Collaborative Testing Services, Inc.

Rubber Interlaboratory Testing Program

Summary Report #214- 4th Qtr 2022

About the Rubber Program, About CTS

Key for Web Summary Report

Analysis	Analysis Name
605	Tensile Strength: Precured Rubber Samples
606	Ultimate Elongation: Precured Rubber Samples
607	Stress at 300% Elongation: Precured Samples
608	Stress at 100% Elongation: Precured Samples
620	Hardness (Type A): Precured Rubber Samples
621	Density: Precured Rubber Samples @ 25C
625	Hardness (Shore D/Type D)
630	Tensile Strength: Participant-Cured Rubber
631	Ultimate Elongation: Participant-Cured Samples
632	Tensile Stress at 300% Elongation: Lab-Cured
633	Tensile Stress at 100% Elongation: Lab-Cured
635	Compression Set
640	O-Ring Tensile Strength at Break
641	O-Ring Ultimate Elongation
642	O-Ring Stress at 100% Elongation
647	O-Ring Hardness (Shore A/Type A)
648	O-Ring Hardness (Shore M)
649	O-Ring Density
650	O-Ring Compression Set
660	Mooney Viscosity (4-minute readings)
661	Mooney Viscosity (8-minute butyl readings)
662	Mooney Stress Relaxation: t80
663	Mooney Stress Relaxation: X30
664	Mooney Stress Relaxation: Area under curve
669	ODR Vulcanization Charac.: Cure Time 10%
670	ODR Vulcanization Charac.: Scorch Time, Ts1
671	ODR Vulcanization Charac.: Cure Time 50%
672	ODR Vulcanization Charac.: Cure Time 90%
673	ODR Vulcanization Charac.: Minimum Torque
674	ODR Vulcanization Charac.: Maximum Torque
684	MDR Vulcanization Charac.: Cure Time 10%
685	MDR Vulcanization Charac.: Scorch Time, Ts1
686	MDR Vulcanization Charac.: Cure Time 50%
687	MDR Vulcanization Charac.: Cure Time 90%
688	MDR Vulcanization Charac.: Minimum Torque
689	MDR Vulcanization Charac.: Maximum Torque
690	RPA Rheological Properties: Part A - G′ at 20Hz
691	RPA Rheological Properties: Part A - G″ at 20Hz
695	RPA Rheological Properties: Part B - G′ at 1.0Hz
696	RPA Rheological Properties: Part B - G″ at 1.0Hz

ABOUT THE PROGRAM

The Collaborative Reference Program for RUBBER, which was initiated in 1969, is operated and maintained by Collaborative Testing Services, Inc. (CTS), with technical guidance provided by the Rubber Division of the American Chemical Society. 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 rubber testing proficiency.

For each test there are summary statistics 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. Please refer to the section KEY TO TABLES AND GRAPHS for an explanation of terms and guidelines to interpreting the results.

ABOUT CTS

Founded in 1971, CTS is a privately-owned company that specializes in interlaboratory tests for a wide variety of industrial sectors, including rubber, plastics, fasteners and metals, containerboard, paper and color, 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.

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Key for Web Summary Report (Page 1 of 2)

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

Lab Mean — Tensile & Hardness: the average of the median values obtained for each sample. All other tests: the average of the test results obtained by the participant.

Grand Mean — The average of the LAB MEANS for all included participants. Laboratories flagged with an X or an M (see DATA FLAG column) are excluded from the GRAND MEAN.

Difference from Grand Mean — The difference of the LAB MEAN from the GRAND MEAN.

Between-Lab Standard Deviation — An indication of the precision of measurement between the laboratories. The greater the spread of the LAB MEANS about the GRAND MEAN, the larger the BETWEEN-LAB STANDARD DEVIATION (and vice versa).

Comparative Performance Value — An indication of how well a laboratory's results agree with the other participants. The CPV is a ratio indicating the number of standard deviations from the GRAND MEAN. The closer a laboratory's COMPARATIVE PERFORMANCE VALUE is to zero, the more consistent its results are with the other participants' data (and vice versa). The critical value for each CPV will vary depending on the number of labs participating in a test.

Inst Code — If instruments are tracked in a test, a code indicating the manufacturer of the instrument used to perform the test (see separate INSTRUMENT CODE LIST for each test section).

Data Flag — DATA FLAGS are assigned based on the simultaneous analysis of both samples tested. Refer to the following chart for an explanation of each symbol:

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

Graph - For each laboratory, the LAB MEAN for the first sample (x-axis) is plotted against the LAB MEAN for the second sample (y-axis) with each point representing a laboratory. The horizontal and vertical cross-hairs are the GRAND MEANS for each sample. When 20 or more laboratories are in the statistics, an ellipse is also drawn so that 95% of the time a randomly selected laboratory will be included inside the ellipse. Plotted data flags are explained above.

Common Problems Highlighted in Footnotes

1. ***Extreme data*** - The laboratory's results for one or both samples are so inconsistent with those of the other participants that the lab mean(s) fall outside the plot. (The data usually vary by more than three standard deviations from the grand mean.) 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.

5. ***Data appeared to be off by a factor of # and was corrected by CTS*** - In tests that involve computations, the results reported to CTS may be off by a factor. If this factor can easily be determined, CTS may correct the data and flag the participant. Occasionally CTS will correct a laboratory's results even though the data are still high or low when compared to the other participants. This is done so that the laboratory may be alerted to other possible errors in its testing procedure.

6. ***Data for two samples (or two tests) appeared to be switched by the lab, and the error was corrected by CTS.***

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.

WebCode	Data Flag	Sample D21-D22 Lab Mean	Diff from Grand Mean	CPV	Sample D23-D24 Lab Mean	Diff from Grand Mean	CPV
2RLHCZ		3,280.3	59.0	0.50	3,287.1	61.5	0.53
342F6B	X	3,356.2	134.9	1.14	3,565.1	339.4	2.90
34F8UL		3,250.0	28.7	0.24	3,207.0	-18.6	-0.16
36AXZZ		3,355.0	133.7	1.13	3,390.0	164.4	1.41
3JC84A		3,225.0	3.7	0.03	3,205.0	-20.6	-0.18
3LW9QA		3,394.7	173.4	1.46	3,248.6	22.9	0.20
3LZV4G		3,377.2	156.0	1.32	3,438.1	212.5	1.82
3V6MTB		3,203.0	-18.3	-0.15	3,358.0	132.4	1.13
4C4EXJ		3,186.4	-34.9	-0.29	3,260.4	34.8	0.30
4DF463		3,148.8	-72.5	-0.61	3,197.7	-27.9	-0.24
64AEB4		3,288.0	66.7	0.56	3,232.0	6.4	0.05
6BQ4KC		3,098.0	-123.3	-1.04	3,157.0	-68.6	-0.59
6HWKM8		3,161.1	-60.1	-0.51	3,345.3	119.7	1.02
6Q4HR3		3,182.2	-39.1	-0.33	3,164.0	-61.6	-0.53
6WQB42		3,096.6	-124.7	-1.05	3,169.1	-56.5	-0.48
7MVPB9		3,173.5	-47.8	-0.40	3,050.5	-175.1	-1.50
87668U		3,511.0	289.7	2.45	3,423.5	197.9	1.69
8GNGMD		3,140.3	-80.9	-0.68	3,156.4	-69.3	-0.59
8YK4XH	X	2,588.2	-633.0	-5.34	2,844.2	-381.4	-3.26
9BEM42	X	3,643.7	422.4	3.57	3,248.3	22.7	0.19
9X9EFR		3,393.9	172.7	1.46	3,422.9	197.3	1.69
A6KYW9		3,332.3	111.0	0.94	3,396.5	170.9	1.46
AAXVKJ		3,208.5	-12.8	-0.11	3,350.5	124.9	1.07
AF3JEJ		3,082.0	-139.3	-1.18	3,108.5	-117.1	-1.00
AHAYMB		3,228.6	7.3	0.06	3,205.4	-20.3	-0.17
ALRBAJ		3,386.7	165.4	1.40	3,315.6	90.0	0.77
ALVP48		3,317.0	95.7	0.81	3,360.9	135.3	1.16
APAHP7		3,219.9	-1.4	-0.01	3,263.4	37.7	0.32
BDKMH8	X	3,212.3	-8.9	-0.08	2,835.0	-390.7	-3.34
BRX62U		3,199.6	-21.7	-0.18	3,222.8	-2.9	-0.02
BWCVF3		3,233.5	12.2	0.10	3,314.5	88.9	0.76
C3RV7Y		3,179.5	-41.8	-0.35	3,045.0	-180.6	-1.55
C6XGWK		3,220.5	-0.8	-0.01	3,214.0	-11.6	-0.10
C83X33		3,198.1	-23.1	-0.20	3,193.8	-31.9	-0.27
CTGMDC		3,422.9	201.7	1.70	3,386.7	161.0	1.38
D339YZ		2,988.0	-233.3	-1.97	2,995.5	-230.1	-1.97
D92AR4		3,204.0	-17.3	-0.15	3,203.0	-22.6	-0.19
DD3U8K		3,238.0	16.8	0.14	3,206.2	-19.5	-0.17

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
DQUC6X		3,258.0	36.7	0.31	3,313.0	87.4	0.75
DWFGTR		3,306.5	85.2	0.72	3,226.5	0.9	0.01
E26B7J		3,345.3	124.1	1.05	3,380.1	154.5	1.32
E6UDHY		3,138.5	-82.8	-0.70	3,104.5	-121.1	-1.04
EMP73X		3,326.5	105.2	0.89	3,144.0	-81.6	-0.70
FBTJCT		3,162.6	-58.7	-0.50	3,214.1	-11.6	-0.10
FEWZ2J		3,042.2	-179.1	-1.51	3,087.9	-137.8	-1.18
GJ7TEF		3,309.1	87.9	0.74	3,203.2	-22.5	-0.19
GW6QBY		2,960.0	-261.3	-2.21	3,095.0	-130.6	-1.12
H3P7EW		3,088.6	-132.7	-1.12	3,103.8	-121.8	-1.04
H42XBJ		3,132.8	-88.4	-0.75	3,147.3	-78.3	-0.67
HLJY7L		3,326.5	105.2	0.89	3,246.0	20.4	0.17
J34ZKN		3,144.0	-77.3	-0.65	3,055.5	-170.1	-1.46
JCX98Z		3,303.3	82.0	0.69	3,334.9	109.3	0.94
JFVR6T		3,287.0	65.7	0.55	3,318.0	92.4	0.79
K3LAB4		3,031.7	-189.5	-1.60	3,051.9	-173.8	-1.49
LHBVZ3		3,347.5	126.2	1.07	3,346.8	121.1	1.04
MU3UB7	X	2,262.6	-958.7	-8.09	2,211.8	-1,013.8	-8.68
N6ZAGL		3,254.7	33.4	0.28	3,244.5	18.9	0.16
N9VTTT		3,046.5	-174.7	-1.47	3,191.9	-33.7	-0.29
NGV6VG		3,113.0	-108.3	-0.91	3,141.5	-84.1	-0.72
NH3R3U		3,390.4	169.1	1.43	3,446.7	221.1	1.89
PA9QTV		3,173.6	-47.7	-0.40	3,356.1	130.4	1.12
PK6YAD		3,383.8	162.6	1.37	3,328.5	102.8	0.88
QMUPUH		3,395.5	174.2	1.47	3,276.5	50.9	0.44
QUQDLU		3,147.3	-73.9	-0.62	3,210.4	-15.2	-0.13
RN3UAR		3,020.0	-201.3	-1.70	3,035.0	-190.6	-1.63
RQ3CZ8		3,378.1	156.8	1.32	3,387.3	161.7	1.38
RX4DFZ		3,324.4	103.1	0.87	3,346.0	120.3	1.03
T6M8WH		3,227.0	5.7	0.05	3,173.5	-52.1	-0.45
THTZQF		3,189.3	-32.0	-0.27	3,297.6	71.9	0.62
TYDVWB		3,222.0	0.7	0.01	3,246.0	20.4	0.17
UQXPLQ	X	2,826.1	-395.2	-3.34	2,412.6	-813.0	-6.96
UT7NWY		3,067.6	-153.7	-1.30	3,147.3	-78.3	-0.67
VA8X8H		3,093.0	-128.3	-1.08	2,969.5	-256.1	-2.19
VE3K8X	*	3,193.6	-27.6	-0.23	3,004.5	-221.2	-1.89
VJR8UQ		3,215.2	-6.1	-0.05	3,266.4	40.7	0.35

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
VNQRPN		3,292.0	70.7	0.60	3,302.6	76.9	0.66
VP2ELG		3,011.7	-209.6	-1.77	3,010.3	-215.3	-1.84
VPKF9J		3,116.5	-104.8	-0.88	3,139.0	-86.6	-0.74
WA4JNG		3,299.5	78.2	0.66	3,213.5	-12.1	-0.10
WQNGL2		3,204.0	-17.3	-0.15	3,290.5	64.9	0.56
WRXLW6		3,266.2	45.0	0.38	3,220.3	-5.3	-0.05
XBC8CK		3,132.8	-88.4	-0.75	3,227.1	1.5	0.01
XBXMXH		3,082.1	-139.2	-1.17	3,009.6	-216.1	-1.85
XPFG98		3,054.5	-166.8	-1.41	3,117.0	-108.6	-0.93
XVY3VK		3,289.0	67.7	0.57	3,311.0	85.4	0.73
XVYRCB		3,137.7	-83.6	-0.71	3,086.6	-139.1	-1.19
XXAM39		3,335.0	113.7	0.96	3,305.0	79.4	0.68
XYKRDC	*	3,533.0	311.7	2.63	3,424.5	198.9	1.70
Y3D7HD		3,166.1	-55.2	-0.47	3,148.5	-77.2	-0.66
ZE4DJL		3,256.1	34.9	0.29	3,232.2	6.6	0.06
ZZ4MRF		3,161.9	-59.4	-0.50	3,205.4	-20.3	-0.17

Summary Statistics

	Sample D21-D22	Sample D23-D24
Grand Means	3,221.26 psi	3,225.64 psi
Stnd Dev Btwn Labs	118.48 psi	116.84 psi

Statistics based on 85 of 91 reporting participants

Summary Statistics in SI Units

	Sample D21-D22	Sample D23-D24
Grand Means	22.210 MPa	22.240 MPa
Stnd Dev Btwn Labs	0.817 MPa	0.810 MPa

Statistics based on 85 of 91 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & D23-D24: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #605

342F6B (X) - Data for sample group D23-D24 are high.

8YK4XH (X) - Data for all samples are low. Possible Systematic Error.

9BEM42 (X) - Data for sample group D21-D22 are high. Inconsistent within the determinations of sample group D21-D22.

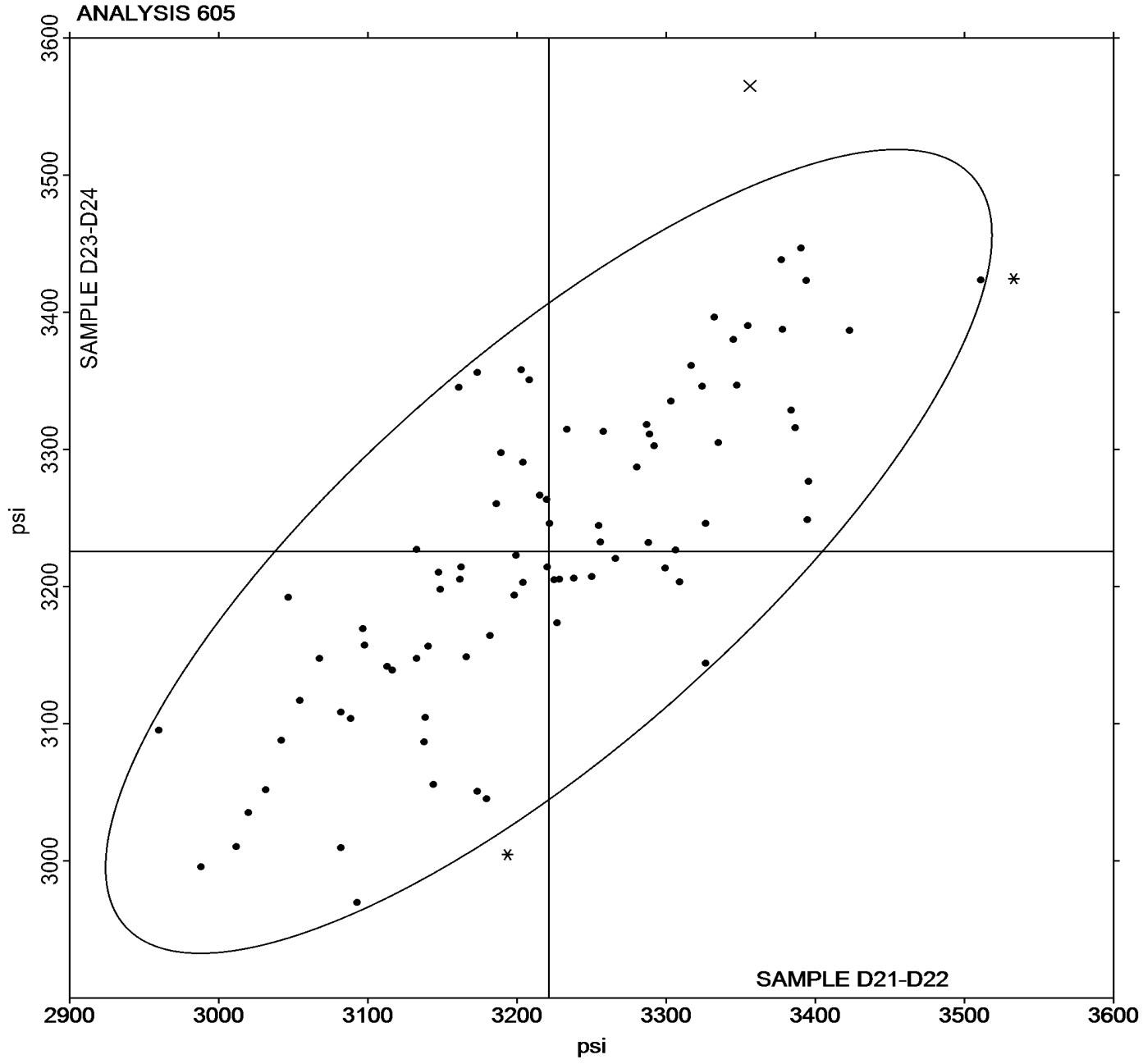
BDKMH8 (X) - Data for sample group D23-D24 are low. Inconsistent within the determinations of sample group D23-D24.

