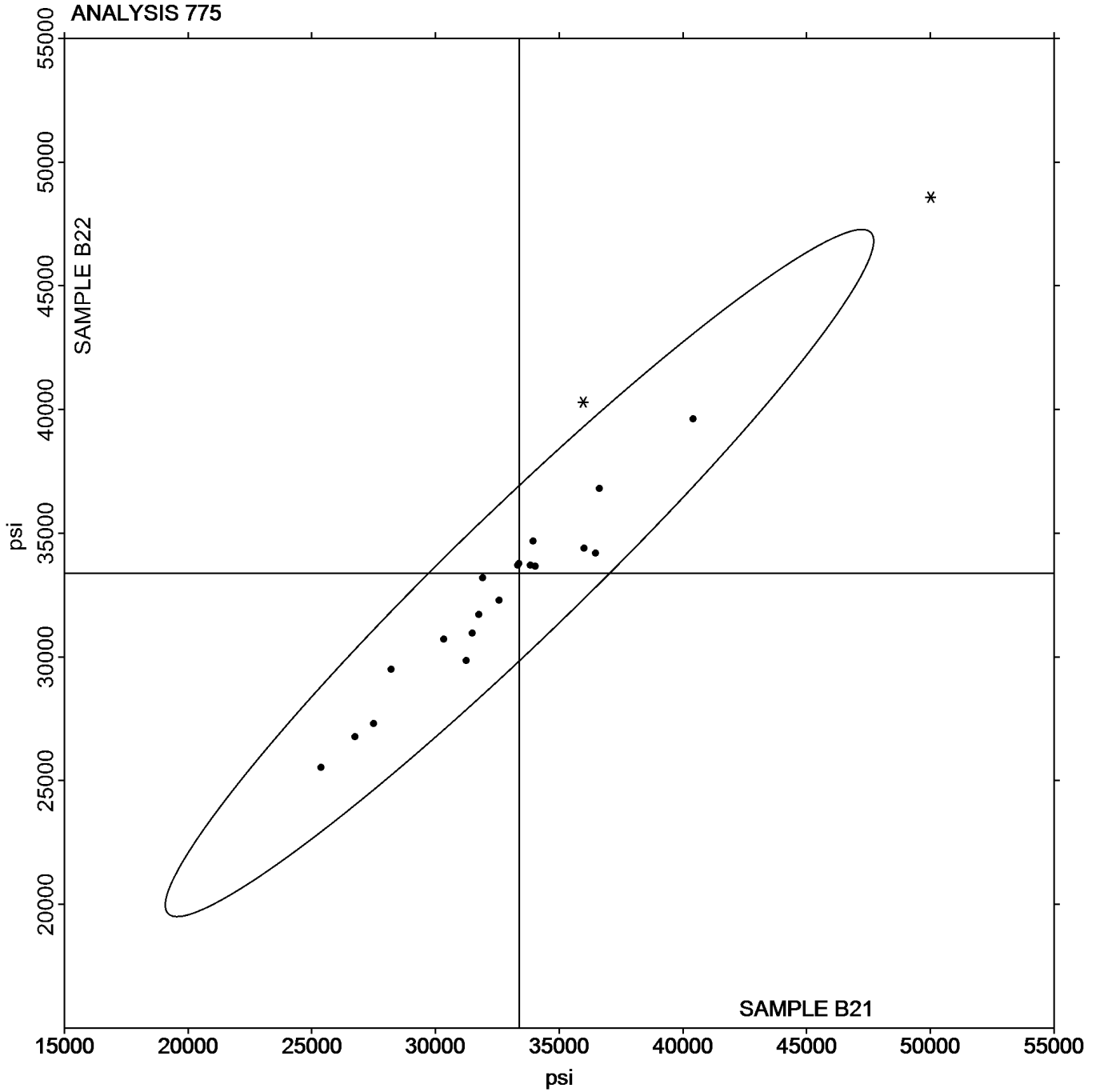
(MT) - MTS/Sintech

(TH) - Thwing Albert

(WZ) - Zwick

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

Grand Mean Sample B21: 33,390.24 psi    Grand Mean Sample B22: 33,392.82 psi



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

## Analysis 776

## Secant Modulus at 2% Strain - psi

WebCode	Data Flag	Sample B21			Sample B22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UXN6P		28,076	720	0.26	28,207	683	0.26	IN
3R9EX9		28,470	1,114	0.40	28,134	610	0.23	IM
4YKZDQ		27,509	153	0.05	26,644	-880	-0.33	IN
8DB2K9		30,840	3,484	1.24	30,643	3,120	1.17	XX
8MX2YW		28,863	1,507	0.54	27,747	223	0.08	IN
8YE2EQ		22,726	-4,630	-1.65	22,676	-4,848	-1.82	IN
A78VLN		26,314	-1,042	-0.37	26,531	-993	-0.37	IN
D2HJEG		28,210	854	0.30	28,580	1,056	0.40	IN
FP2KHC		24,753	-2,603	-0.93	25,798	-1,726	-0.65	IN
FYNEWU		28,000	644	0.23	29,595	2,072	0.78	IN
GG48ZN		28,442	1,086	0.39	28,481	957	0.36	TH
JFJEUB		27,166	-190	-0.07	27,956	432	0.16	IN
NC67Y8		33,956	6,600	2.35	33,495	5,971	2.25	IM
VFYNVY		26,387	-968	-0.34	26,221	-1,303	-0.49	MT
WHJ3UT		25,508	-1,848	-0.66	25,556	-1,967	-0.74	LI
XD869R		27,991	635	0.23	29,030	1,506	0.57	MT
ZDCMWE		21,840	-5,516	-1.96	22,610	-4,914	-1.85	IN