MU3UB7 (X) - Data for all samples are low. Possible Systematic Error.

UQXPLQ (X) - Data for all samples are low. Possible Systematic Error.

Grand Mean Sample **D21-D22** = 3,221.26 psi

Grand Mean Sample **D23-D24** = 3,225.64 psi



WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
2RLHCZ		661.2	24.2	0.74	646.7	11.6	0.37
342F6B	X	587.0	-49.9	-1.53	634.5	-0.6	-0.02
34F8UL		575.5	-61.4	-1.88	576.0	-59.1	-1.91
36AXZZ		642.0	5.1	0.15	624.5	-10.6	-0.34
3JC84A		645.5	8.6	0.26	638.0	2.9	0.09
3LW9QA		659.0	22.1	0.68	627.5	-7.6	-0.25
3LZV4G		630.0	-7.0	-0.21	634.1	-1.0	-0.03
3V6MTB		658.5	21.6	0.66	675.0	39.9	1.29
4C4EXJ		634.0	-2.9	-0.09	641.5	6.4	0.20
4DF463		628.9	-8.0	-0.25	640.2	5.1	0.16
64AEB4		662.0	25.1	0.77	651.0	15.9	0.51
6BQ4KC		645.0	8.1	0.25	657.0	21.9	0.70
6HWKM8		627.1	-9.8	-0.30	639.8	4.6	0.15
6Q4HR3		622.5	-14.4	-0.44	618.5	-16.6	-0.54
6WQB42		624.0	-12.9	-0.40	628.0	-7.1	-0.23
7MVPB9		590.0	-46.9	-1.44	607.5	-27.6	-0.89
87668U		688.5	51.6	1.58	669.0	33.9	1.09
8GNGMD		715.7	78.8	2.41	701.0	65.8	2.12
8YK4XH	X	526.5	-110.4	-3.38	561.5	-73.6	-2.38
9BEM42	*	690.0	53.1	1.63	709.5	74.4	2.40
9X9EFR		663.0	26.1	0.80	668.5	33.4	1.08
A6KYW9		621.5	-15.4	-0.47	618.0	-17.1	-0.55
AAXVKJ		615.5	-21.4	-0.66	630.0	-5.1	-0.17
AF3JEJ		577.5	-59.4	-1.82	588.0	-47.1	-1.52
AHAYMB		664.7	27.8	0.85	651.2	16.1	0.52
ALRBAJ		659.0	22.1	0.68	648.0	12.9	0.41
ALVP48		625.5	-11.4	-0.35	621.0	-14.1	-0.46
BDKMH8		680.0	43.1	1.32	663.0	27.8	0.90
BRX62U		635.0	-1.9	-0.06	635.5	0.4	0.01
BWCVF3	X	714.5	77.6	2.38	665.5	30.4	0.98
C3RV7Y		622.5	-14.4	-0.44	621.0	-14.1	-0.46
C6XGWK		615.0	-21.9	-0.67	626.5	-8.6	-0.28
C83X33		660.0	23.1	0.71	645.5	10.4	0.33
CTGMDC		619.0	-17.9	-0.55	607.5	-27.6	-0.89
D339YZ		595.0	-41.9	-1.28	576.0	-59.1	-1.91
D92AR4		665.0	28.1	0.86	653.5	18.4	0.59
DD3U8K		626.0	-10.9	-0.34	625.2	-10.0	-0.32
DQUC6X		626.5	-10.4	-0.32	603.0	-32.1	-1.04

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
DWFGTR		650.0	13.1	0.40	644.5	9.4	0.30
E26B7J		653.0	16.1	0.49	656.5	21.4	0.69
E6UDHY	X	700.0	63.1	1.93	634.5	-0.6	-0.02
EMP73X		649.0	12.1	0.37	662.0	26.9	0.87
FBTJCT		628.0	-8.9	-0.27	644.5	9.4	0.30
FEWZ2J		683.0	46.1	1.41	684.0	48.9	1.58
GJ7TEF		688.7	51.8	1.59	675.4	40.3	1.30
GW6QBY		706.5	69.6	2.13	697.5	62.4	2.01
H3P7EW		645.5	8.6	0.26	654.5	19.4	0.62
H42XBJ		592.5	-44.4	-1.36	605.5	-29.6	-0.96
HLJY7L		628.5	-8.4	-0.26	637.0	1.9	0.06
J34ZKN		597.0	-39.9	-1.22	582.0	-53.1	-1.71
JCX98Z		655.5	18.6	0.57	648.0	12.9	0.41
JFVR6T		665.0	28.1	0.86	654.5	19.4	0.62
K3LAB4		627.3	-9.6	-0.30	642.5	7.4	0.24
LHBVZ3		648.8	11.8	0.36	642.9	7.7	0.25
MU3UB7		659.0	22.1	0.68	658.0	22.9	0.74
N6ZAGL		575.5	-61.4	-1.88	562.5	-72.6	-2.34
N9VTTT		601.4	-35.5	-1.09	598.9	-36.2	-1.17
NGV6VG		659.5	22.6	0.69	656.5	21.4	0.69
NH3R3U		611.4	-25.6	-0.78	633.2	-2.0	-0.06
PA9QTV		620.0	-16.9	-0.52	641.0	5.9	0.19
PK6YAD		651.8	14.8	0.45	639.3	4.2	0.13
QMUPUH		623.0	-13.9	-0.43	621.0	-14.1	-0.46
QUQDLU		690.0	53.1	1.63	680.0	44.9	1.45
RN3UAR	*	552.0	-84.9	-2.60	555.0	-80.1	-2.58
RQ3CZ8		635.5	-1.4	-0.04	625.5	-9.6	-0.31
RX4DFZ		590.5	-46.4	-1.42	575.5	-59.7	-1.92
T6M8WH		635.0	-1.9	-0.06	642.5	7.4	0.24
THTZQF		584.8	-52.1	-1.60	590.0	-45.2	-1.46
TYDVWB		636.0	-0.9	-0.03	633.5	-1.6	-0.05
UQXPLQ	X	855.6	218.7	6.70	1,000.0	364.9	11.77
UT7NWY		623.1	-13.8	-0.42	634.6	-0.5	-0.02
VA8X8H		607.0	-29.9	-0.92	590.0	-45.1	-1.46
VE3K8X		662.4	25.4	0.78	633.4	-1.7	-0.06
VJR8UQ		645.8	8.8	0.27	649.7	14.6	0.47
VNQRPN		642.5	5.5	0.17	633.7	-1.4	-0.05

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
VP2ELG		627.8	-9.1	-0.28	644.3	9.1	0.29
VPKF9J	X	648.0	11.1	0.34	687.0	51.9	1.67
WA4JNG		677.0	40.1	1.23	657.5	22.4	0.72
WQNGL2		644.5	7.6	0.23	647.0	11.9	0.38
WRXLW6		668.0	31.0	0.95	679.3	44.2	1.42
XBC8CK		650.0	13.1	0.40	647.5	12.4	0.40
XBXMXH		637.2	0.2	0.01	615.2	-20.0	-0.65
XPFG98		662.5	25.6	0.78	670.0	34.9	1.12
XVY3VK		641.0	4.1	0.12	641.5	6.4	0.20
XVYRCB		630.5	-6.4	-0.20	629.5	-5.6	-0.18
XXAM39		630.0	-6.9	-0.21	635.0	-0.1	0.00
XYKRDC		670.7	33.8	1.03	653.0	17.8	0.58
Y3D7HD		644.5	7.6	0.23	626.5	-8.6	-0.28
ZE4DJL		558.0	-78.9	-2.42	561.5	-73.6	-2.38
ZZ4MRF	*	567.5	-69.4	-2.13	593.6	-41.6	-1.34

Summary Statistics

	Sample D21-D22	Sample D23-D24
Grand Means	636.95 percent	635.15 percent
Stnd Dev Btwn Labs	32.65 percent	31.01 percent

Statistics based on 84 of 90 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & D23-D24: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #606

342F6B (X) - Inconsistent in testing between samples.

8YK4XH (X) - Data for sample group D21-D22 are low.

BWCVF3 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both sample groups.

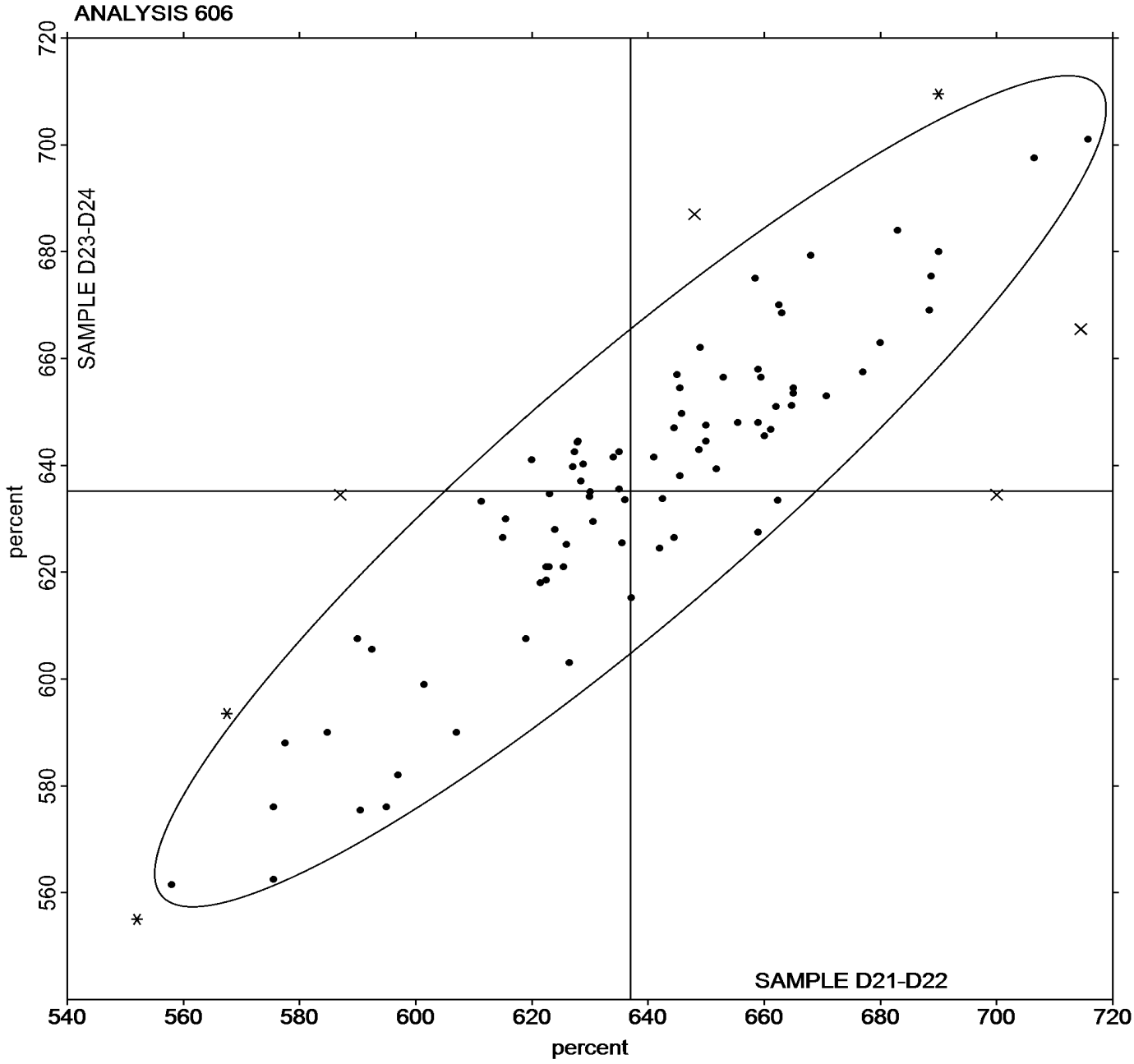
E6UDHY (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group D23-D24.

UQXPLQ (X) - Data for all samples are high. Inconsistent within the determinations of sample group D21-D22.

VPKF9J (X) - Inconsistent in testing between samples.

Grand Mean Sample **D21-D22** = 636.95 percent

Grand Mean Sample **D23-D24** = 635.15 percent



WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
2RLHCZ		826.7	-51.4	-0.76	871.7	-18.3	-0.28
342F6B		1,010.0	131.8	1.96	959.5	69.5	1.08
34F8UL		857.0	-21.2	-0.31	887.5	-2.5	-0.04
36AXZZ		879.5	1.3	0.02	947.5	57.5	0.90
3JC84A		884.0	5.8	0.09	889.0	-1.0	-0.02
3LW9QA		830.2	-48.0	-0.71	885.9	-4.1	-0.06
3LZV4G		927.5	49.4	0.73	979.7	89.8	1.40
3V6MTB		790.5	-87.7	-1.30	817.0	-73.0	-1.14
4C4EXJ		853.7	-24.4	-0.36	873.1	-16.9	-0.26
4DF463		801.5	-76.6	-1.14	861.2	-28.8	-0.45
64AEB4		831.5	-46.7	-0.69	863.0	-27.0	-0.42
6HWKM8		877.5	-0.7	-0.01	929.7	39.7	0.62
6Q4HR3		925.3	47.2	0.70	920.3	30.3	0.47
6WQB42		921.7	43.6	0.65	928.2	38.3	0.60
7MVPB9	*	988.0	109.8	1.63	899.0	9.0	0.14
87668U		818.5	-59.7	-0.88	826.0	-64.0	-1.00
8GNGMD		773.3	-104.9	-1.56	820.9	-69.1	-1.08
9BEM42	X	879.8	1.7	0.02	746.3	-143.7	-2.24
9X9EFR		818.7	-59.4	-0.88	837.6	-52.4	-0.82
A6KYW9		907.0	28.8	0.43	958.5	68.5	1.07
AAXVKJ		901.0	22.8	0.34	895.0	5.0	0.08
AF3JEJ		987.5	109.3	1.62	1,011.0	121.0	1.89
AHAYMB		781.8	-96.4	-1.43	808.6	-81.4	-1.27
ALRBAJ		849.2	-28.9	-0.43	898.5	8.5	0.13
ALVP48		893.0	14.8	0.22	954.0	64.0	1.00
BDKMH8	X	794.7	-83.4	-1.24	696.0	-194.0	-3.02
BRX62U		871.7	-6.5	-0.10	900.7	10.7	0.17
C3RV7Y		894.5	16.3	0.24	828.0	-62.0	-0.97
C6XGWK		913.5	35.3	0.52	884.0	-6.0	-0.09
C83X33		878.2	0.1	0.00	884.0	-6.0	-0.09
CTGMDC		966.0	87.8	1.30	1,036.3	146.3	2.28
D339YZ		894.0	15.8	0.23	965.5	75.5	1.18
D92AR4		783.0	-95.2	-1.41	811.0	-79.0	-1.23
DD3U8K		948.1	69.9	1.04	943.1	53.1	0.83
DWFGTR		867.0	-11.2	-0.17	853.0	-37.0	-0.58
E26B7J		876.8	-1.4	-0.02	883.3	-6.7	-0.10
EMP73X		863.5	-14.7	-0.22	803.0	-87.0	-1.35
FBTJCT		825.3	-52.9	-0.78	836.1	-53.8	-0.84

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
FEWZ2J		761.5	-116.7	-1.73	765.1	-124.9	-1.95
GJ7TEF		841.8	-36.4	-0.54	866.2	-23.8	-0.37
GW6QBY		728.9	-149.3	-2.21	797.6	-92.4	-1.44
H3P7EW		849.2	-28.9	-0.43	824.5	-65.4	-1.02
H42XBJ		948.6	70.4	1.04	960.9	70.9	1.10
HLJY7L		938.0	59.8	0.89	936.5	46.5	0.72
J34ZKN		933.5	55.3	0.82	938.0	48.0	0.75
JCX98Z		874.1	-4.1	-0.06	900.8	10.8	0.17
JFVR6T		807.5	-70.7	-1.05	852.0	-38.0	-0.59
K3LAB4		858.6	-19.6	-0.29	837.1	-52.9	-0.82
LHBVZ3		873.1	-5.0	-0.07	876.0	-13.9	-0.22
MU3UB7	X	638.9	-239.3	-3.55	636.7	-253.2	-3.94
N6ZAGL		1,005.1	127.0	1.88	954.4	64.4	1.00
N9VTTT		906.5	28.3	0.42	952.9	62.9	0.98
NGV6VG		808.5	-69.7	-1.03	851.5	-38.5	-0.60
NH3R3U		1,001.2	123.0	1.82	942.0	52.0	0.81
PA9QTV		847.1	-31.1	-0.46	873.1	-16.9	-0.26
PK6YAD		875.6	-2.6	-0.04	867.7	-22.3	-0.35
QMUPUH		845.0	-33.2	-0.49	890.5	0.5	0.01
RN3UAR		905.0	26.8	0.40	925.5	35.5	0.55
RQ3CZ8		934.4	56.2	0.83	952.2	62.2	0.97
RX4DFZ	*	985.6	107.4	1.59	1,062.9	173.0	2.69
T6M8WH		848.0	-30.2	-0.45	819.0	-71.0	-1.11
THTZQF	X	1,083.9	205.8	3.05	1,128.1	238.1	3.71
TYDVWB		932.5	54.3	0.81	936.0	46.0	0.72
UQXPLQ	X	663.1	-215.1	-3.19	437.6	-452.3	-7.05
UT7NWY		802.8	-75.4	-1.12	827.4	-62.5	-0.97
VA8X8H		898.5	20.3	0.30	879.5	-10.5	-0.16
VE3K8X	X	663.6	-214.5	-3.18	671.1	-218.9	-3.41
VJR8UQ		852.7	-25.5	-0.38	888.2	-1.7	-0.03
VNQRPN		864.2	-13.9	-0.21	919.5	29.6	0.46
VP2ELG	*	860.5	-17.7	-0.26	782.0	-108.0	-1.68
VPKF9J	X	842.5	-35.7	-0.53	722.5	-167.5	-2.61
WA4JNG		780.5	-97.7	-1.45	819.0	-71.0	-1.11
WQNGL2		835.0	-43.2	-0.64	888.0	-2.0	-0.03
WRXLW6		821.3	-56.9	-0.84	777.2	-112.8	-1.76
XBC8CK		888.0	9.8	0.15	881.5	-8.5	-0.13

WebCode	Data Flag	Sample D21-D22 Lab Mean	Diff from Grand Mean	CPV	Sample D23-D24 Lab Mean	Diff from Grand Mean	CPV
XBXMXH		818.0	-60.1	-0.89	865.2	-24.8	-0.39
XPFG98		819.5	-58.7	-0.87	781.5	-108.5	-1.69
XVY3VK		854.0	-24.2	-0.36	874.5	-15.5	-0.24
XVYRCB		891.1	13.0	0.19	836.1	-53.8	-0.84
XXAM39		912.0	33.8	0.50	916.0	26.0	0.41
XYKRDC		923.6	45.5	0.67	937.0	47.0	0.73
Y3D7HD		836.6	-41.6	-0.62	869.3	-20.7	-0.32
ZE4DJL	*	1,071.8	193.7	2.87	1,063.9	173.9	2.71
ZZ4MRF	*	1,062.4	184.3	2.73	989.2	99.2	1.55

Summary Statistics

	Sample D21-D22	Sample D23-D24
Grand Means	878.15 psi	889.97 psi
Stnd Dev Btwn Labs	67.44 psi	64.20 psi

Statistics based on 77 of 84 reporting participants

Summary Statistics in SI Units

	Sample D21-D22	Sample D23-D24
Grand Means	6.0546 MPa	6.1400 MPa
Stnd Dev Btwn Labs	0.4650 MPa	0.4400 MPa

Statistics based on 77 of 84 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & D23-D24: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #607

9BEM42 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group D21-D22.