## Summary Statistics

Grand Means

27,355.7 psi

27,523.6 psi

Std Dev Btwn Labs

2,812.9 psi

2,657.6 psi

Statistics based on 17 of 17 reporting participants

Sample B21: LDPE &amp; Sample B22: LDPE

## Instrument Code List as Reported by the Labs

(IM) - Instru-Met Instruments

(IN) - Instron

(LI) - Lloyd Instruments

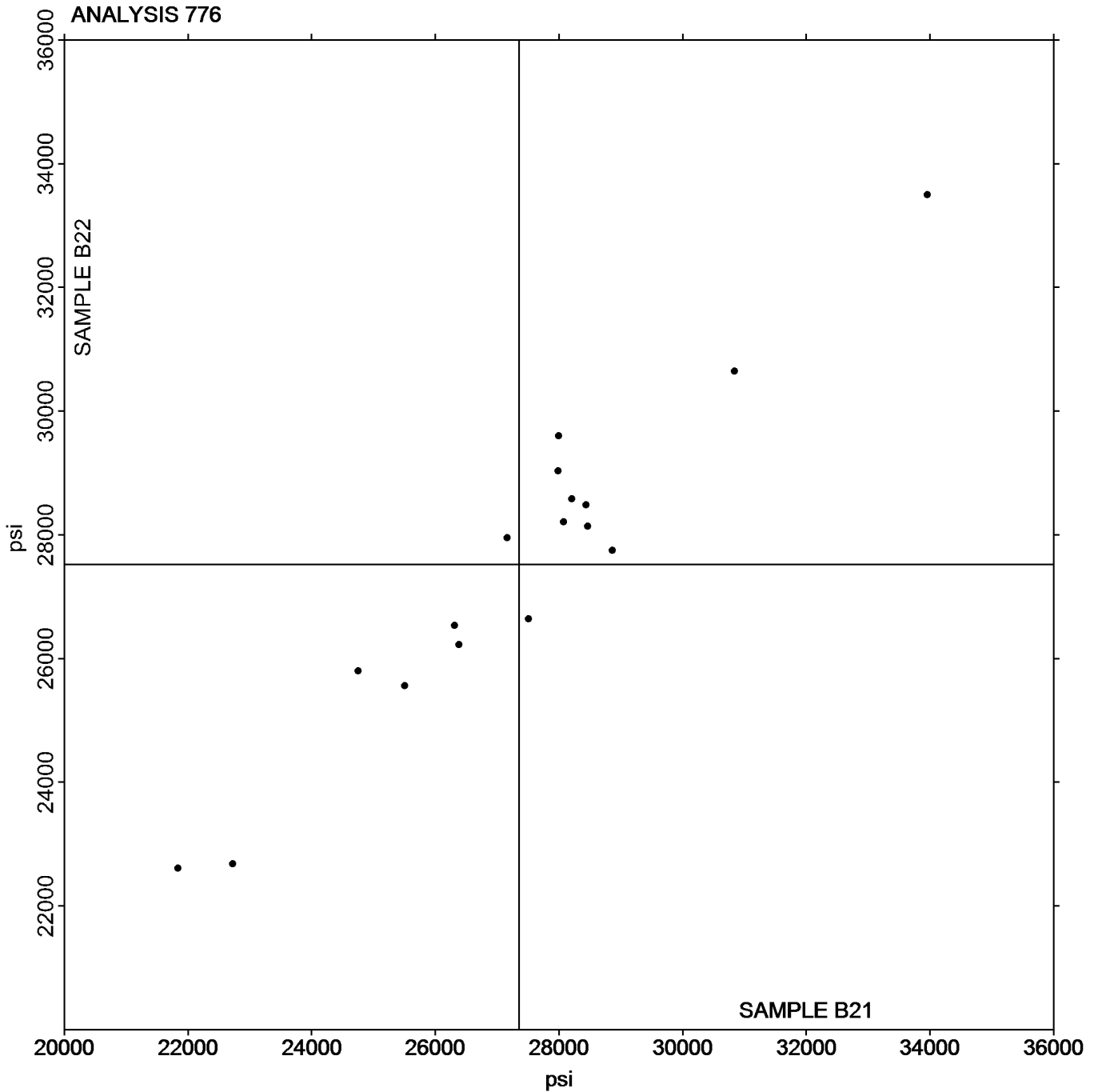
(MT) - MTS/Sintech

(TH) - Thwing Albert

(XX) - Instrument manufacturer not specified by lab

Analysis 776  
Secant Modulus at 2% Strain - psi

Grand Mean Sample B21: 27,355.75 psi    Grand Mean Sample B22: 27,523.56 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 P21			Sample P22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3R9EX9		0.1068	-0.0096	-0.24	0.1316	0.0070	0.16	TH
4HC6JV		0.0280	-0.0884	-2.21	0.0440	-0.0806	-1.87	XX
7NV6WE		0.0868	-0.0296	-0.74	0.0810	-0.0436	-1.01	TN
8DB2K9		0.1160	-0.0004	-0.01	0.1414	0.0168	0.39	IG
A78VLN		0.1178	0.0014	0.03	0.1152	-0.0094	-0.22	IS
CAGVQD		0.2010	0.0846	2.12	0.2166	0.0920	2.14	MI
DEMWFE		0.1140	-0.0024	-0.06	0.1116	-0.0130	-0.30	TH
DRWJLQ		0.1816	0.0652	1.63	0.1900	0.0654	1.52	IG
FP2KHC		0.1282	0.0118	0.30	0.1476	0.0230	0.53	TN
FYNEWU		0.0800	-0.0364	-0.91	0.0952	-0.0294	-0.68	TM
GG48ZN		0.0940	-0.0224	-0.56	0.1018	-0.0228	-0.53	TH
JFJEUB		0.1122	-0.0042	-0.11	0.1074	-0.0172	-0.40	TM
KVQTND		0.1800	0.0636	1.59	0.1606	0.0360	0.84	RD
N9PPP3		0.1450	0.0286	0.72	0.1540	0.0294	0.68	XX
QT4XVT		0.0960	-0.0204	-0.51	0.1000	-0.0246	-0.57	KA
RAQUT2		0.0906	-0.0258	-0.65	0.0984	-0.0262	-0.61	IS
UC3RL9		0.1200	0.0036	0.09	0.0850	-0.0396	-0.92	DY
VFYNVY		0.1366	0.0202	0.51	0.1546	0.0300	0.70	MI
X3NYTF		0.0480	-0.0684	-1.71	0.0575	-0.0671	-1.56	IG
XD869R		0.1452	0.0288	0.72	0.1380	0.0134	0.31	MT
XMFQBZ		0.1336	0.0172	0.43	0.1226	-0.0020	-0.05	TH
XXT9KJ		0.0899	-0.0265	-0.66	0.1104	-0.0142	-0.33	IG
XZHGTY	*	0.1260	0.0096	0.24	0.2020	0.0774	1.80	SA

Summary Statistics			
Grand Means	0.11641	COF	0.12463
			COF
Std Dev Btwn Labs	0.03997	COF	0.04303
			COF
Statistics based on 23 of 23 reporting participants			

Sample P21: LDPE & Sample P22: LDPE

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

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

(DY) - Dynisco Model D1055

(IS) - Instron 5000 Series

(MI) - MTS Insight

(RD) - RDM CF

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

(TN) - TMI #32-06

(IG) - Instron

(KA) - Kayeness Inc.

(MT) - MTS Q-Test

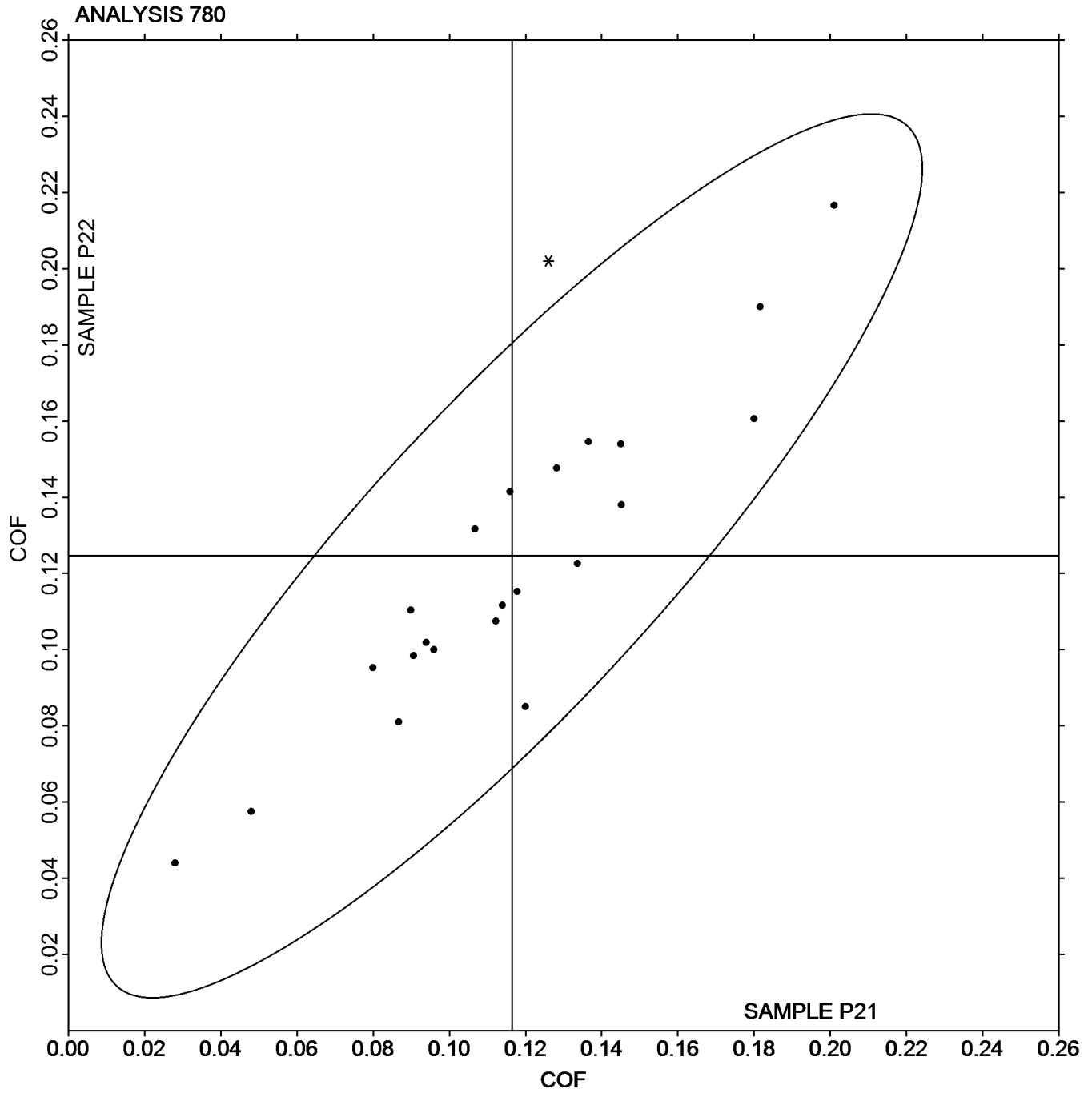
(SA) - Shimadzu Autograph

(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 P21: 0.11641 COF    Grand Mean Sample P22: 0.12463 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 P21			Sample P22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3R9EX9		0.0754	-0.0099	-0.32	0.0842	-0.0018	-0.06	TH
4HC6JV		0.0340	-0.0513	-1.66	0.0320	-0.0540	-1.92	XX
7NV6WE		0.0634	-0.0219	-0.71	0.0614	-0.0246	-0.88	TN
8DB2K9		0.0804	-0.0049	-0.16	0.0842	-0.0018	-0.06	IG
A78VLN		0.0842	-0.0011	-0.04	0.0878	0.0018	0.07	IS
CAGVQD		0.1112	0.0259	0.84	0.1150	0.0290	1.03	MI
DEMWFE		0.0662	-0.0191	-0.62	0.0624	-0.0236	-0.84	TH
DRWJLQ		0.1492	0.0639	2.07	0.1414	0.0554	1.98	IG
FP2KHC		0.0782	-0.0071	-0.23	0.1066	0.0206	0.74	TN
FYNEWU		0.0654	-0.0199	-0.65	0.0728	-0.0132	-0.47	TM
GG48ZN		0.0666	-0.0187	-0.61	0.0758	-0.0102	-0.36	TH
JFJEUB		0.0858	0.0005	0.02	0.0824	-0.0036	-0.13	TM
KVQTND	*	0.1632	0.0779	2.52	0.1322	0.0462	1.65	RD
N9PPP3		0.1106	0.0253	0.82	0.1144	0.0284	1.01	XX
QT4XVT		0.0960	0.0107	0.35	0.1000	0.0140	0.50	KA
RAQUT2		0.0686	-0.0167	-0.54	0.0768	-0.0092	-0.33	IS
UC3RL9	*	0.0900	0.0047	0.15	0.0500	-0.0360	-1.28	DY
VFYNVY		0.0962	0.0109	0.35	0.0980	0.0120	0.43	MI
X3NYTF		0.0200	-0.0653	-2.12	0.0275	-0.0585	-2.08	IG
XD869R		0.1004	0.0151	0.49	0.1014	0.0154	0.55	MT
XMFQBZ		0.0924	0.0071	0.23	0.0784	-0.0076	-0.27	TH
XXT9KJ		0.0830	-0.0023	-0.07	0.0967	0.0107	0.38	IG
XZHGTY		0.0820	-0.0033	-0.11	0.0960	0.0100	0.36	SA

Summary Statistics			
Grand Means	0.08532	COF	0.08597
			COF
Std Dev Btwn Labs	0.03086	COF	0.02805
			COF
Statistics based on 23 of 23 reporting participants			

Sample P21: LDPE & Sample P22: LDPE

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

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

(DY) - Dynisco Model D1055

(IS) - Instron 5000 Series

(MI) - MTS Insight

(RD) - RDM CF

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

(TN) - TMI #32-06

(IG) - Instron

(KA) - Kayeness Inc.