BDKMH8 (X) - Data for sample group D23-D24 are low. Inconsistent within the determinations of sample group D23-D24.

MU3UB7 (X) - Data for all samples are low. Possible Systematic Error.

THTZQF (X) - Data for all samples are high. Possible Systematic Error.

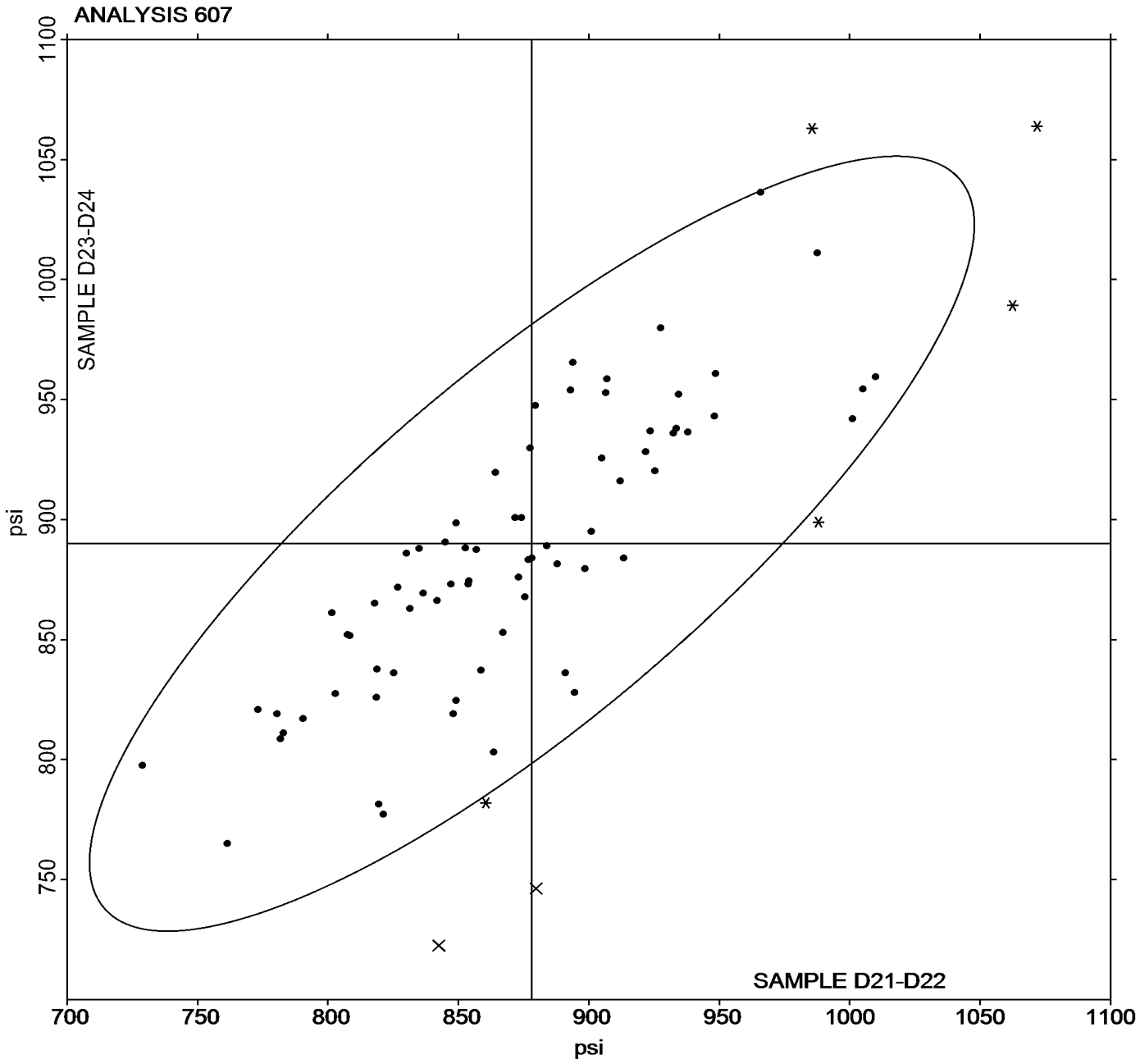
UQXPLQ (X) - Data for all samples are low. Possible Systematic Error.

VE3K8X (X) - Data for all samples are low. Possible Systematic Error.

VPKF9J (X) - Inconsistent in testing between samples.

Grand Mean Sample **D21-D22** = 878.15 psi

Grand Mean Sample **D23-D24** = 889.97 psi



WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
2RLHCZ		192.2	-5.7	-0.42	204.5	3.9	0.25
342F6B		217.0	19.2	1.42	219.0	18.4	1.20
34F8UL		178.0	-19.8	-1.47	182.0	-18.6	-1.22
36AXZZ		202.0	4.2	0.31	219.5	18.9	1.23
3JC84A		208.0	10.2	0.75	211.0	10.4	0.68
3LW9QA		185.7	-12.2	-0.91	197.6	-3.0	-0.20
3LZV4G		205.2	7.4	0.55	220.5	19.8	1.30
3V6MTB		186.0	-11.8	-0.88	194.0	-6.6	-0.43
4C4EXJ		194.9	-2.9	-0.22	198.5	-2.1	-0.14
4DF463		184.9	-12.9	-0.96	197.7	-2.9	-0.19
64AEB4		201.5	3.7	0.27	196.0	-4.6	-0.30
6HWKM8		188.6	-9.3	-0.69	200.9	0.2	0.02
6Q4HR3		207.4	9.6	0.71	204.5	3.9	0.25
6WQB42		205.2	7.4	0.55	207.4	6.8	0.44
7MVPB9		206.5	8.7	0.64	191.0	-9.6	-0.63
87668U		190.5	-7.3	-0.55	188.0	-12.6	-0.83
8GNGMD		191.6	-6.3	-0.47	199.7	-0.9	-0.06
8YK4XH		199.4	1.6	0.12	201.6	1.0	0.06
9BEM42	X	214.9	17.1	1.27	181.1	-19.6	-1.28
9X9EFR		189.3	-8.6	-0.64	195.1	-5.6	-0.36
A6KYW9		187.5	-10.3	-0.77	196.0	-4.6	-0.30
AAXVKJ		197.0	-0.8	-0.06	195.0	-5.6	-0.37
AF3JEJ		222.5	24.7	1.83	233.5	32.9	2.15
AHAYMB		175.5	-22.3	-1.66	175.5	-25.1	-1.64
ALRBAJ		206.7	8.8	0.66	223.4	22.7	1.48
ALVP48		196.0	-1.8	-0.14	213.5	12.9	0.84
BDKMH8		197.2	-0.6	-0.04	179.8	-20.9	-1.36
BRX62U		191.5	-6.4	-0.47	200.2	-0.5	-0.03
BWCVF3		187.5	-10.3	-0.77	193.5	-7.1	-0.47
C3RV7Y		198.0	0.2	0.01	183.5	-17.1	-1.12
C6XGWK		200.0	2.2	0.16	196.5	-4.1	-0.27
C83X33		213.9	16.1	1.20	211.0	10.4	0.68
CTGMDC		215.4	17.5	1.30	235.0	34.3	2.24
D339YZ		206.5	8.7	0.64	231.0	30.4	1.98
D92AR4		180.5	-17.3	-1.29	193.0	-7.6	-0.50
DD3U8K		212.9	15.0	1.11	213.6	12.9	0.84
DWFGTR		192.0	-5.8	-0.43	192.0	-8.6	-0.56
E26B7J		198.0	0.1	0.01	203.8	3.1	0.21

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
EMP73X		199.5	1.7	0.12	187.0	-13.6	-0.89
FBTJCT		190.7	-7.1	-0.53	191.5	-9.2	-0.60
FEWZ2J		170.4	-27.4	-2.04	166.1	-34.6	-2.26
GJ7TEF		186.5	-11.3	-0.84	191.0	-9.7	-0.63
GW6QBY		199.9	2.1	0.15	215.7	15.1	0.99
H3P7EW		211.0	13.2	0.98	207.4	6.8	0.44
H42XBJ		203.8	5.9	0.44	211.8	11.1	0.73
HLJY7L		225.5	27.7	2.05	223.5	22.9	1.49
J34ZKN		211.0	13.2	0.98	212.0	11.4	0.74
JCX98Z		197.7	-0.2	-0.01	202.9	2.2	0.14
JFVR6T		189.0	-8.8	-0.66	203.0	2.4	0.15
K3LAB4		197.2	-0.6	-0.04	190.7	-9.9	-0.65
LHBVZ3		182.7	-15.1	-1.12	187.8	-12.8	-0.84
MU3UB7		165.3	-32.5	-2.41	173.3	-27.3	-1.78
N6ZAGL		206.0	8.1	0.60	184.9	-15.7	-1.03
N9VTTT		207.4	9.6	0.71	211.8	11.1	0.73
NGV6VG		197.0	-0.8	-0.06	211.0	10.4	0.68
NH3R3U		225.7	27.9	2.07	218.9	18.2	1.19
PA9QTV		185.9	-12.0	-0.89	195.4	-5.3	-0.35
PK6YAD		205.5	7.7	0.57	204.5	3.9	0.25
QMUPUH		179.0	-18.8	-1.40	188.5	-12.1	-0.79
RN3UAR		203.0	5.2	0.38	208.5	7.9	0.51
RQ3CZ8		199.5	1.7	0.12	206.0	5.3	0.35
RX4DFZ	X	243.6	45.8	3.40	248.3	47.6	3.11
T6M8WH		189.5	-8.3	-0.62	185.0	-15.6	-1.02
THTZQF		218.1	20.2	1.50	234.2	33.5	2.19
TYDVWB		229.5	31.7	2.35	235.0	34.4	2.25
UQXPLQ		171.8	-26.1	-1.94	170.8	-29.8	-1.95
UT7NWY		183.5	-14.4	-1.07	186.4	-14.3	-0.93
VA8X8H		218.0	20.2	1.50	215.0	14.4	0.94
VE3K8X		187.1	-10.7	-0.80	191.1	-9.5	-0.62
VJR8UQ		204.1	6.3	0.47	205.5	4.9	0.32
VNQRPN		200.3	2.5	0.18	209.4	8.7	0.57
VP2ELG		192.5	-5.3	-0.40	175.0	-25.6	-1.68
VPKF9J	*	198.0	0.2	0.01	176.0	-24.6	-1.61
WA4JNG		185.0	-12.8	-0.95	197.0	-3.6	-0.24
WQNGL2		192.0	-5.8	-0.43	203.0	2.4	0.15

WebCode	Data Flag	Sample D21-D22 Lab Mean	Diff from Grand Mean	CPV	Sample D23-D24 Lab Mean	Diff from Grand Mean	CPV
WRXLW6		189.7	-8.1	-0.60	179.5	-21.2	-1.38
XBC8CK		227.0	29.2	2.17	217.0	16.4	1.07
XBXMXH		181.3	-16.5	-1.23	193.6	-7.0	-0.46
XPFG98		186.5	-11.3	-0.84	177.0	-23.6	-1.54
XVY3VK		194.5	-3.3	-0.25	201.0	0.4	0.02
XVYRCB		202.6	4.8	0.35	190.5	-10.1	-0.66
XXAM39		196.5	-1.3	-0.10	199.5	-1.1	-0.07
XYKRDC		204.3	6.4	0.48	207.3	6.6	0.43
Y3D7HD		186.3	-11.6	-0.86	196.2	-4.4	-0.29
ZE4DJL		203.8	5.9	0.44	205.2	4.6	0.30
ZZ4MRF		225.5	27.7	2.06	212.5	11.8	0.77

Summary Statistics

	Sample D21-D22	Sample D23-D24
Grand Means	197.84 psi	200.64 psi
Stnd Dev Btwn Labs	13.46 psi	15.31 psi

Statistics based on 84 of 86 reporting participants

Summary Statistics in SI Units

	Sample D21-D22	Sample D23-D24
Grand Means	1.3641 MPa	1.3800 MPa
Stnd Dev Btwn Labs	0.0928 MPa	0.1100 MPa

Statistics based on 84 of 86 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & D23-D24: Polyisoprene compound, batch #2

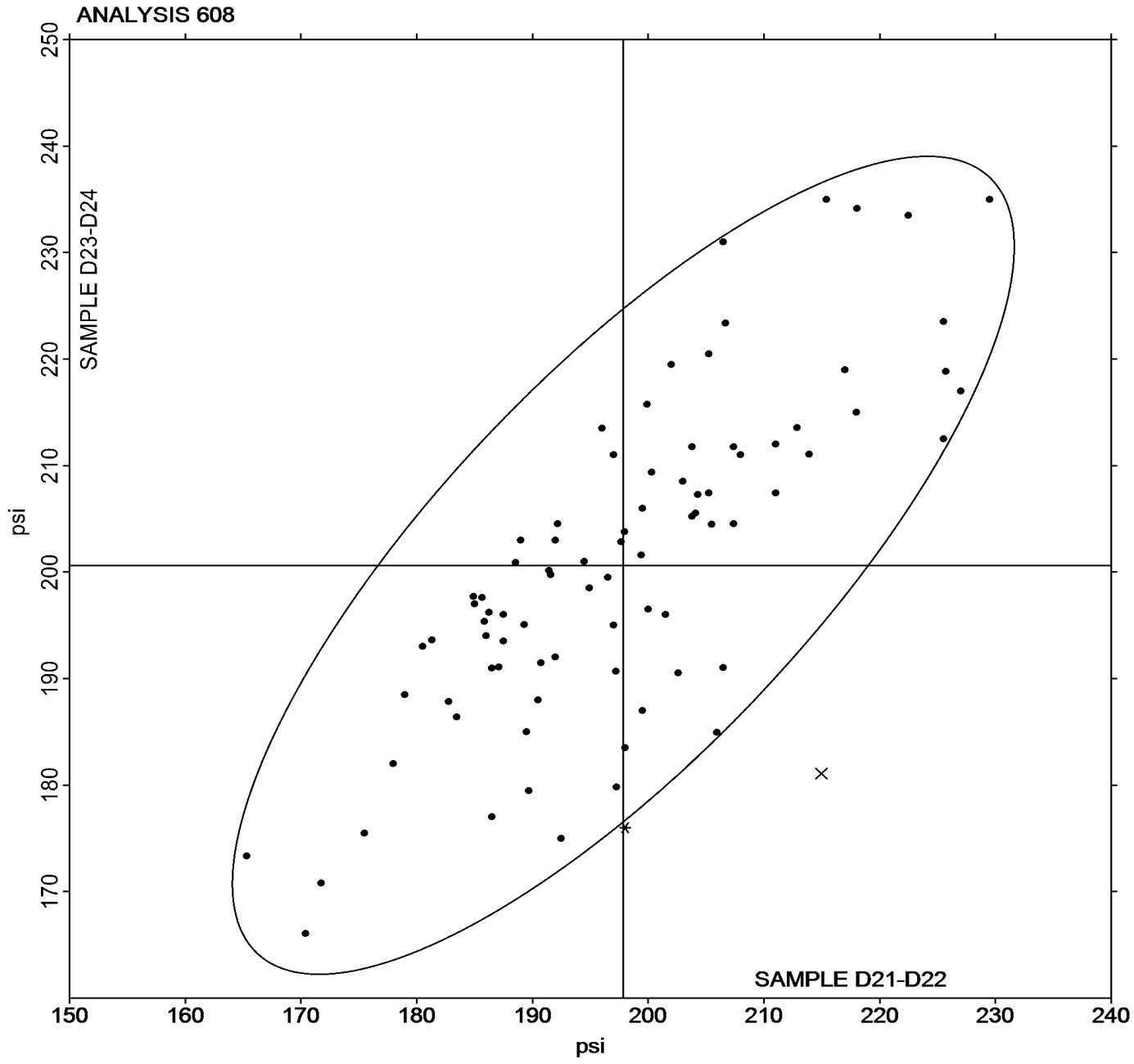
Comments on Assigned Data Flags for Test #608

9BEM42 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group D21-D22.

RX4DFZ (X) - Data for all samples are high. Possible Systematic Error.