(MT) - MTS Q-Test

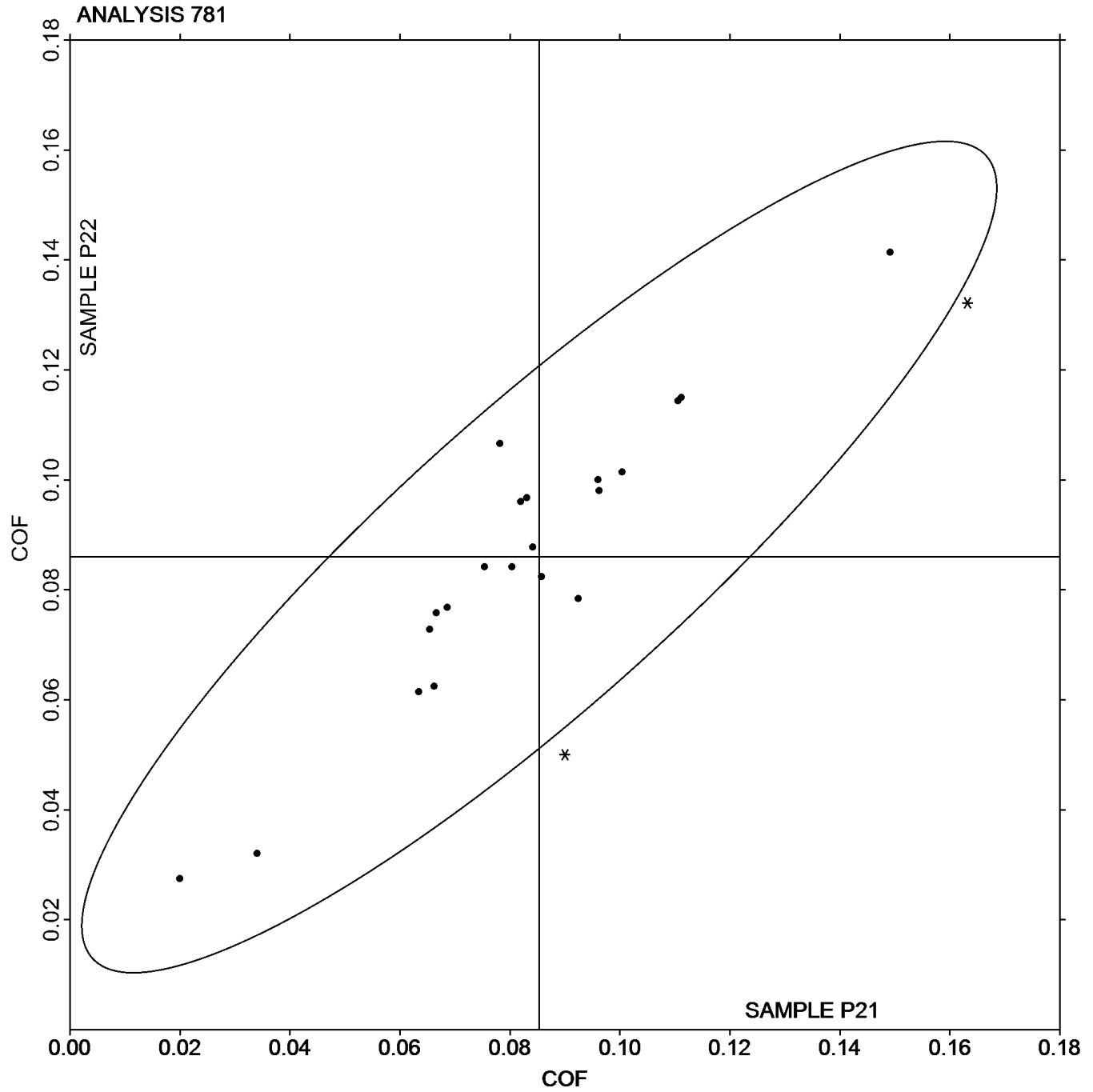
(SA) - Shimadzu Autograph

(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 P21: 0.08532 COF    Grand Mean Sample P22: 0.08597 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 Q21			Sample Q22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UXN6P		366.3	-5.3	-0.10	388.4	10.6	0.27	TM
3R9EX9		348.1	-23.5	-0.45	358.4	-19.4	-0.49	TE
4BF2ZT		403.8	32.2	0.61	459.0	81.2	2.05	TM
4HC6JV		427.2	55.6	1.06	456.3	78.5	1.99	TA
8DB2K9		333.3	-38.3	-0.73	367.4	-10.4	-0.26	IN
A78VLN		391.0	19.4	0.37	392.0	14.2	0.36	TE
CAGVQD	X	708.8	337.2	6.43	725.1	347.3	8.78	XX
D2HJEG		395.2	23.6	0.45	355.0	-22.8	-0.58	TN
FP2KHC		337.2	-34.4	-0.66	342.3	-35.5	-0.90	TM
GA7HGY		356.0	-15.6	-0.30	353.4	-24.4	-0.62	SZ
JFJEUB		480.0	108.4	2.07	401.0	23.2	0.59	TE
UC3RL9		348.8	-22.8	-0.43	384.0	6.2	0.16	TA
VFYNVY		296.6	-75.0	-1.43	360.1	-17.7	-0.45	TE
XMFQBZ		292.2	-79.4	-1.51	335.9	-41.9	-1.06	TE
XZHGTY		426.3	54.8	1.04	336.1	-41.7	-1.05	LO

**Summary Statistics**

Grand Means

371.57 grams-force

377.80 grams-force

Std Dev Btwn Labs

52.43 grams-force

39.54 grams-force

Statistics based on 14 of 15 reporting participants

Sample Q21: LDPE &amp; Sample Q22: LDPE

**Comments on assigned Data Flags for Test #782**

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

**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

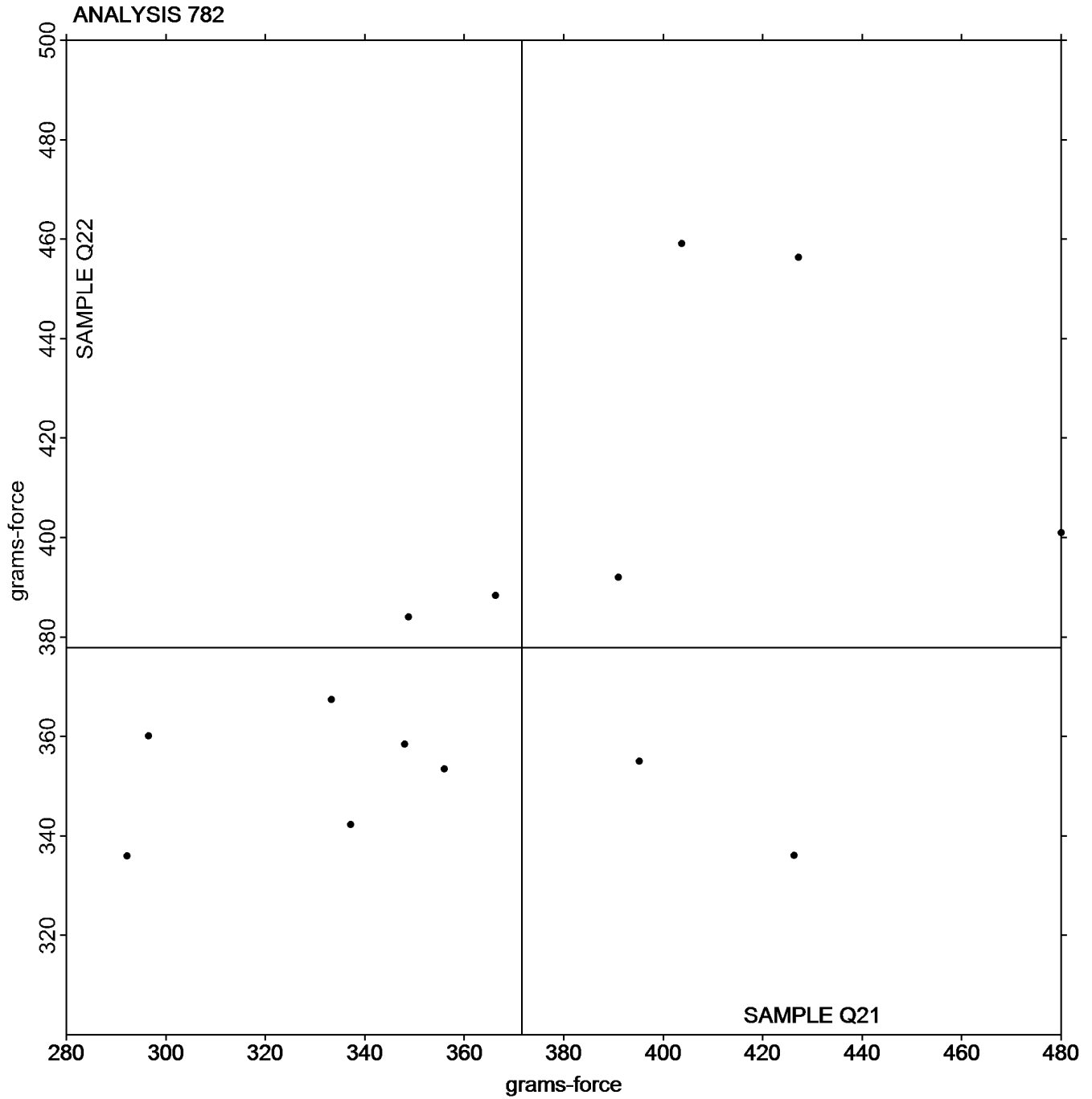
(TM) - TMI No. 83-1100

(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 Q21: 371.57 grams-force    Grand Mean Sample Q22: 377.80 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 D21			Sample D22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UYKFK		17.575	0.152	0.16	15.713	-0.077	-0.09	BJ
3APMRH		15.935	-1.488	-1.58	14.319	-1.471	-1.77	XR
3R9EX9		17.675	0.252	0.27	15.925	0.136	0.16	BJ
4BF2ZT		17.763	0.340	0.36	15.550	-0.239	-0.29	BJ
4HC6JV	*	16.788	-0.635	-0.68	13.813	-1.977	-2.38	BJ
7RZQTQ		17.256	-0.167	-0.18	16.341	0.552	0.66	XR
8MX2YW		17.525	0.102	0.11	15.688	-0.102	-0.12	BJ
8YE2EQ		19.043	1.620	1.72	16.781	0.992	1.19	HC
A78VLN		17.799	0.376	0.40	16.555	0.766	0.92	BT
AYLXVF		18.575	1.152	1.23	16.488	0.698	0.84	BJ
CAGVQD		19.350	1.927	2.05	16.475	0.686	0.82	XX
DEMWFE		15.888	-1.535	-1.63	14.825	-0.964	-1.16	HL
FP2KHC		18.050	0.627	0.67	16.313	0.523	0.63	BJ
G7G98X		17.350	-0.073	-0.08	15.813	0.023	0.03	BJ
GA7HGY		17.400	-0.023	-0.02	16.488	0.698	0.84	BJ
GHZNCK		18.888	1.465	1.56	17.175	1.386	1.67	DA
JACNPJ		17.775	0.352	0.37	16.471	0.682	0.82	BJ
JFJEUB		17.525	0.102	0.11	16.225	0.436	0.52	BJ
LPW94U		15.386	-2.037	-2.17	13.929	-1.861	-2.24	HL
PGD328		16.821	-0.602	-0.64	16.054	0.264	0.32	MA
RAQUT2		16.638	-0.785	-0.84	15.613	-0.177	-0.21	BJ
RFBYJG		16.350	-1.073	-1.14	14.888	-0.902	-1.08	BJ
VFYNVY		18.163	0.740	0.79	16.238	0.448	0.54	BJ
X37TMX		16.613	-0.810	-0.86	15.088	-0.702	-0.84	BJ
XHGKJV		18.125	0.702	0.75	16.263	0.473	0.57	BJ
XMFQBZ		17.188	-0.235	-0.25	15.938	0.148	0.18	BJ
YAZHLD		17.300	-0.123	-0.13	15.475	-0.314	-0.38	BJ
YPCW2Q		17.100	-0.323	-0.34	15.663	-0.127	-0.15	BJ

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

**Summary Statistics**

Grand Means	17.4229 Percent	15.7893 Percent
Std Dev Btwn Labs	0.9398 Percent	0.8320 Percent
Statistics based on 28 of 28 reporting participants		