Grand Mean Sample **D21-D22** = 197.84 psi

Grand Mean Sample **D23-D24** = 200.64 psi



WebCode	Data Flag	Sample D21-D22 Lab Mean	Diff from Grand Mean	CPV	Sample D23-D24 Lab Mean	Diff from Grand Mean	CPV	Instr Code
2RLHCZ		48.00	-1.12	-0.65	48.00	-0.91	-0.56	BT
342F6B		47.00	-2.12	-1.23	48.50	-0.41	-0.25	XX
34F8UL		50.80	1.68	0.97	49.60	0.69	0.43	HH
36AXZZ		49.00	-0.12	-0.07	49.00	0.09	0.06	HH
3JC84A		47.00	-2.12	-1.23	47.00	-1.91	-1.17	BT
3LW9QA		48.85	-0.27	-0.16	48.85	-0.06	-0.03	BT
3LZV4G		48.00	-1.12	-0.65	48.50	-0.41	-0.25	HH
3V6MTB		48.50	-0.62	-0.36	48.00	-0.91	-0.56	BT
4C4EXJ	X	55.50	6.38	3.69	48.50	-0.41	-0.25	BT
4DF463		49.00	-0.12	-0.07	49.00	0.09	0.06	BT
64AEB4		48.66	-0.46	-0.27	48.68	-0.23	-0.14	BT
6HWKM8		47.95	-1.17	-0.68	47.90	-1.01	-0.62	BT
6Q4HR3		51.20	2.08	1.20	50.95	2.04	1.26	BT
6WQB42		50.40	1.28	0.74	49.25	0.34	0.21	BT
7MVPB9	X	48.00	-1.12	-0.65	44.00	-4.91	-3.02	BT
87668U		50.85	1.73	1.00	50.10	1.19	0.74	BT
8GNGMD		48.75	-0.37	-0.21	48.65	-0.26	-0.16	BT
8YK4XH		48.85	-0.27	-0.16	48.20	-0.71	-0.43	BT
9BEM42	X	52.00	2.88	1.67	54.50	5.59	3.44	HH
9QRZDL		47.50	-1.62	-0.94	48.00	-0.91	-0.56	BT
9X9EFR		48.50	-0.62	-0.36	48.50	-0.41	-0.25	BT
A6KYW9		51.00	1.88	1.09	50.50	1.59	0.98	BT
AA36MG		47.80	-1.32	-0.76	47.10	-1.81	-1.11	BT
AAXVKJ		50.25	1.13	0.65	49.80	0.89	0.55	BT
AF3JEJ	X	49.50	0.38	0.22	46.50	-2.41	-1.48	BT
AHAYMB		50.50	1.38	0.80	50.00	1.09	0.67	BT
ALRBAJ	*	54.35	5.23	3.03	53.90	4.99	3.07	BT
ALVP48		46.50	-2.62	-1.52	48.00	-0.91	-0.56	HH
APAHP7		47.50	-1.62	-0.94	47.00	-1.91	-1.17	BT
BDKMH8	X	49.50	0.38	0.22	46.00	-2.91	-1.79	HH
BRX62U		46.90	-2.22	-1.29	46.10	-2.81	-1.73	BT
BWCVF3		49.35	0.23	0.13	49.35	0.44	0.27	BT
C3RV7Y		50.25	1.13	0.65	48.90	-0.01	0.00	BT
C6XGWK	*	48.00	-1.12	-0.65	46.00	-2.91	-1.79	BT
C83X33		48.25	-0.87	-0.50	48.60	-0.31	-0.19	BT
CTGMDC		47.70	-1.42	-0.82	48.85	-0.06	-0.03	BT
D339YZ	X	41.50	-7.62	-4.41	42.00	-6.91	-4.25	HH
D92AR4		48.50	-0.62	-0.36	49.00	0.09	0.06	BT

WebCode	Data Flag	Sample D21-D22 Lab Mean	Diff from Grand Mean	CPV	Sample D23-D24 Lab Mean	Diff from Grand Mean	CPV	Instr Code
DD3U8K		49.40	0.28	0.16	49.30	0.39	0.24	BT
DQUC6X		49.00	-0.12	-0.07	49.00	0.09	0.06	BT
DWFGTR		51.00	1.88	1.09	51.00	2.09	1.29	HH
E26B7J		47.50	-1.62	-0.94	47.50	-1.41	-0.87	BT
E6UDHY		50.00	0.88	0.51	49.50	0.59	0.37	HH
ELE9PF	X	43.75	-5.37	-3.11	41.75	-7.16	-4.41	BT
EMP73X		50.50	1.38	0.80	49.10	0.19	0.12	BT
FBBMU2		48.05	-1.07	-0.62	49.20	0.29	0.18	HH
FBTJCT		50.00	0.88	0.51	49.00	0.09	0.06	BT
FEWZ2J		49.00	-0.12	-0.07	49.00	0.09	0.06	BT
FWW3Q2		48.50	-0.62	-0.36	48.00	-0.91	-0.56	BT
GHAFRM	X	50.00	0.88	0.51	47.00	-1.91	-1.17	HH
GJ7TEF		50.50	1.38	0.80	51.25	2.34	1.44	HH
GW6QBY		47.75	-1.37	-0.79	47.50	-1.41	-0.87	HH
H3P7EW		50.00	0.88	0.51	49.00	0.09	0.06	HH
H42XBJ		47.90	-1.22	-0.71	47.25	-1.66	-1.02	BT
HLJY7L		49.50	0.38	0.22	50.00	1.09	0.67	BT
J34ZKN		45.00	-4.12	-2.38	45.50	-3.41	-2.10	BT
JCX98Z		50.65	1.53	0.89	50.15	1.24	0.77	BT
JFVR6T		48.00	-1.12	-0.65	47.00	-1.91	-1.17	BT
K3LAB4		49.25	0.13	0.08	48.20	-0.71	-0.43	BT
LHBVZ3		48.00	-1.12	-0.65	48.00	-0.91	-0.56	BT
MU3UB7	X	37.20	-11.92	-6.90	36.60	-12.31	-7.58	BT
N6ZAGL	*	48.30	-0.82	-0.47	46.25	-2.66	-1.64	BT
N9VTTT		49.00	-0.12	-0.07	49.00	0.09	0.06	BT
NGV6VG		49.00	-0.12	-0.07	49.35	0.44	0.27	BT
NH3R3U		48.75	-0.37	-0.21	48.80	-0.11	-0.07	BT
PA9QTV		52.55	3.43	1.99	52.30	3.39	2.09	BT
PK6YAD		49.00	-0.12	-0.07	49.55	0.64	0.40	BT
Q4YWAK	*	54.00	4.88	2.82	53.50	4.59	2.83	HH
QMUPUH		49.50	0.38	0.22	49.00	0.09	0.06	HH
QUQDLU		51.20	2.08	1.20	50.95	2.04	1.26	BT
RN3UAR	X	53.60	4.48	2.59	54.35	5.44	3.35	BT
RQ3CZ8		49.75	0.63	0.36	50.25	1.34	0.83	BT
RX4DFZ		47.25	-1.87	-1.08	47.90	-1.01	-0.62	BT
T6M8WH		49.50	0.38	0.22	48.50	-0.41	-0.25	BT
THTZQF		53.00	3.88	2.25	52.00	3.09	1.91	HH

WebCode	Data Flag	Sample D21-D22 Lab Mean	Diff from Grand Mean	CPV	Sample D23-D24 Lab Mean	Diff from Grand Mean	CPV	Instr Code
TYDVWB		50.00	0.88	0.51	49.00	0.09	0.06	BT
UQXPLQ		48.20	-0.92	-0.53	48.05	-0.86	-0.53	BT
UT7NWY		47.65	-1.47	-0.85	47.25	-1.66	-1.02	BT
UWNVCL	*	54.50	5.38	3.11	53.50	4.59	2.83	BT
VA8X8H	X	54.50	5.38	3.11	54.85	5.94	3.66	XX
VE3K8X		47.50	-1.62	-0.94	48.00	-0.91	-0.56	BT
VJR8UQ		48.25	-0.87	-0.50	48.00	-0.91	-0.56	BT
VNQRPN		49.75	0.63	0.36	50.20	1.29	0.80	BT
VP2ELG		48.75	-0.37	-0.21	47.70	-1.21	-0.74	BT
VPKF9J		48.00	-1.12	-0.65	46.50	-2.41	-1.48	BT
WA4JNG		47.55	-1.57	-0.91	46.90	-2.01	-1.23	BT
WQNGL2		48.00	-1.12	-0.65	48.00	-0.91	-0.56	BT
WRXLW6		48.50	-0.62	-0.36	47.50	-1.41	-0.87	BT
XBC8CK		50.00	0.88	0.51	49.50	0.59	0.37	BT
XBXMXH		49.15	0.03	0.02	50.20	1.29	0.80	BT
XPFG98		45.50	-3.62	-2.10	46.50	-2.41	-1.48	BT
XVY3VK		48.90	-0.22	-0.13	48.45	-0.46	-0.28	BT
XVYRCB	X	48.00	-1.12	-0.65	45.50	-3.41	-2.10	BT
XXAM39		52.00	2.88	1.67	51.50	2.59	1.60	BT
XYKRDC		47.75	-1.37	-0.79	48.75	-0.16	-0.10	BT
ZE4DJL		49.30	0.18	0.10	49.90	0.99	0.61	BT
ZZ4MRF		50.00	0.88	0.51	50.00	1.09	0.67	HH

Summary Statistics

	Sample D21-D22	Sample D23-D24
Grand Means	49.120 Type A	48.906 Type A
Stnd Dev Btwn Labs	1.728 Type A	1.624 Type A

Statistics based on 85 of 97 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & D23-D24: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #620

4C4EXJ (X) - Data for sample group D21-D22 are high. Inconsistent within the determinations of sample group D21-D22.

7MVPB9 (X) - Data for sample group D23-D24 are low. Inconsistent within the determinations of sample group D23-D24.

9BEM42 (X) - Data for sample group D23-D24 are high. Inconsistent within the determinations of sample group D21-D22.

AF3JEJ (X) - Inconsistent in testing between samples.

BDKMH8 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group D23-D24.

D339YZ (X) - Data for all samples are low. Possible Systematic Error.

ELE9PF (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group D21-D22.

GHAFRM (X) - Inconsistent in testing between samples.

MU3UB7 (X) - Data for all samples are low. Possible Systematic Error.

RN3UAR (X) - Data for sample group D23-D24 are high.

VA8X8H (X) - Data for all samples are high. Possible Systematic Error.

XVYRCB (X) - Inconsistent in testing between samples.

Key to Instrument Codes Reported by Participants

BT Benchtop

HH Handheld

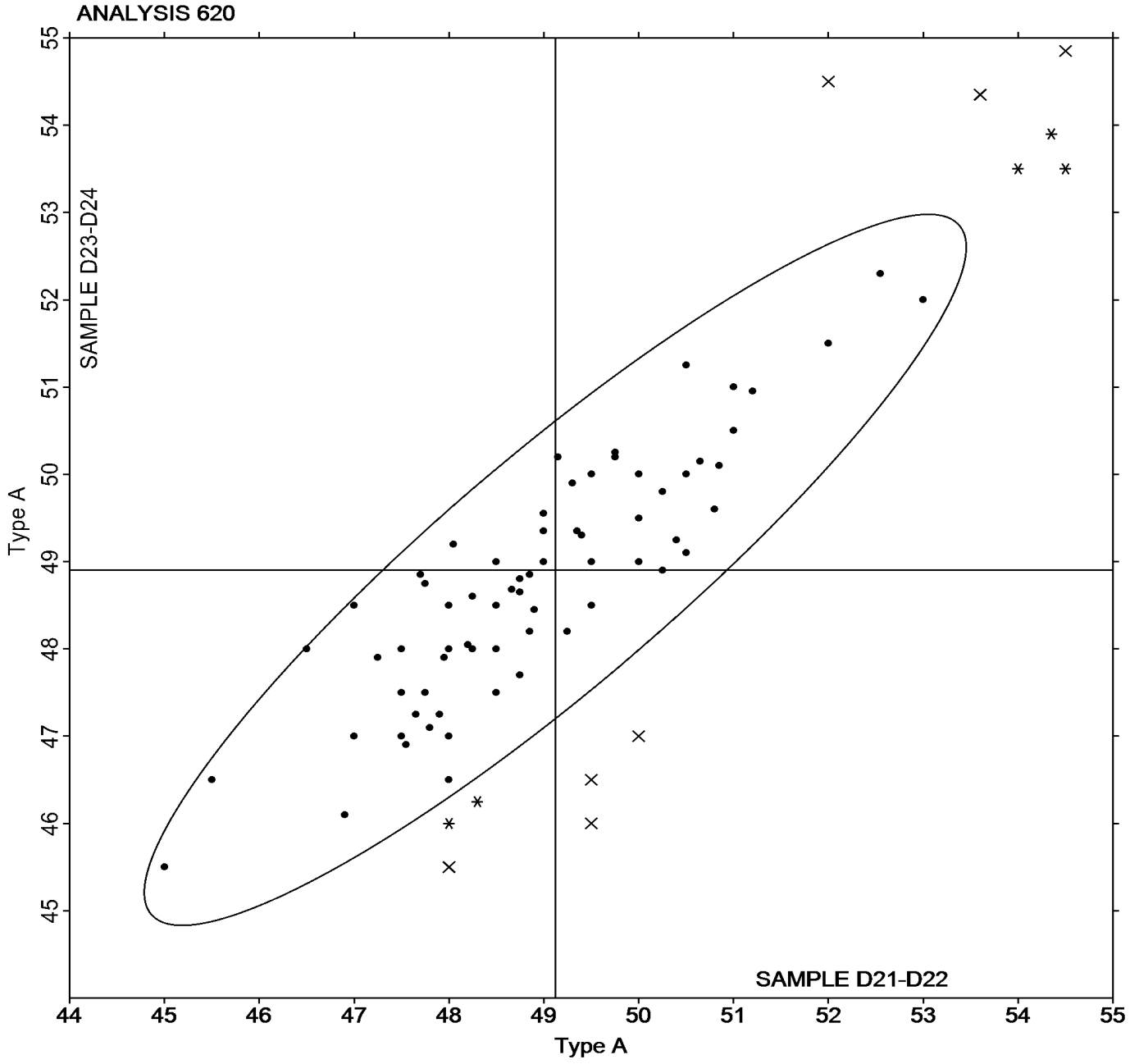
XX Specify Benchtop or Handheld Instrument

Results by Reading Time (as reported by laboratory)

	Sample D21-D22 *Polyisoprene compound, batch #1*			Sample D23-D24 *Polyisoprene compound, batch #2*				
Reading Time	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	/ Rpt
Readings taken within 0 - 5 seconds	49.14	1.47	0.02	48.99	1.31	0.09	60	68
Readings taken at 5 seconds	48.06	0.41	-1.06	47.67	0.67	-1.23	8	10
Readings taken after 5+ seconds	48.71	0.93	-0.41	48.55	0.67	-0.36	5	9
Maximum hardness indicator used	48.54	2.00	-0.58	48.58	1.73	-0.33	7	9

Grand Mean Sample **D21-D22** = 49.120 Type A

Grand Mean Sample **D23-D24** = 48.906 Type A



WebCode	Data Flag	Sample D21-D22 Lab Mean	Diff from Grand Mean	CPV	Sample D23-D24 Lab Mean	Diff from Grand Mean	CPV
342F6B		1.135	-0.002	-0.91	1.134	-0.004	-1.34
34F8UL		1.134	-0.003	-1.18	1.135	-0.002	-0.81
36AXZZ		1.139	0.002	0.76	1.139	0.002	0.74
3JC84A		1.138	0.002	0.56	1.139	0.001	0.57
3LW9QA		1.135	-0.002	-0.79	1.135	-0.002	-0.81
3LZV4G	X	1.139	0.002	0.76	1.148	0.010	3.95
4C4EXJ	X	1.125	-0.012	-4.43	1.130	-0.007	-2.67
6Q4HR3		1.133	-0.004	-1.46	1.132	-0.005	-1.91
6WQB42		1.138	0.001	0.21	1.137	0.000	-0.02
7MVPB9		1.134	-0.003	-1.18	1.134	-0.003	-1.21
87668U		1.140	0.003	1.01	1.138	0.001	0.28
8GNGMD		1.137	0.000	-0.16	1.136	-0.001	-0.45
9X9EFR		1.135	-0.002	-0.72	1.138	0.000	0.17
A6KYW9	X	1.128	-0.009	-3.32	1.125	-0.013	-4.74
AAXVKJ		1.139	0.002	0.76	1.140	0.002	0.93
AF3JEJ	X	1.136	-0.001	-0.35	1.130	-0.007	-2.67
AHAYMB		1.141	0.004	1.51	1.140	0.003	1.12
ALRBAJ	X	1.118	-0.019	-7.16	1.128	-0.010	-3.60
ALVP48	*	1.136	-0.001	-0.52	1.140	0.003	1.06
BDKMH8	X	1.129	-0.008	-2.95	1.126	-0.012	-4.37
BRX62U		1.136	-0.001	-0.35	1.137	-0.001	-0.21
BWCVF3		1.141	0.004	1.51	1.139	0.002	0.74
C3RV7Y		1.135	-0.002	-0.72	1.135	-0.002	-0.77
C6XGWK		1.139	0.002	0.76	1.139	0.001	0.55
C83X33		1.138	0.001	0.26	1.137	0.000	0.04
D339YZ		1.138	0.001	0.45	1.137	0.000	0.00
D92AR4		1.133	-0.004	-1.65	1.132	-0.005	-1.91
DD3U8K	X	1.135	-0.002	-0.72	1.127	-0.011	-3.99
DQUC6X		1.134	-0.003	-1.09	1.135	-0.002	-0.77
DWFGTR	X	1.130	-0.007	-2.57	1.125	-0.012	-4.56
E26B7J		1.137	0.000	0.17	1.141	0.004	1.34
E6UDHY		1.131	-0.006	-2.25	1.131	-0.006	-2.15
EMP73X		1.139	0.002	0.58	1.138	0.001	0.36
FBBMU2		1.137	0.000	0.02	1.139	0.002	0.74
FEWZ2J		1.136	-0.001	-0.35	1.136	-0.001	-0.40
FWW3Q2		1.135	-0.002	-0.91	1.136	-0.001	-0.40
GHAFRM		1.141	0.004	1.51	1.140	0.002	0.93
GW6QBY		1.140	0.003	0.95	1.139	0.002	0.74

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample D23-D24 Lab Mean	Sample D23-D24 Diff from Grand Mean	Sample D23-D24 CPV
H42XBJ		1.136	-0.001	-0.22	1.138	0.001	0.32
HLJY7L		1.139	0.002	0.67	1.139	0.002	0.76
J34ZKN		1.137	0.000	0.02	1.137	0.000	-0.02
JCX98Z		1.138	0.001	0.45	1.138	0.001	0.51
JFVR6T		1.138	0.001	0.21	1.138	0.001	0.36
K3LAB4	X	1.116	-0.021	-7.92	1.117	-0.020	-7.50
LHBVZ3		1.134	-0.003	-1.09	1.132	-0.005	-1.83
MU3UB7	X	1.111	-0.026	-9.73	1.111	-0.026	-9.89
N9VTTT		1.134	-0.003	-1.28	1.133	-0.004	-1.53
NGV6VG	*	1.141	0.004	1.51	1.138	0.000	0.17
NH3R3U		1.137	0.000	0.02	1.138	0.001	0.36
PA9QTV		1.136	-0.001	-0.46	1.138	0.001	0.34
Q4YWAK		1.141	0.004	1.45	1.141	0.004	1.38
QMUPUH		1.136	-0.001	-0.35	1.138	0.000	0.17
RQ3CZ8		1.139	0.002	0.73	1.140	0.003	0.98
RX4DFZ		1.140	0.003	1.06	1.139	0.002	0.60
T6M8WH		1.139	0.002	0.76	1.139	0.001	0.55
THTZQF		1.134	-0.002	-0.92	1.134	-0.003	-1.15
TYDVWB		1.140	0.003	1.08	1.139	0.002	0.64
UQXPLQ		1.138	0.001	0.39	1.135	-0.002	-0.77
UT7NWY		1.135	-0.002	-0.74	1.135	-0.002	-0.68
UWNVCL	*	1.144	0.007	2.43	1.145	0.007	2.82
VA8X8H		1.138	0.001	0.21	1.139	0.001	0.55
VE3K8X		1.139	0.002	0.67	1.140	0.003	0.96
VJR8UQ		1.132	-0.005	-2.00	1.132	-0.006	-2.08
VNQRPN		1.132	-0.005	-1.74	1.132	-0.005	-1.87
VP2ELG		1.134	-0.003	-0.98	1.134	-0.003	-1.15
VPKF9J		1.136	-0.001	-0.35	1.137	0.000	-0.02
WA4JNG		1.139	0.002	0.58	1.140	0.002	0.93
WRXLW6		1.133	-0.004	-1.65	1.134	-0.003	-1.15
XBC8CK		1.138	0.001	0.23	1.135	-0.002	-0.72
XBXMXH		1.140	0.003	1.14	1.140	0.002	0.93
XPFG98		1.140	0.003	0.95	1.140	0.002	0.93
XVY3VK		1.138	0.001	0.43	1.138	0.001	0.42
XXAM39		1.138	0.001	0.21	1.138	0.001	0.36
XYKRDC	*	1.134	-0.003	-0.98	1.138	0.001	0.49
ZE4DJL		1.139	0.002	0.76	1.138	0.001	0.36

Summary Statistics		
Grand Means		
	1.1369 g/cm^3 (Mg/m^3)	1.1371 g/cm^3 (Mg/m^3)
Stnd Dev Btwn Labs		
	0.0027 g/cm^3 (Mg/m^3)	0.0026 g/cm^3 (Mg/m^3)
		Statistics based on 65 of 75 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & D23-D24: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #621

3LZV4G (X) - Data for sample group D23-D24 are high.

4C4EXJ (X) - Data for sample group D21-D22 are low. Inconsistent within the determinations of sample group D21-D22.

A6KYW9 (X) - Data for all samples are low. Possible Systematic Error.

AF3JEJ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group D21-D22.

ALRBAJ (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group D23-D24.

BDKMH8 (X) - Data for all samples are low. Possible Systematic Error.

DD3U8K (X) - Data for sample group D23-D24 are low. Inconsistent within the determinations of sample group D21-D22.

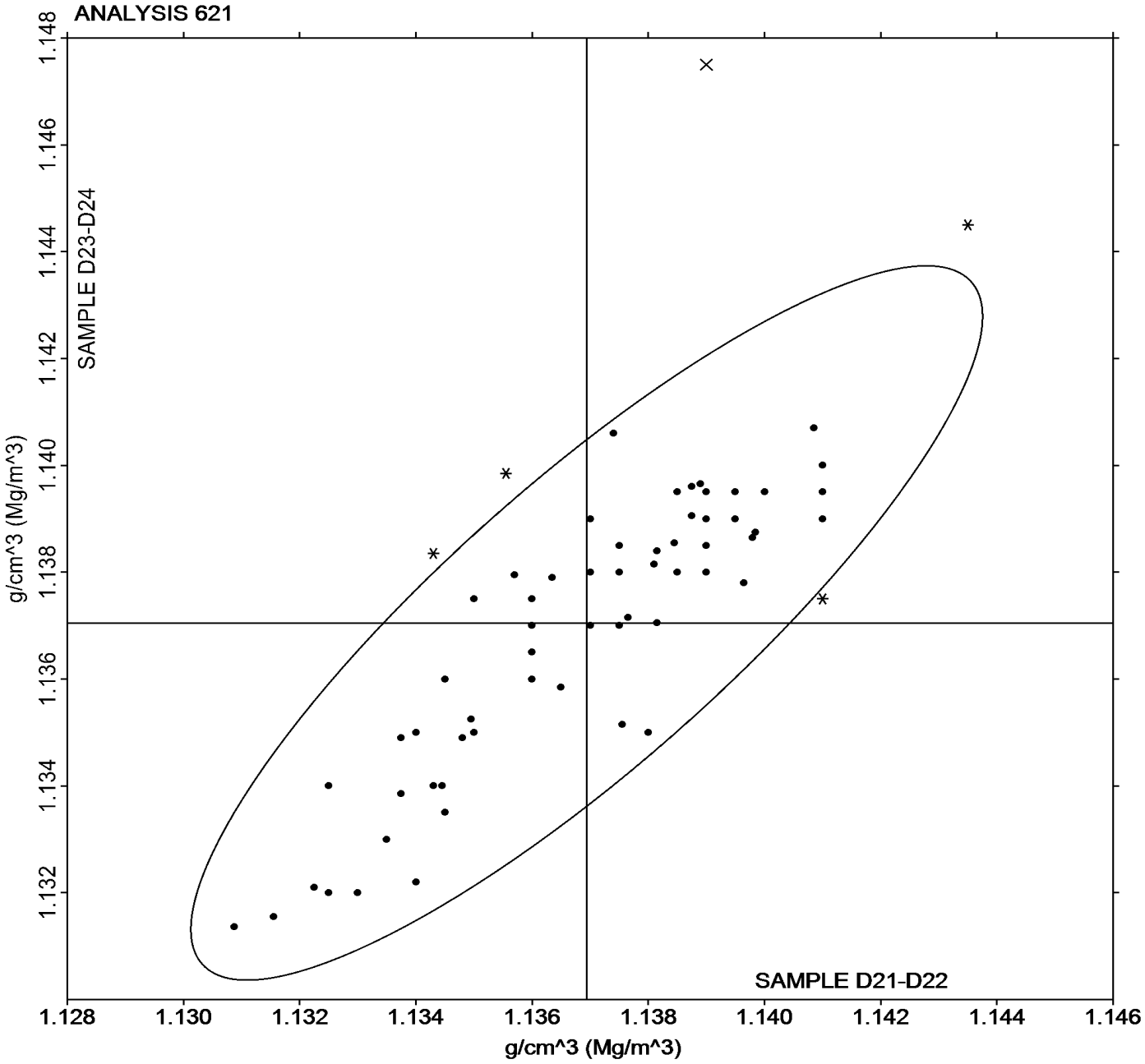
DWFGTR (X) - Data for sample group D23-D24 are low. Inconsistent within the determinations of sample group D23-D24.

K3LAB4 (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group D23-D24.

MU3UB7 (X) - Data for all samples are low. Inconsistent within the determinations of both sample groups.

Grand Mean Sample **D21-D22** = 1.1369 g/cm^3 (Mg/m^3)

Grand Mean Sample **D23-D24** = 1.1371 g/cm^3 (Mg/m^3)



WebCode	Data Flag	Sample HD21-HD22 Lab Mean	Diff from Grand Mean	CPV	Sample HD23-HD24 Lab Mean	Diff from Grand Mean	CPV	Instr Code
2KAGYC		77.00	2.08	0.97	84.00	1.08	0.59	BT
3LW9QA		73.90	-1.02	-0.47	82.40	-0.52	-0.28	BT
4C4EXJ		72.00	-2.92	-1.35	80.50	-2.42	-1.32	BT
4DF463		75.00	0.08	0.04	83.00	0.08	0.04	XX
7T433F		74.50	-0.42	-0.19	83.00	0.08	0.04	BT
8TKP7F		72.65	-2.27	-1.05	80.75	-2.17	-1.18	BT
8YK4XH		71.90	-3.02	-1.40	81.00	-1.92	-1.04	BT
A6KYW9		75.50	0.58	0.27	81.50	-1.42	-0.77	HH
AA36MG		74.85	-0.07	-0.03	83.15	0.23	0.12	BT
AXMBA3		77.55	2.63	1.22	84.60	1.68	0.91	HH
C3RV7Y	X	94.20	19.28	8.94	94.60	11.68	6.35	BT
CTGMDC		75.10	0.18	0.08	81.90	-1.02	-0.55	BT
ELE9PF	X	67.60	-7.32	-3.39	66.05	-16.87	-9.17	BT
FTWRV2		77.95	3.03	1.41	84.50	1.58	0.86	HH
GHAFRM	*	79.50	4.58	2.12	88.00	5.08	2.76	HH
HDXP68		77.75	2.83	1.31	85.00	2.08	1.13	BT
J38MXW		74.10	-0.82	-0.38	81.80	-1.12	-0.61	BT
JDRYBU		75.50	0.58	0.27	85.00	2.08	1.13	XX
MDVN73	X	57.50	-17.42	-8.07	53.50	-29.42	-15.99	HH
MPBK9K		71.35	-3.57	-1.65	80.10	-2.82	-1.53	BT
Q4YWAK		77.50	2.58	1.20	85.50	2.58	1.40	HH
T86ED6		76.80	1.88	0.87	83.70	0.78	0.42	BT
UQXPLQ		72.55	-2.37	-1.10	81.90	-1.02	-0.55	BT
UT7NWY		73.20	-1.72	-0.80	81.30	-1.62	-0.88	BT
XBXMXH		74.85	-0.07	-0.03	83.20	0.28	0.15	BT
XG2TAY		72.70	-2.22	-1.03	81.35	-1.57	-0.85	BT
XXAM39		75.00	0.08	0.04	83.00	0.08	0.04	BT
ZE4DJL		74.25	-0.67	-0.31	82.85	-0.07	-0.04	BT

Summary Statistics

	Sample HD21-HD22	Sample HD23-HD24
Grand Means	74.918 Type D	82.920 Type D
Stnd Dev Btwn Labs	2.157 Type D	1.840 Type D

Statistics based on 25 of 28 reporting participants

Samples HD21-HD22: Hardness Disc, batch #1 & HD23-HD24: Hardness Disc, batch #2

Comments on Assigned Data Flags for Test #625

C3RV7Y (X) - Data for all samples are high.

ELE9PF (X) - Data for all samples are low. Inconsistent within the determinations of sample group HD23-HD24.

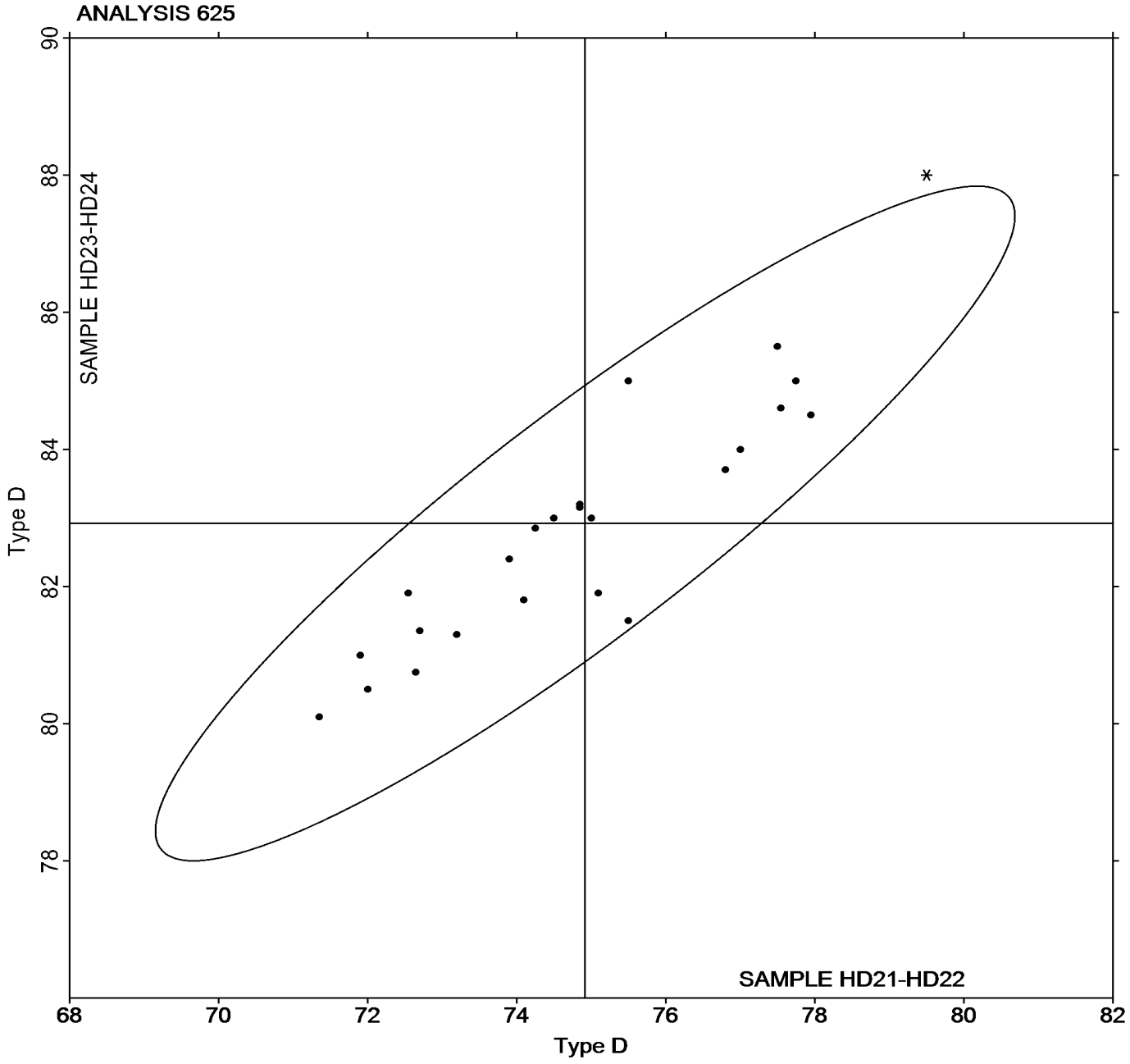
MDVN73 (X) - Data for all samples are low. Inconsistent within the determinations of sample group HD21-HD22.