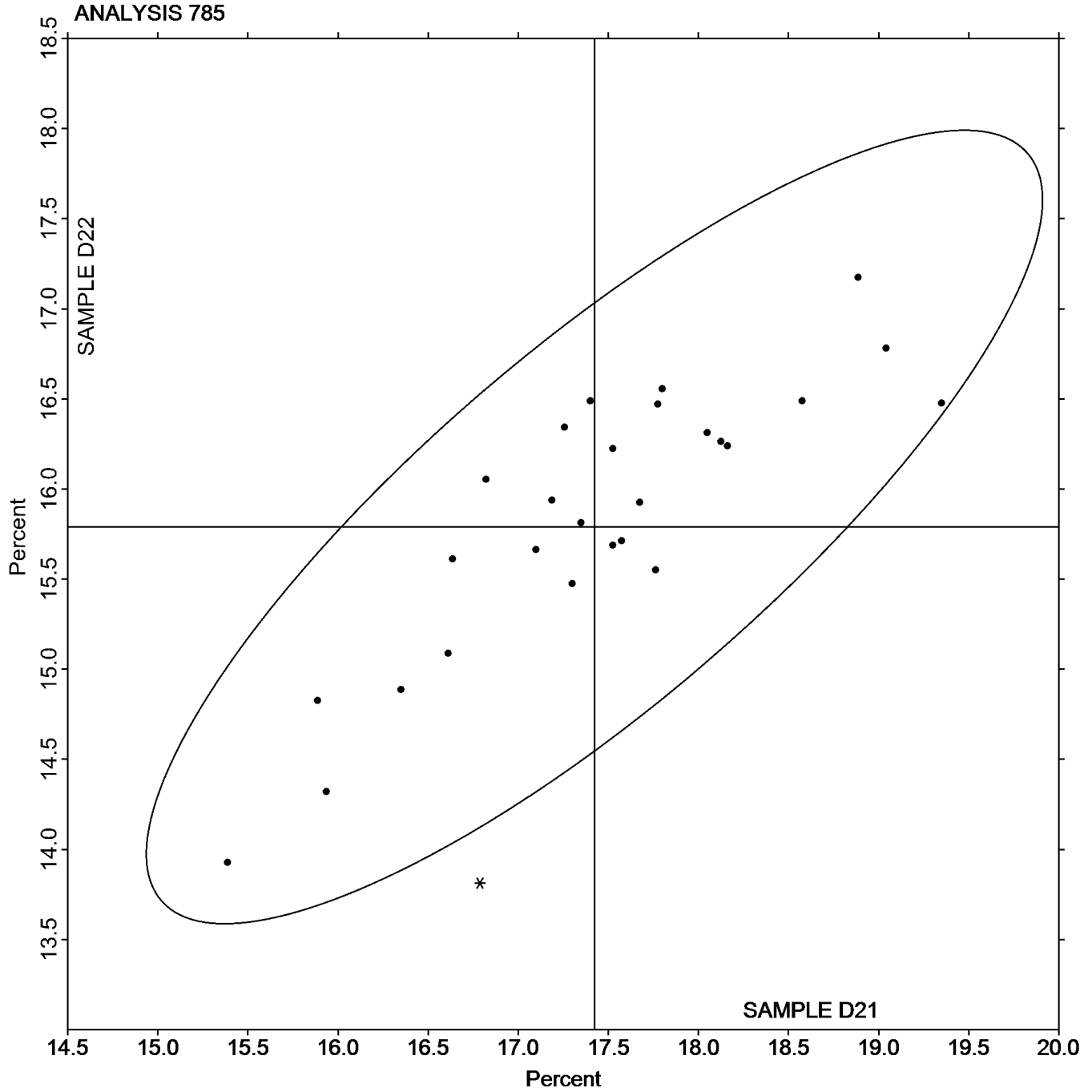
Sample D21: LDPE & Sample D22: LDPE

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

(BJ) - BYK-Gardner Haze-Gard Plus	(BT) - BYK Gardner TCS Series
(DA) - Datacolor SF 600 Series	(HC) - Hunterlab ColorQuest
(HL) - Hunterlab Ultrascan	(MA) - Macbeth 7000A
(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 D21: 17.423 Percent    Grand Mean Sample D22: 15.789 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 D21			Sample D22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2UYKFK		93.34	1.29	1.07	92.96	1.11	0.92	BJ
3APMRH		91.01	-1.04	-0.86	90.83	-1.02	-0.84	XR
3R9EX9		92.20	0.15	0.13	92.09	0.24	0.20	BJ
4BF2ZT		93.18	1.13	0.93	92.93	1.07	0.89	BJ
7RZQTQ		91.46	-0.59	-0.49	91.25	-0.60	-0.50	XR
8MX2YW		91.95	-0.10	-0.08	91.84	-0.01	-0.01	BJ
8YE2EQ		92.58	0.54	0.44	92.46	0.61	0.50	HC
A78VLN		92.78	0.73	0.60	92.50	0.65	0.54	BT
AYLXVF		91.00	-1.05	-0.87	90.80	-1.05	-0.87	BJ
DEMWFE	*	89.83	-2.22	-1.84	89.36	-2.49	-2.06	BH
FP2KHC		92.48	0.43	0.35	92.44	0.59	0.49	BJ
G7G98X		92.89	0.84	0.70	92.39	0.54	0.45	BJ
GA7HGY		91.26	-0.79	-0.65	91.05	-0.80	-0.66	BJ
GHZNCK		90.61	-1.43	-1.19	90.30	-1.55	-1.28	DA
JACNPJ		92.85	0.80	0.66	92.68	0.83	0.69	BJ
JFJEUB		90.90	-1.15	-0.95	90.69	-1.16	-0.96	BJ
LPW94U		90.25	-1.80	-1.49	90.27	-1.58	-1.31	HL
PGD328		90.10	-1.95	-1.62	89.95	-1.90	-1.58	MA
RAQUT2		92.00	-0.05	-0.04	91.73	-0.13	-0.10	BJ
RFBYJG		92.23	0.18	0.15	92.09	0.24	0.20	BJ
VFYNVY		92.93	0.88	0.73	92.75	0.90	0.75	BJ
X37TMX		92.51	0.46	0.38	92.59	0.74	0.61	BJ
XHGKJV		94.53	2.48	2.05	94.30	2.45	2.03	BJ
XMFQBZ		94.03	1.98	1.64	93.71	1.86	1.54	BJ
YAZHLD	X	77.24	-14.81	-12.27	78.41	-13.44	-11.15	BJ
YPCW2Q		92.35	0.30	0.25	92.33	0.47	0.39	BJ