Key to Instrument Codes Reported by Participants

BT	Benchtop	HH	Handheld
XX	Specify Benchtop or Handheld Instrument		

Grand Mean Sample **HD21-HD22** = 74.918 Type D

Grand Mean Sample **HD23-HD24** = 82.920 Type D



Tensile Strength: Precured vs. Lab-Cured Samples (psi)

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample M21-M22 Lab Mean	Sample M21-M22 Diff from Grand Mean	Sample M21-M22 CPV
34F8UL		3,250.0	6.9	0.05	3,051.0	317.8	1.31
36AXZZ		3,355.0	111.9	0.73	2,935.0	201.8	0.83
3LW9QA		3,394.7	151.6	0.99	2,718.3	-14.9	-0.06
6WQB42		3,096.6	-146.5	-0.96	2,908.0	174.9	0.72
87668U		3,511.0	267.9	1.75	3,050.0	316.8	1.30
9BEM42	*	3,643.7	400.6	2.62	2,657.0	-76.2	-0.31
9X9EFR		3,393.9	150.9	0.99	2,850.0	116.9	0.48
A6KYW9		3,332.3	89.2	0.58	3,000.0	266.8	1.10
AF3JEJ		3,082.0	-161.1	-1.05	2,518.0	-215.2	-0.89
AHAYMB		3,228.6	-14.5	-0.09	2,214.0	-519.1	-2.14
ALVP48		3,317.0	73.9	0.48	2,946.0	212.9	0.88
BDKMH8		3,212.3	-30.7	-0.20	2,876.5	143.3	0.59
C3RV7Y		3,179.5	-63.6	-0.42	3,155.0	421.8	1.74
C83X33		3,198.1	-45.0	-0.29	2,654.2	-78.9	-0.33
D339YZ	*	2,988.0	-255.1	-1.67	2,141.0	-592.2	-2.44
D92AR4		3,204.0	-39.1	-0.26	2,688.0	-45.2	-0.19
DD3U8K		3,238.0	-5.0	-0.03	2,469.9	-263.2	-1.08
GW6QBY		2,960.0	-283.1	-1.85	2,950.0	216.8	0.89
H3P7EW		3,088.6	-154.5	-1.01	2,546.9	-186.3	-0.77
JCX98Z		3,303.3	60.2	0.39	2,522.9	-210.3	-0.87
K3LAB4		3,031.7	-211.4	-1.38	2,515.3	-217.9	-0.90
PA9QTV		3,173.6	-69.5	-0.46	2,499.8	-233.4	-0.96
QMUPUH		3,395.5	152.4	1.00	2,410.5	-322.7	-1.33
RQ3CZ8		3,378.1	135.0	0.88	2,986.8	253.6	1.04
T6M8WH		3,227.0	-16.1	-0.11	2,557.5	-175.7	-0.72
THTZQF		3,189.3	-53.8	-0.35	2,711.2	-22.0	-0.09
VA8X8H		3,093.0	-150.1	-0.98	2,997.0	263.8	1.09
VNQRPN		3,292.0	48.9	0.32	2,868.3	135.1	0.56
WQNGL2		3,204.0	-39.1	-0.26	2,683.5	-49.7	-0.20
WRXLW6		3,266.2	23.2	0.15	2,553.3	-179.8	-0.74
XBXMXH		3,082.1	-161.0	-1.05	2,828.3	95.1	0.39
XYKRDC		3,533.0	289.9	1.90	2,911.9	178.8	0.74
Y3D7HD		3,166.1	-77.0	-0.50	2,769.6	36.4	0.15
ZE4DJL		3,256.1	13.1	0.09	2,782.6	49.4	0.20

Summary Statistics

Grand Means	3,243.06 psi	2,733.16 psi
Stnd Dev Btwn Labs	152.75 psi	242.87 psi

Statistics based on 34 of 34 reporting participants

Summary Statistics in SI Units

Grand Means	22.360 MPa	18.840 MPa
Stnd Dev Btwn Labs	1.053 MPa	1.670 MPa

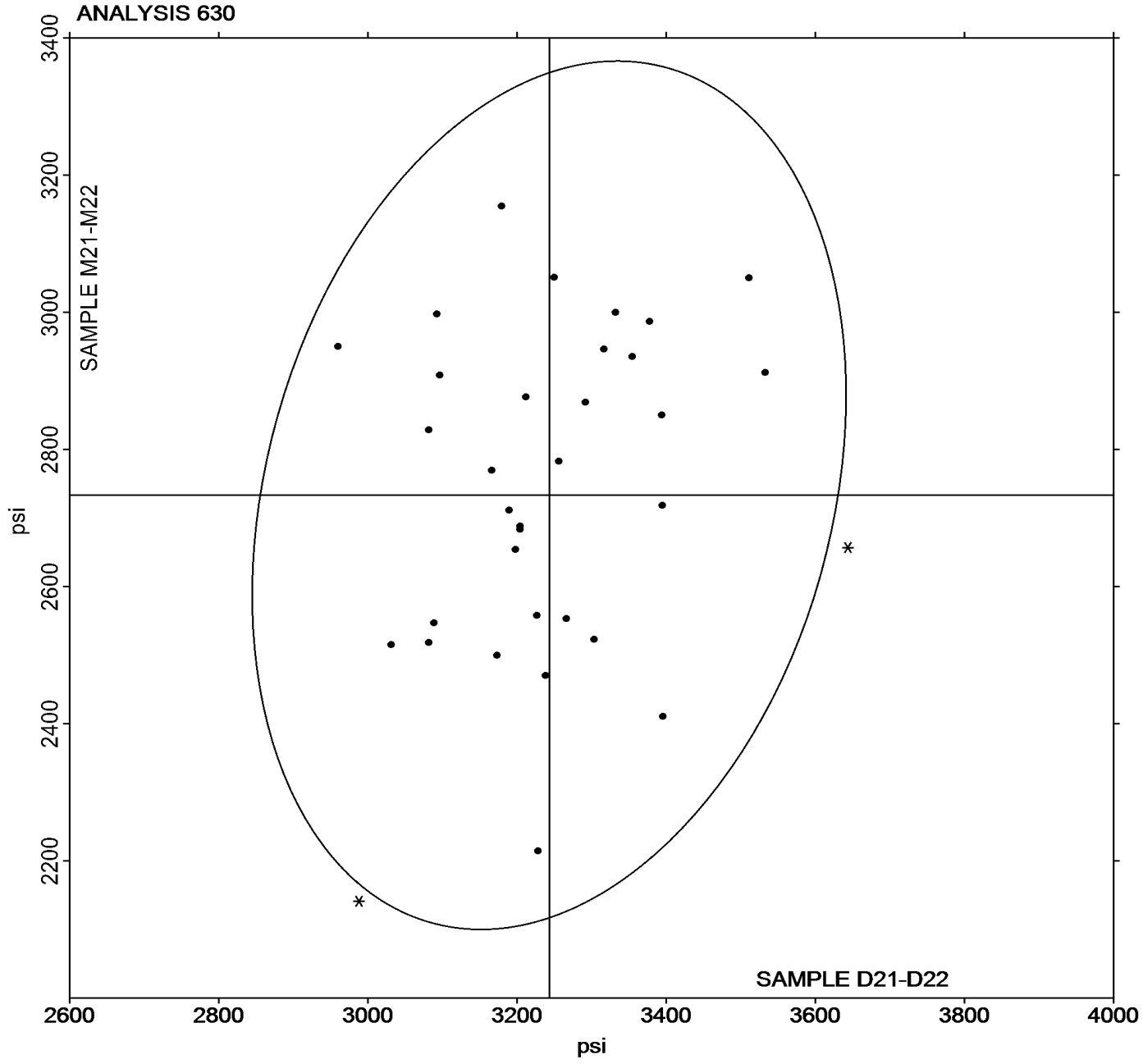
Statistics based on 34 of 34 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & M21-M22: Polyisoprene compound, batch #1

Tensile Strength: Precured vs. Lab-Cured Samples (psi)

Grand Mean Sample **D21-D22** = 3,243.06 psi

Grand Mean Sample **M21-M22** = 2,733.16 psi



Ultimate Elongation: Precured vs. Lab-Cured Samples (percent)

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample M21-M22 Lab Mean	Sample M21-M22 Diff from Grand Mean	Sample M21-M22 CPV
34F8UL		575.5	-62.3	-1.83	565.0	-1.9	-0.06
36AXZZ		642.0	4.2	0.12	579.0	12.1	0.39
3LW9QA		659.0	21.2	0.62	565.0	-1.9	-0.06
6WQB42		624.0	-13.8	-0.40	592.5	25.6	0.83
87668U		688.5	50.7	1.49	597.0	30.1	0.98
9BEM42		690.0	52.2	1.53	559.5	-7.4	-0.24
9X9EFR		663.0	25.2	0.74	600.0	33.1	1.08
A6KYW9		621.5	-16.3	-0.48	545.5	-21.4	-0.70
AF3JEJ		577.5	-60.3	-1.77	504.5	-62.4	-2.03
AHAYMB		664.7	26.9	0.79	546.9	-20.0	-0.65
ALVP48		625.5	-12.3	-0.36	549.0	-17.9	-0.58
BDKMH8		680.0	42.2	1.24	600.4	33.5	1.09
C3RV7Y		622.5	-15.3	-0.45	577.5	10.6	0.35
C83X33		660.0	22.2	0.65	600.0	33.1	1.08
D339YZ		595.0	-42.8	-1.25	545.0	-21.9	-0.71
D92AR4		665.0	27.2	0.80	593.5	26.6	0.87
DD3U8K		626.0	-11.8	-0.35	503.3	-63.6	-2.07
GW6QBY	*	706.5	68.7	2.01	666.0	99.1	3.23
H3P7EW		645.5	7.7	0.23	566.5	-0.4	-0.01
JCX98Z		655.5	17.7	0.52	541.5	-25.4	-0.83
K3LAB4		627.3	-10.5	-0.31	563.1	-3.8	-0.12
PA9QTV		620.0	-17.8	-0.52	561.0	-5.9	-0.19
QMUPUH		623.0	-14.8	-0.43	521.0	-45.9	-1.50
RQ3CZ8		635.5	-2.3	-0.07	576.5	9.6	0.31
T6M8WH		635.0	-2.8	-0.08	545.0	-21.9	-0.71
THTZQF		584.8	-53.0	-1.55	531.1	-35.8	-1.17
VA8X8H		607.0	-30.8	-0.90	578.5	11.6	0.38
VNQRPN		642.5	4.7	0.14	577.9	11.0	0.36
WQNGL2		644.5	6.7	0.20	552.0	-14.9	-0.49
WRXLW6		668.0	30.2	0.88	580.1	13.2	0.43
XBXMXH		637.2	-0.6	-0.02	573.3	6.4	0.21
XYKRDC		670.7	32.9	0.96	586.3	19.4	0.63
Y3D7HD		644.5	6.7	0.20	562.0	-4.9	-0.16
ZE4DJL	*	558.0	-79.8	-2.34	569.0	2.1	0.07

Summary Statistics		
Grand Means		
	637.80 percent	566.89 percent
Stnd Dev Btwn Labs		
	34.13 percent	30.69 percent

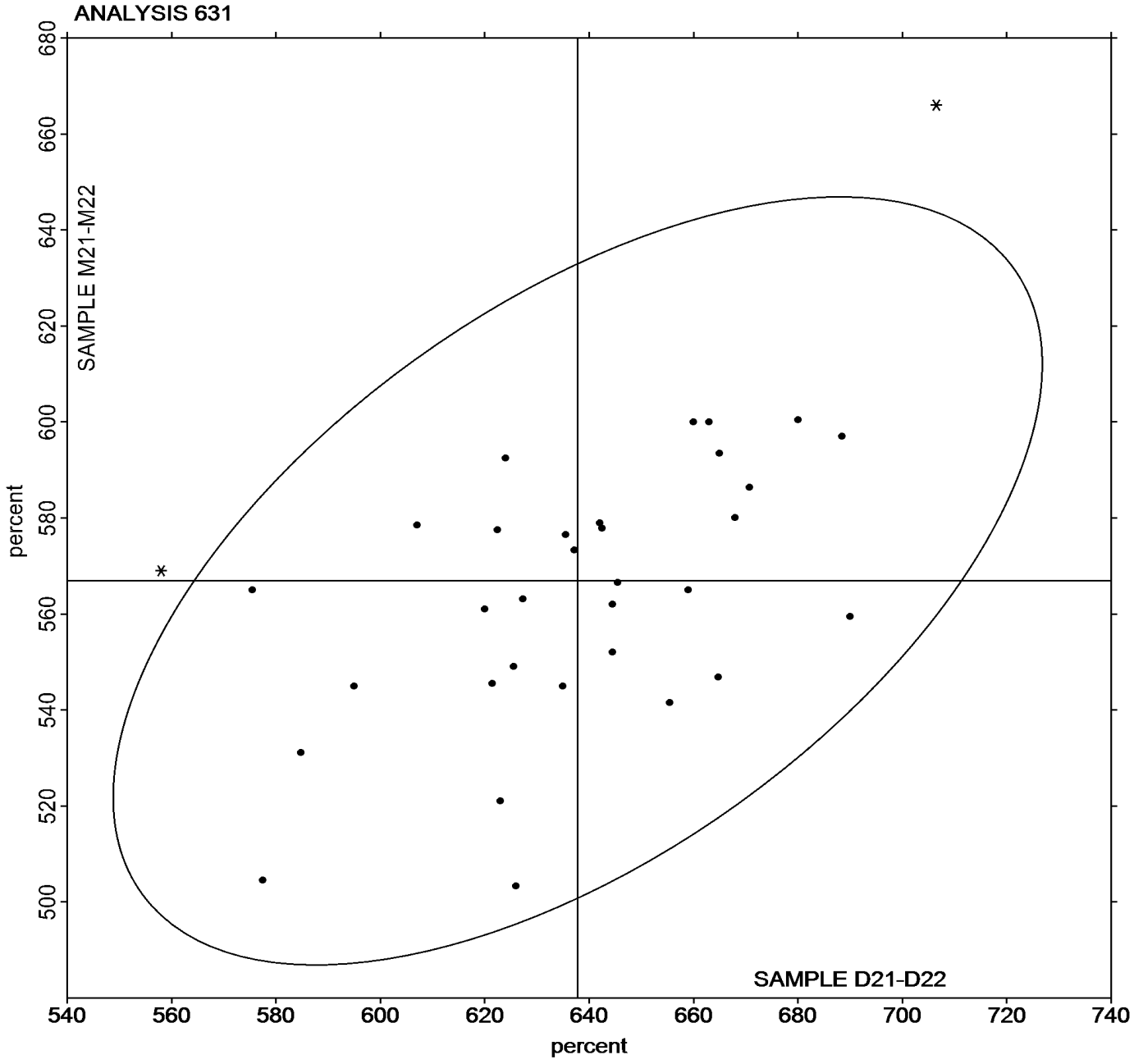
Statistics based on 34 of 34 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & M21-M22: Polyisoprene compound, batch #1

Ultimate Elongation: Precured vs. Lab-Cured Samples (percent)

Grand Mean Sample **D21-D22** = 637.80 percent

Grand Mean Sample **M21-M22** = 566.89 percent



Stress at 300% Elongation: Precured vs. Lab-Cured Samples (psi)

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample M21-M22 Lab Mean	Sample M21-M22 Diff from Grand Mean	Sample M21-M22 CPV
34F8UL		857.0	-9.9	-0.15	869.0	-79.0	-0.95
36AXZZ		879.5	12.6	0.19	986.0	38.0	0.46
3LW9QA		830.2	-36.7	-0.55	933.1	-14.9	-0.18
6WQB42		921.7	54.9	0.83	966.0	18.0	0.22
87668U		818.5	-48.4	-0.73	943.0	-5.0	-0.06
9BEM42		879.8	12.9	0.20	945.1	-2.8	-0.03
9X9EFR		818.7	-48.1	-0.73	849.9	-98.1	-1.18
A6KYW9		907.0	40.1	0.61	1,055.0	107.0	1.29
AF3JEJ		987.5	120.6	1.82	1,053.0	105.0	1.27
AHAYMB		781.8	-85.1	-1.28	835.4	-112.6	-1.36
ALVP48		893.0	26.1	0.39	1,067.5	119.5	1.44
BDKMH8		794.7	-72.1	-1.09	907.3	-40.7	-0.49
C3RV7Y		894.5	27.6	0.42	1,059.5	111.5	1.35
C83X33		878.2	11.4	0.17	872.4	-75.6	-0.91
D339YZ	X	894.0	27.1	0.41	761.5	-186.5	-2.25
D92AR4		783.0	-83.9	-1.26	856.0	-92.0	-1.11
DD3U8K		948.1	81.2	1.23	1,044.7	96.7	1.17
GW6QBY		728.9	-138.0	-2.08	865.1	-82.9	-1.00
H3P7EW		849.2	-17.7	-0.27	918.8	-29.2	-0.35
JCX98Z		874.1	7.2	0.11	973.1	25.1	0.30
K3LAB4		858.6	-8.3	-0.12	869.6	-78.4	-0.95
PA9QTV		847.1	-19.8	-0.30	855.7	-92.3	-1.11
QMUPUH		845.0	-21.9	-0.33	930.0	-18.0	-0.22
RQ3CZ8		934.4	67.5	1.02	1,038.8	90.8	1.10
T6M8WH		848.0	-18.9	-0.28	929.5	-18.5	-0.22
THTZQF	*	1,083.9	217.1	3.27	1,140.7	192.7	2.33
VA8X8H		898.5	31.6	0.48	1,025.0	77.0	0.93
VNQRPN		864.2	-2.6	-0.04	959.7	11.7	0.14
WQNGL2		835.0	-31.9	-0.48	880.0	-68.0	-0.82
WRXLW6		821.3	-45.6	-0.69	791.9	-156.1	-1.88
XBXMXH		818.0	-48.8	-0.74	947.1	-0.9	-0.01
XYKRDC		923.6	56.7	0.86	1,005.4	57.4	0.69
Y3D7HD		836.6	-30.3	-0.46	962.2	14.2	0.17
ZE4DJL	X	1,071.8	205.0	3.09	939.1	-8.9	-0.11

Stress at 300% Elongation: Precured vs. Lab-Cured Samples (psi)

Summary Statistics

Grand Means	866.86 psi	947.98 psi
Stnd Dev Btwn Labs	66.30 psi	82.80 psi

Statistics based on 32 of 34 reporting participants

Summary Statistics in SI Units

Grand Means	5.9767 MPa	6.5400 MPa
Stnd Dev Btwn Labs	0.4571 MPa	0.5700 MPa

Statistics based on 32 of 34 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & M21-M22: Polyisoprene compound, batch #1

Comments on Assigned Data Flags for Test #632

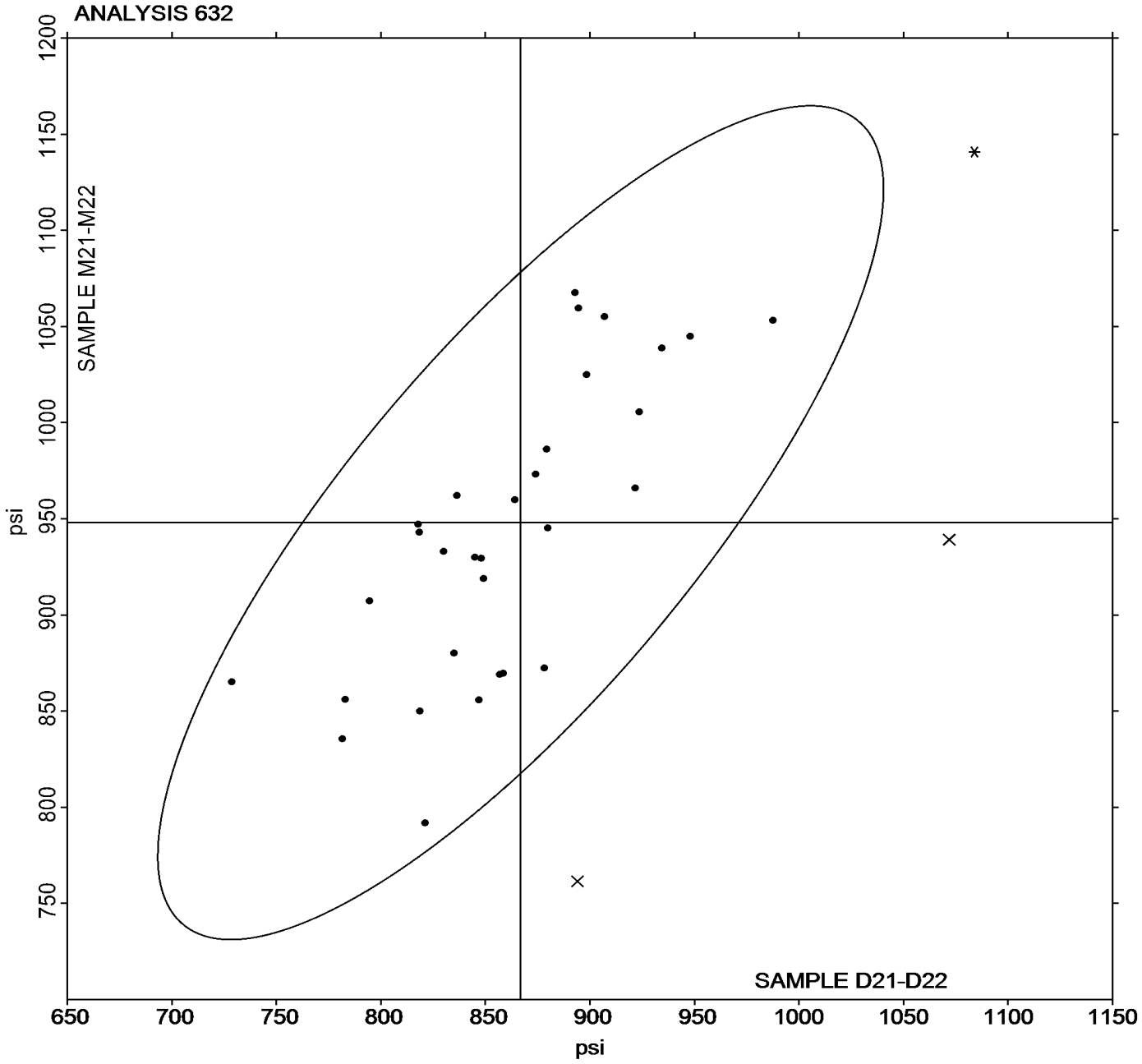
D339YZ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group M21-M22.