## Analysis 786

## Total Luminous transmittance of film

## Summary Statistics

Grand Means

92.048 Percent

91.850 Percent

Std Dev Btwn Labs

1.207 Percent

1.206 Percent

Statistics based on 25 of 26 reporting participants

Sample D21: LDPE &amp; Sample D22: LDPE

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

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

**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

(HC) - Hunterlab ColorQuest

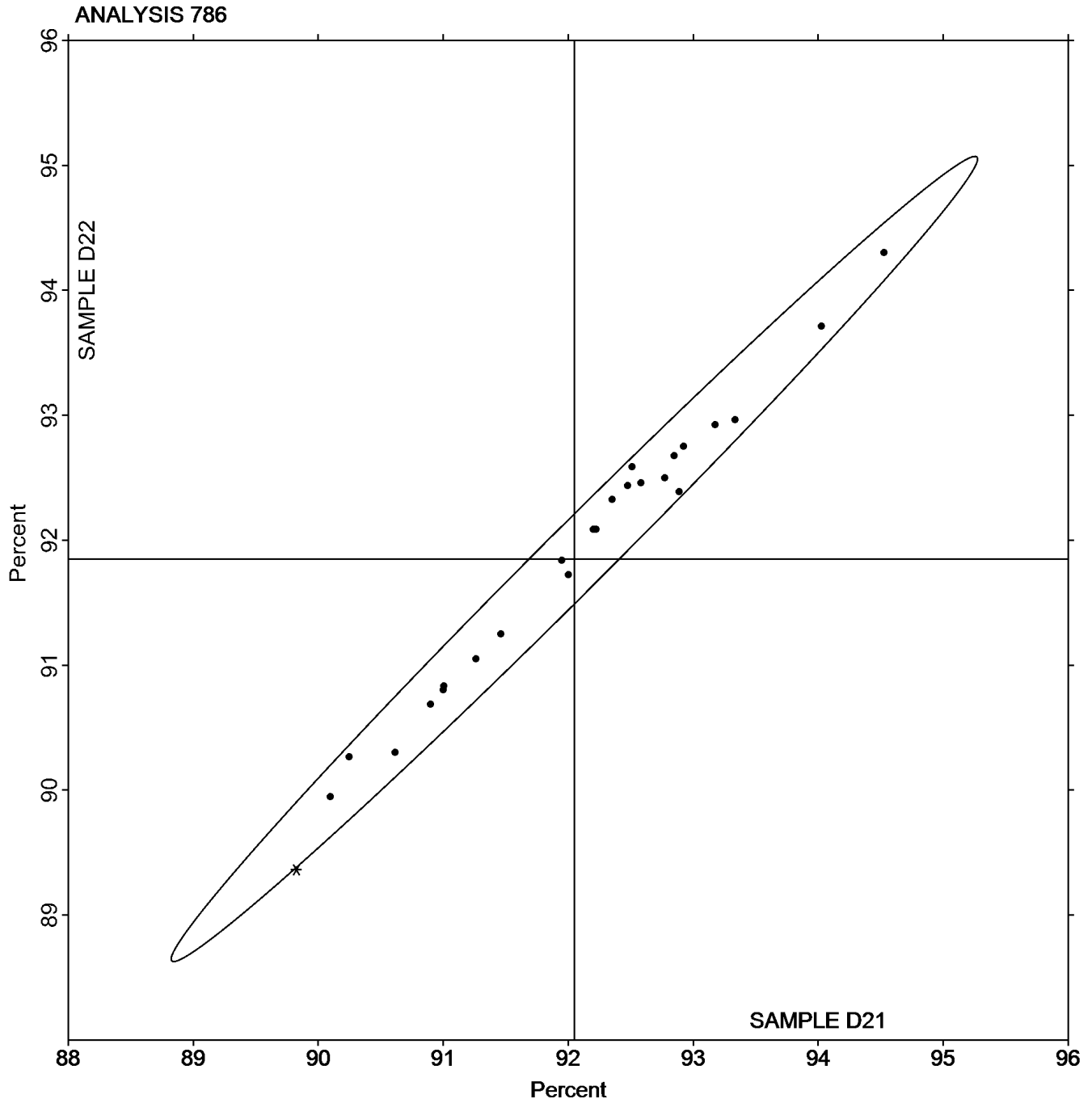
(HL) - Hunterlab Ultrascan XE

(MA) - Macbeth 7000A

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

Plastics Interlaboratory Testing Program  
Analysis 786  
Total Luminous transmittance of film

Grand Mean Sample D21: 92.048 Percent    Grand Mean Sample D22: 91.850 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 Y21			Sample Y22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2MZ3W3		0.08800	0.00707	0.25	0.15100	0.02254	0.83	SA
343VKP		0.07343	-0.00750	-0.27	0.12357	-0.00489	-0.18	AZ
44W34T		0.06433	-0.01660	-0.59	0.07400	-0.05446	-2.02	MU
6UVQUK		0.06540	-0.01553	-0.55	0.11689	-0.01157	-0.43	CS
7FP2BP		0.10250	0.02157	0.77	0.14550	0.01704	0.63	CT
7NV6WE		0.02800	-0.05293	-1.89	0.12500	-0.00346	-0.13	MA
8P86QM	*	0.08910	0.00817	0.29	0.20187	0.07341	2.72	XX
96G76P		0.10567	0.02474	0.88	0.14433	0.01588	0.59	SB
A78VLN		0.12107	0.04014	1.43	0.13767	0.00921	0.34	ML
APX6MP		0.01033	-0.07060	-2.51	0.08367	-0.04479	-1.66	AZ
AY96JL		0.02297	-0.05796	-2.06	0.11270	-0.01576	-0.58	XX
AYLXVF		0.13500	0.05407	1.93	0.14033	0.01188	0.44	MK
BLDDBM		0.05467	-0.02626	-0.94	0.09033	-0.03812	-1.41	MU
C2NDKH		0.05767	-0.02326	-0.83	0.09333	-0.03512	-1.30	MU
D3D7T7		0.07960	-0.00133	-0.05	0.12160	-0.00686	-0.25	MK
D8LPRY		0.07767	-0.00326	-0.12	0.12500	-0.00346	-0.13	CS
EAAGLG		0.09333	0.01240	0.44	0.12000	-0.00846	-0.31	XX
FKJMNU		0.08467	0.00374	0.13	0.12700	-0.00146	-0.05	MJ
FWGEHE		0.07787	-0.00306	-0.11	0.12513	-0.00332	-0.12	MR
FYNEWU		0.08807	0.00714	0.25	0.09183	-0.03662	-1.36	MD
FYNJ6B		0.08533	0.00440	0.16	0.13100	0.00254	0.09	XX
G74NEM		0.10000	0.01907	0.68	0.16667	0.03821	1.42	MU
G8CRBJ		0.14060	0.05967	2.13	0.14017	0.01171	0.43	MT
HBV4MU		0.06367	-0.01726	-0.61	0.11433	-0.01412	-0.52	MR
HL9D8D		0.08700	0.00607	0.22	0.12100	-0.00746	-0.28	SB
K3A6R7		0.07100	-0.00993	-0.35	0.11300	-0.01546	-0.57	MB
KPMP3L	X	0.17223	0.09130	3.25	0.22807	0.09961	3.69	MR
LUPDVD		0.08345	0.00252	0.09	0.12602	-0.00243	-0.09	MJ
MWXXZR		0.09850	0.01757	0.63	0.13950	0.01104	0.41	AZ
QKAXA9		0.13000	0.04907	1.75	0.18000	0.05154	1.91	XX
TAZ6Z6		0.08207	0.00114	0.04	0.12937	0.00091	0.03	MD
TDFZF3		0.08500	0.00407	0.14	0.12500	-0.00346	-0.13	MK