ZE4DJL (X) - Data for sample group D21-D22 are high.

Stress at 300% Elongation: Precured vs. Lab-Cured Samples (psi)

Grand Mean Sample **D21-D22** = 866.86 psi

Grand Mean Sample **M21-M22** = 947.98 psi



Stress at 100% Elongation: Precured vs. Lab-Cured Samples (psi)

WebCode	Data Flag	Sample D21-D22 Lab Mean	Sample D21-D22 Diff from Grand Mean	Sample D21-D22 CPV	Sample M21-M22 Lab Mean	Sample M21-M22 Diff from Grand Mean	Sample M21-M22 CPV
34F8UL		178.0	-19.3	-1.53	175.5	-38.3	-2.03
36AXZZ		202.0	4.7	0.37	223.0	9.2	0.49
3LW9QA		185.7	-11.7	-0.93	211.8	-2.0	-0.11
6WQB42		205.2	7.9	0.63	216.1	2.3	0.12
87668U		190.5	-6.8	-0.54	208.5	-5.3	-0.28
9BEM42		214.9	17.6	1.40	213.1	-0.8	-0.04
9X9EFR		189.3	-8.1	-0.64	200.2	-13.7	-0.72
A6KYW9		187.5	-9.8	-0.78	222.0	8.2	0.43
AF3JEJ		222.5	25.2	1.99	237.5	23.7	1.26
AHAYMB		175.5	-21.8	-1.73	167.5	-46.3	-2.46
ALVP48		196.0	-1.3	-0.11	232.0	18.2	0.96
BDKMH8		197.2	-0.1	-0.01	206.1	-7.7	-0.41
C3RV7Y		198.0	0.7	0.05	232.5	18.7	0.99
C83X33		213.9	16.6	1.31	231.3	17.5	0.93
D339YZ	*	206.5	9.2	0.73	184.0	-29.8	-1.58
D92AR4		180.5	-16.8	-1.33	201.0	-12.8	-0.68
DD3U8K		212.9	15.5	1.23	238.0	24.2	1.28
GW6QBY		199.9	2.6	0.20	244.4	30.5	1.62
H3P7EW		211.0	13.7	1.08	229.9	16.1	0.85
JCX98Z		197.7	0.3	0.02	213.5	-0.4	-0.02
K3LAB4		197.2	-0.1	-0.01	201.1	-12.7	-0.67
PA9QTV		185.9	-11.5	-0.91	193.8	-20.1	-1.06
QMUPUH		179.0	-18.3	-1.45	207.0	-6.8	-0.36
RQ3CZ8		199.5	2.2	0.17	229.7	15.9	0.84
T6M8WH		189.5	-7.8	-0.62	209.5	-4.3	-0.23
THTZQF		218.1	20.7	1.64	233.7	19.9	1.06
VA8X8H		218.0	20.7	1.64	239.0	25.2	1.34
VNQRPN		200.3	3.0	0.23	226.9	13.1	0.69
WQNGL2		192.0	-5.3	-0.42	203.0	-10.8	-0.57
WRXLW6		189.7	-7.6	-0.60	184.1	-29.7	-1.58
XBXMXH		181.3	-16.0	-1.27	213.2	-0.6	-0.03
XYKRDC		204.3	6.9	0.55	224.0	10.2	0.54
Y3D7HD		186.3	-11.1	-0.88	213.9	0.0	0.00
ZE4DJL		203.8	6.4	0.51	203.1	-10.8	-0.57

Summary Statistics

Grand Means	197.34 psi	213.81 psi
Stnd Dev Btwn Labs	12.62 psi	18.85 psi

Statistics based on 34 of 34 reporting participants

Summary Statistics in SI Units

Grand Means	1.3606 MPa	1.4700 MPa
Stnd Dev Btwn Labs	0.0870 MPa	0.1300 MPa

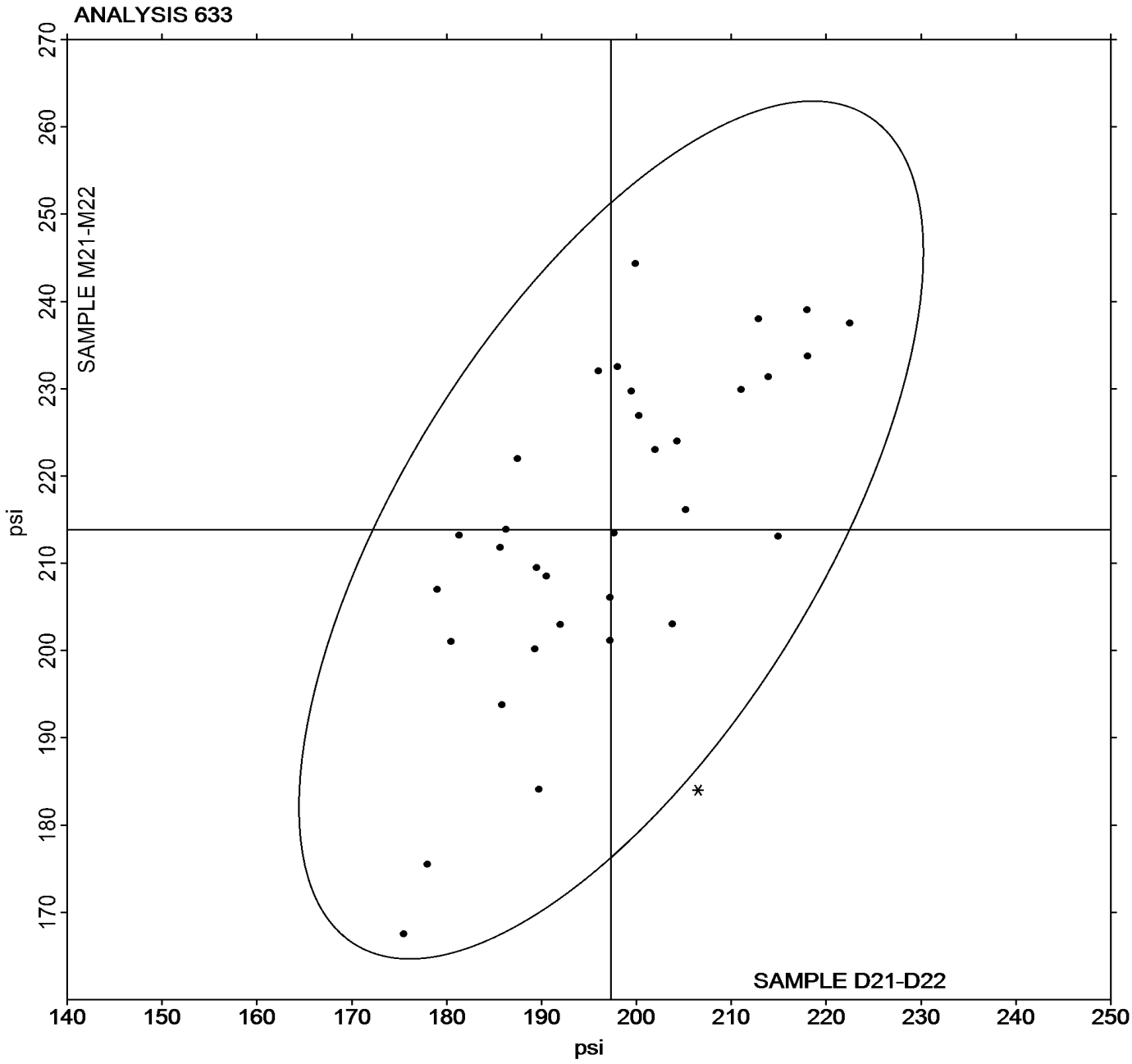
Statistics based on 34 of 34 reporting participants

Samples D21-D22: Polyisoprene compound, batch #1 & M21-M22: Polyisoprene compound, batch #1

Stress at 100% Elongation: Precured vs. Lab-Cured Samples (psi)

Grand Mean Sample **D21-D22** = 197.34 psi

Grand Mean Sample **M21-M22** = 213.81 psi



WebCode	Data Flag	Sample Q21 Lab Mean	Sample Q21 Diff from Grand Mean	Sample Q21 CPV	Sample Q22 Lab Mean	Sample Q22 Diff from Grand Mean	Sample Q22 CPV
2RLHCZ		30.74	3.74	0.92	31.23	4.49	1.05
34F8UL		21.40	-5.60	-1.38	23.63	-3.11	-0.73
36AXZZ		23.67	-3.34	-0.82	23.33	-3.41	-0.80
3LW9QA		26.91	-0.09	-0.02	26.37	-0.37	-0.09
3LZV4G		24.33	-2.67	-0.66	25.33	-1.41	-0.33
7MVPB9		26.67	-0.34	-0.08	27.00	0.25	0.06
A6KYW9		29.90	2.90	0.71	30.97	4.22	0.99
ALVP48		29.37	2.37	0.58	27.14	0.40	0.09
BRX62U		25.67	-1.34	-0.33	23.00	-3.75	-0.88
BWCVF3		25.00	-2.00	-0.49	23.43	-3.31	-0.78
C3RV7Y		21.44	-5.56	-1.37	22.27	-4.48	-1.05
CTGMDC		32.23	5.23	1.29	34.00	7.25	1.71
D92AR4		24.33	-2.67	-0.66	24.33	-2.41	-0.57
DD3U8K		28.73	1.73	0.43	30.50	3.75	0.88
DQUC6X		24.00	-3.00	-0.74	22.67	-4.08	-0.96
E26B7J		29.81	2.81	0.69	28.36	1.61	0.38
EA3QA7		28.67	1.66	0.41	24.00	-2.75	-0.65
ENP4HY	*	29.33	2.33	0.57	21.73	-5.01	-1.18
FBTJCT		25.53	-1.47	-0.36	23.01	-3.74	-0.88
H42XBJ		27.08	0.08	0.02	27.30	0.55	0.13
HLJY7L		26.67	-0.34	-0.08	26.00	-0.75	-0.18
JCX98Z		30.67	3.66	0.90	31.67	4.92	1.16
JFVR6T		25.33	-1.67	-0.41	28.00	1.25	0.30
NH3R3U		23.93	-3.07	-0.76	23.80	-2.95	-0.69
PA9QTV		35.20	8.20	2.02	34.07	7.32	1.72
Q4YWAK	*	38.03	11.03	2.72	37.10	10.35	2.43
QMUPUH		33.00	6.00	1.48	34.00	7.25	1.71
T6M8WH		24.67	-2.34	-0.58	21.67	-5.08	-1.19
THTZQF		23.11	-3.90	-0.96	20.10	-6.65	-1.56
TYDVWB		25.67	-1.34	-0.33	27.67	0.92	0.22
UT7NWY		28.20	1.20	0.29	29.13	2.39	0.56
VNQRPN		24.50	-2.50	-0.62	27.40	0.65	0.15
VPKF9J		26.57	-0.44	-0.11	26.60	-0.15	-0.03
XBC8CK		26.33	-0.67	-0.16	29.67	2.92	0.69
XPFG98		30.00	3.00	0.74	29.67	2.92	0.69
XVY3VK		23.31	-3.69	-0.91	25.74	-1.00	-0.24
XXAM39		25.00	-2.00	-0.49	27.00	0.25	0.06
XYY38A	*	15.57	-11.44	-2.82	16.10	-10.65	-2.50

WebCode	Data Flag	Sample Q21 Lab Mean	Sample Q21 Diff from Grand Mean	Sample Q21 CPV	Sample Q22 Lab Mean	Sample Q22 Diff from Grand Mean	Sample Q22 CPV
Y3TLGL		27.52	0.51	0.13	28.48	1.73	0.41
ZE4DJL		32.00	5.00	1.23	26.33	-0.41	-0.10

Summary Statistics

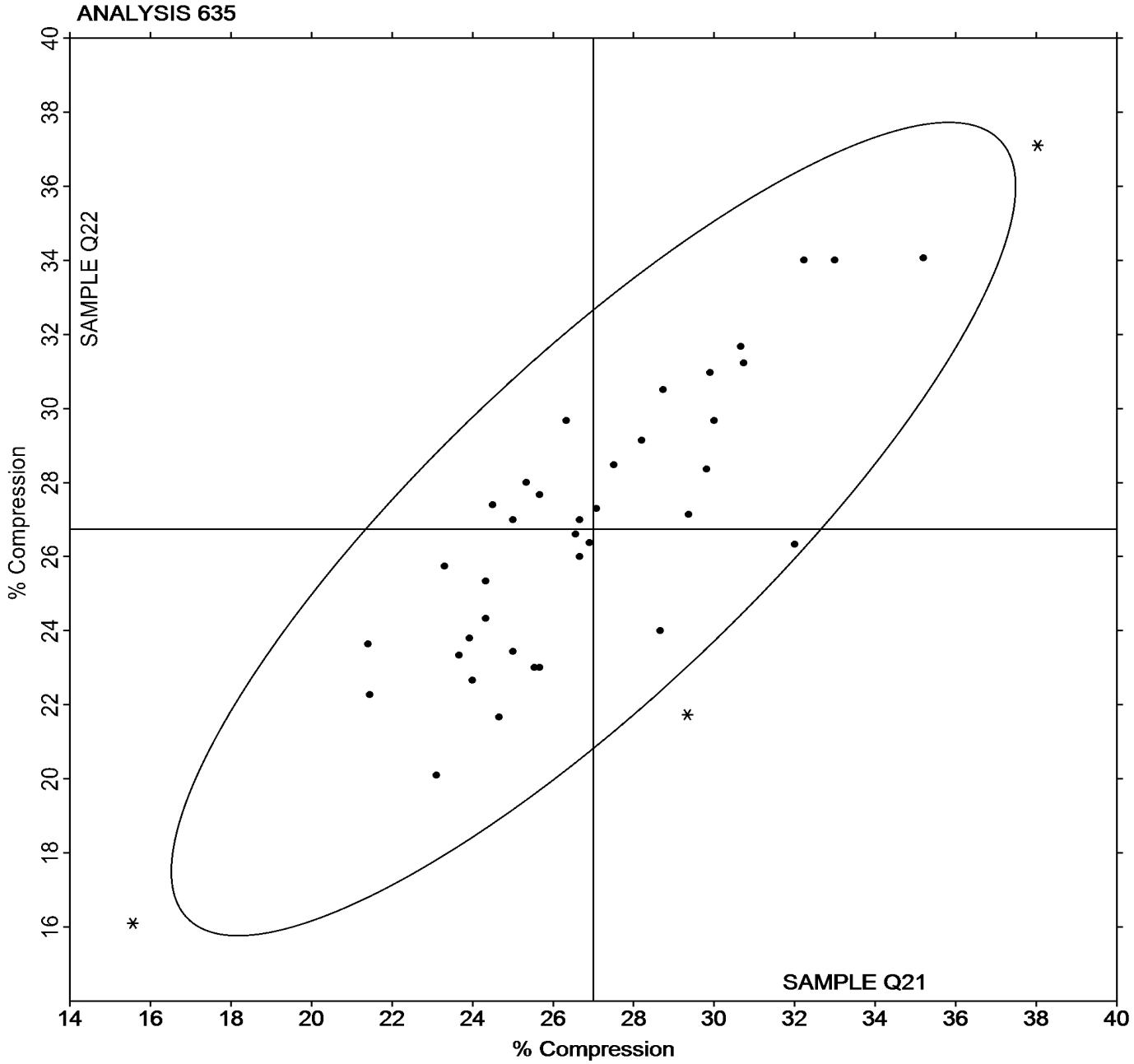
	Sample Q21	Sample Q22
Grand Means	27.002 % Compression	26.745 % Compression
Stnd Dev Btwn Labs	4.061 % Compression	4.253 % Compression