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

WebCode	Data Flag	Sample Y21			Sample Y22			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
TJ92J3	*	0.07083	-0.01010	-0.36	0.18897	0.06051	2.24	XX
X28QXU		0.07000	-0.01093	-0.39	0.12000	-0.00846	-0.31	MU
ZJ4UFM		0.04700	-0.03393	-1.21	0.14200	0.01354	0.50	XX
ZL7TQF		0.09300	0.01207	0.43	0.13000	0.00154	0.06	SB
ZU76T4		0.08667	0.00574	0.20	0.10667	-0.02179	-0.81	XX

**Summary Statistics**

Grand Means

0.080929 Percent

0.128457 Percent

Std Dev Btwn Labs

0.028075 Percent

0.027000 Percent

Statistics based on 36 of 37 reporting participants

Sample Y21: ABS/PC &amp; Sample Y22: ABS/PC

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

KPMP3L (X) - Data for both samples are high.

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

(AZ) - Arizona Instruments Moisture Analyzer

(CS) - Cosa Instruments

(CT) - Computrac Moisture Analyzer

(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

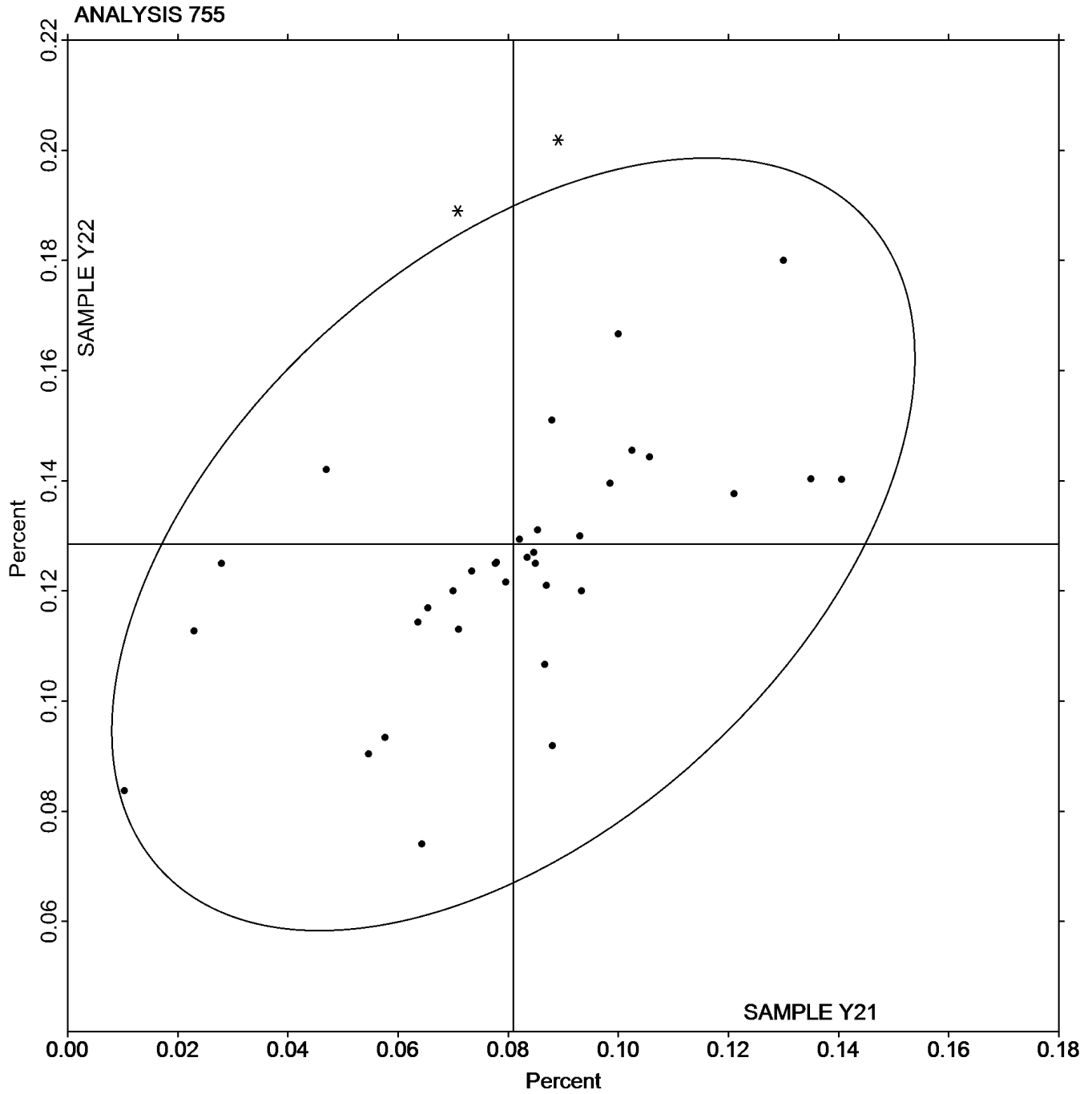
(SA) - Sartorius MA30

(SB) - Sartorius Mark 3

(XX) - Instrument manufacturer not specified by lab

Plastics Interlaboratory Testing Program  
Analysis 755  
Moisture Content of Plastics

Grand Mean Sample Y21: 0.08093 Percent    Grand Mean Sample Y22: 0.12846 Percent



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