Statistics based on 40 of 40 reporting participants

Samples Q21: EPDM compound, batch #1 & Q22: EPDM compound, batch #1

Grand Mean Sample **Q21** = 27.002 % Compression

Grand Mean Sample **Q22** = 26.745 % Compression



WebCode	Data Flag	Sample RD21 Lab Mean	Sample RD21 Diff from Grand Mean	Sample RD21 CPV	Sample RD22 Lab Mean	Sample RD22 Diff from Grand Mean	Sample RD22 CPV
34F8UL		2,401.0	-36.3	-0.71	2,384.6	-44.0	-1.09
3LW9QA		2,498.8	61.5	1.20	2,504.6	76.0	1.89
7MVPB9		2,428.6	-8.7	-0.17	2,428.2	-0.4	-0.01
AAXVKJ		2,436.8	-0.5	-0.01	2,426.0	-2.6	-0.06
HLJY7L		2,331.4	-105.9	-2.07	2,374.8	-53.8	-1.33
JCX98Z		2,481.5	44.1	0.86	2,420.3	-8.3	-0.21
JFVR6T		2,417.4	-19.9	-0.39	2,469.4	40.8	1.01
PA9QTV		2,360.7	-76.6	-1.50	2,478.7	50.1	1.24
PJVNGF		2,423.6	-13.7	-0.27	2,438.4	9.8	0.24
TFXTTW		2,440.4	3.1	0.06	2,370.8	-57.8	-1.43
TYDVWB		2,498.2	60.9	1.19	2,434.6	6.0	0.15
WA4JNG		2,449.6	12.3	0.24	2,410.4	-18.2	-0.45
XVY3VK		2,510.4	73.1	1.43	2,464.8	36.2	0.90
ZE4DJL		2,444.2	6.9	0.13	2,394.3	-34.3	-0.85

Summary Statistics

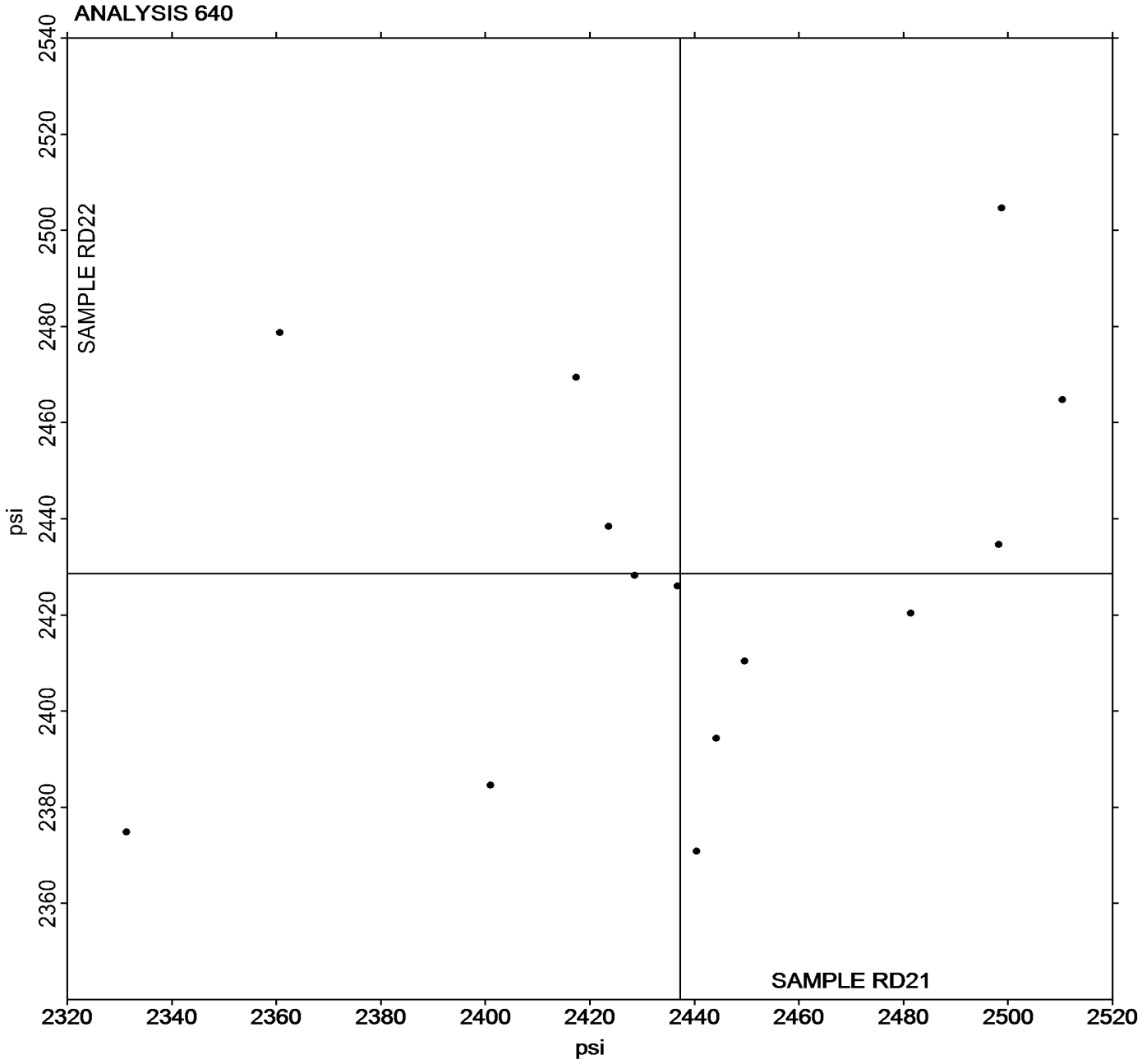
	Sample RD21	Sample RD22
Grand Means	2,437.33 psi	2,428.56 psi
Stnd Dev Btwn Labs	51.18 psi	40.33 psi

Statistics based on 14 of 14 reporting participants

Samples RD21: Nitrile O-Ring & RD22: Nitrile O-Ring

Grand Mean Sample **RD21** = 2,437.33 psi

Grand Mean Sample **RD22** = 2,428.56 psi



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

WebCode	Data Flag	Sample RD21 Lab Mean	Sample RD21 Diff from Grand Mean	Sample RD21 CPV	Sample RD22 Lab Mean	Sample RD22 Diff from Grand Mean	Sample RD22 CPV
34F8UL		408.4	12.1	0.17	406.0	9.2	0.13
3LW9QA		439.2	42.9	0.60	437.2	40.4	0.55
7MVPB9		405.2	8.9	0.12	409.4	12.6	0.17
AAXVKJ		403.6	7.3	0.10	406.4	9.6	0.13
HLJY7L		367.2	-29.1	-0.41	376.0	-20.8	-0.28
JCX98Z		422.7	26.5	0.37	409.9	13.1	0.18
JFVR6T		418.8	22.5	0.31	432.4	35.6	0.49
PA9QTV		410.4	14.1	0.20	437.2	40.4	0.55
PJVNGF		426.2	29.9	0.42	432.2	35.4	0.48
TFXTTW	*	160.2	-236.1	-3.30	153.4	-243.4	-3.32
TYDVWB		376.4	-19.9	-0.28	374.6	-22.2	-0.30
WA4JNG		432.8	36.5	0.51	425.4	28.6	0.39
XVY3VK		424.0	27.7	0.39	411.6	14.8	0.20
ZE4DJL		452.6	56.3	0.79	443.8	47.0	0.64

Summary Statistics

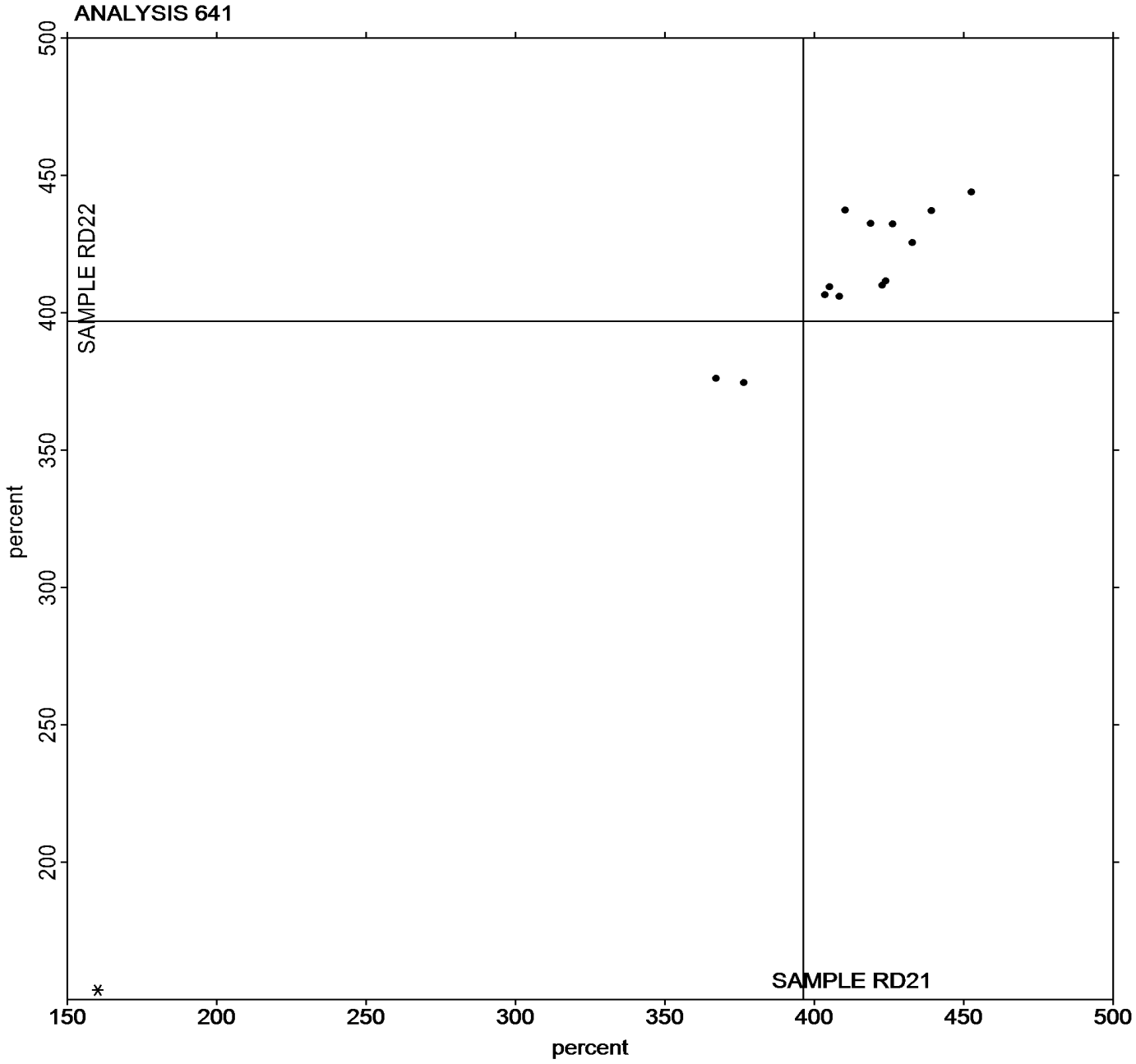
	Sample RD21	Sample RD22
Grand Means	396.27 percent	396.83 percent
Stnd Dev Btwn Labs	71.61 percent	73.23 percent

Statistics based on 14 of 14 reporting participants

Samples RD21: Nitrile O-Ring & RD22: Nitrile O-Ring

Grand Mean Sample **RD21** = 396.27 percent

Grand Mean Sample **RD22** = 396.83 percent



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WebCode	Data Flag	Sample RD21 Lab Mean	Sample RD21 Diff from Grand Mean	Sample RD21 CPV	Sample RD22 Lab Mean	Sample RD22 Diff from Grand Mean	Sample RD22 CPV
34F8UL		553.2	78.8	1.19	549.6	74.8	1.10
3LW9QA		478.4	4.0	0.06	481.4	6.6	0.10
7MVPB9		515.6	41.2	0.62	523.4	48.6	0.71
AAXVKJ		489.4	15.0	0.23	489.2	14.4	0.21
HLJY7L		505.0	30.6	0.46	511.2	36.4	0.53
JCX98Z		486.7	12.4	0.19	486.0	11.2	0.16
JFVR6T		449.4	-25.0	-0.38	447.0	-27.8	-0.41
PA9QTV		382.8	-91.6	-1.38	385.4	-89.4	-1.31
PJVNGF		448.2	-26.2	-0.39	447.0	-27.8	-0.41
TFXTTW		552.0	77.6	1.17	552.9	78.1	1.14
TYDVWB		558.4	84.0	1.27	565.0	90.2	1.32
WA4JNG		433.8	-40.6	-0.61	427.2	-47.6	-0.70
XVY3VK		467.6	-6.8	-0.10	464.6	-10.2	-0.15
ZE4DJL		320.8	-153.6	-2.31	317.1	-157.7	-2.31

Summary Statistics

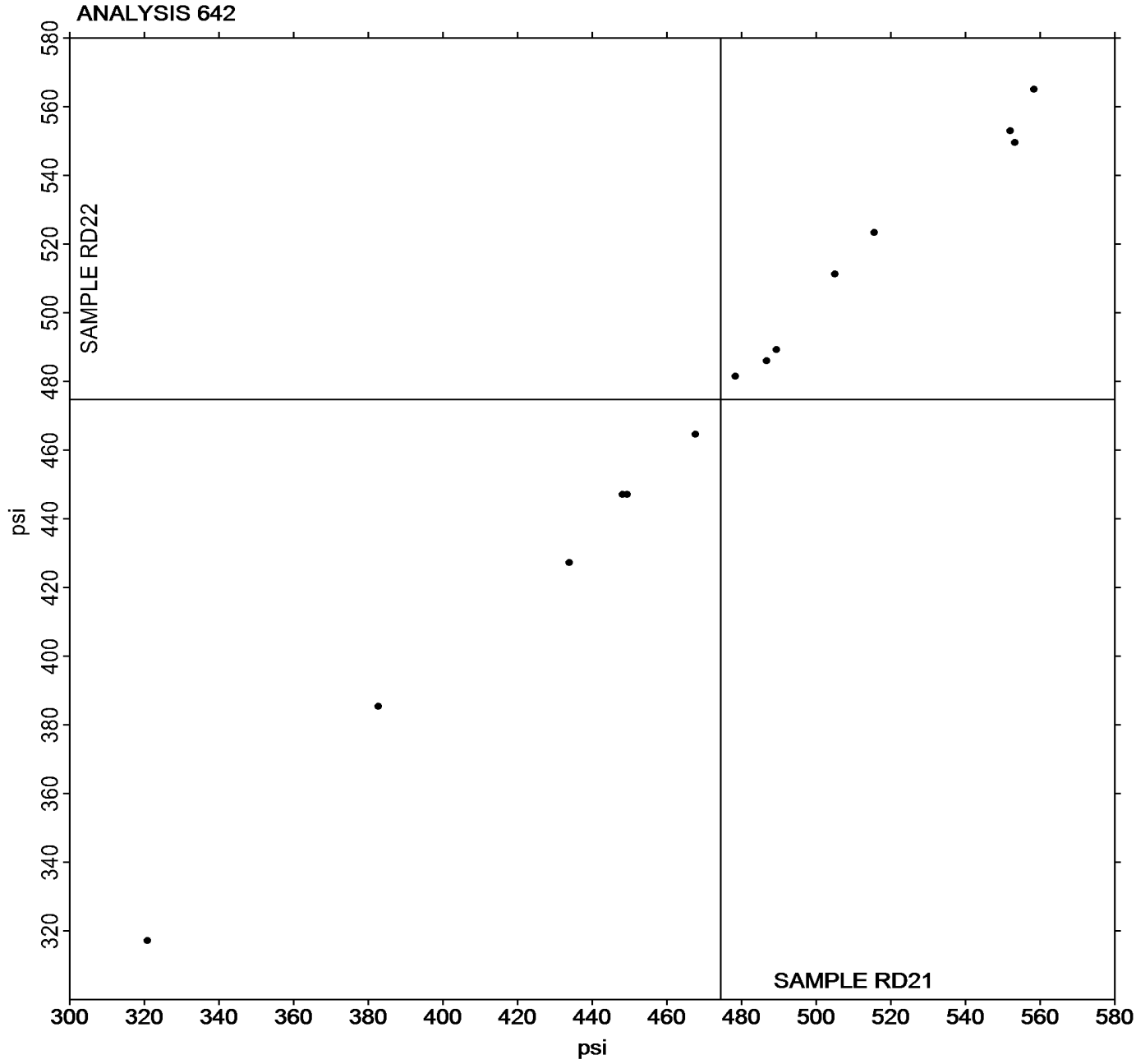
	Sample RD21	Sample RD22
Grand Means	474.38 psi	474.78 psi
Stnd Dev Btwn Labs	66.39 psi	68.32 psi

Statistics based on 14 of 14 reporting participants

Samples RD21: Nitrile O-Ring & RD22: Nitrile O-Ring

Grand Mean Sample **RD21** = 474.38 psi

Grand Mean Sample **RD22** = 474.78 psi



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WebCode	Data Flag	Sample RD21 Lab Mean	Sample RD21 Diff from Grand Mean	Sample RD21 CPV	Sample RD22 Lab Mean	Sample RD22 Diff from Grand Mean	Sample RD22 CPV
2JU3NW		65.60	-2.69	-1.08	66.00	-2.48	-1.01
34F8UL		68.76	0.47	0.19	69.70	1.22	0.49
3LW9QA		69.60	1.31	0.52	69.86	1.38	0.56
7MVPB9		64.20	-4.09	-1.63	65.60	-2.88	-1.17
FWW3Q2		70.80	2.51	1.00	71.00	2.52	1.02
HLJY7L		70.50	2.21	0.88	70.32	1.84	0.75
JCX98Z		70.20	1.91	0.76	70.64	2.16	0.88
JFVR6T		70.20	1.91	0.76	70.20	1.72	0.70
PA9QTV		70.82	2.53	1.01	70.64	2.16	0.88
PJVNGF		70.00	1.71	0.68	71.00	2.52	1.02
TFXTTW		65.52	-2.77	-1.11	65.50	-2.98	-1.21
TYDVWB		70.40	2.11	0.84	69.60	1.12	0.45
WA4JNG		65.44	-2.85	-1.14	65.64	-2.84	-1.16
XVY3VK		64.58	-3.71	-1.48	64.10	-4.38	-1.78
ZE4DJL		67.80	-0.49	-0.20	67.44	-1.04	-0.42

Summary Statistics

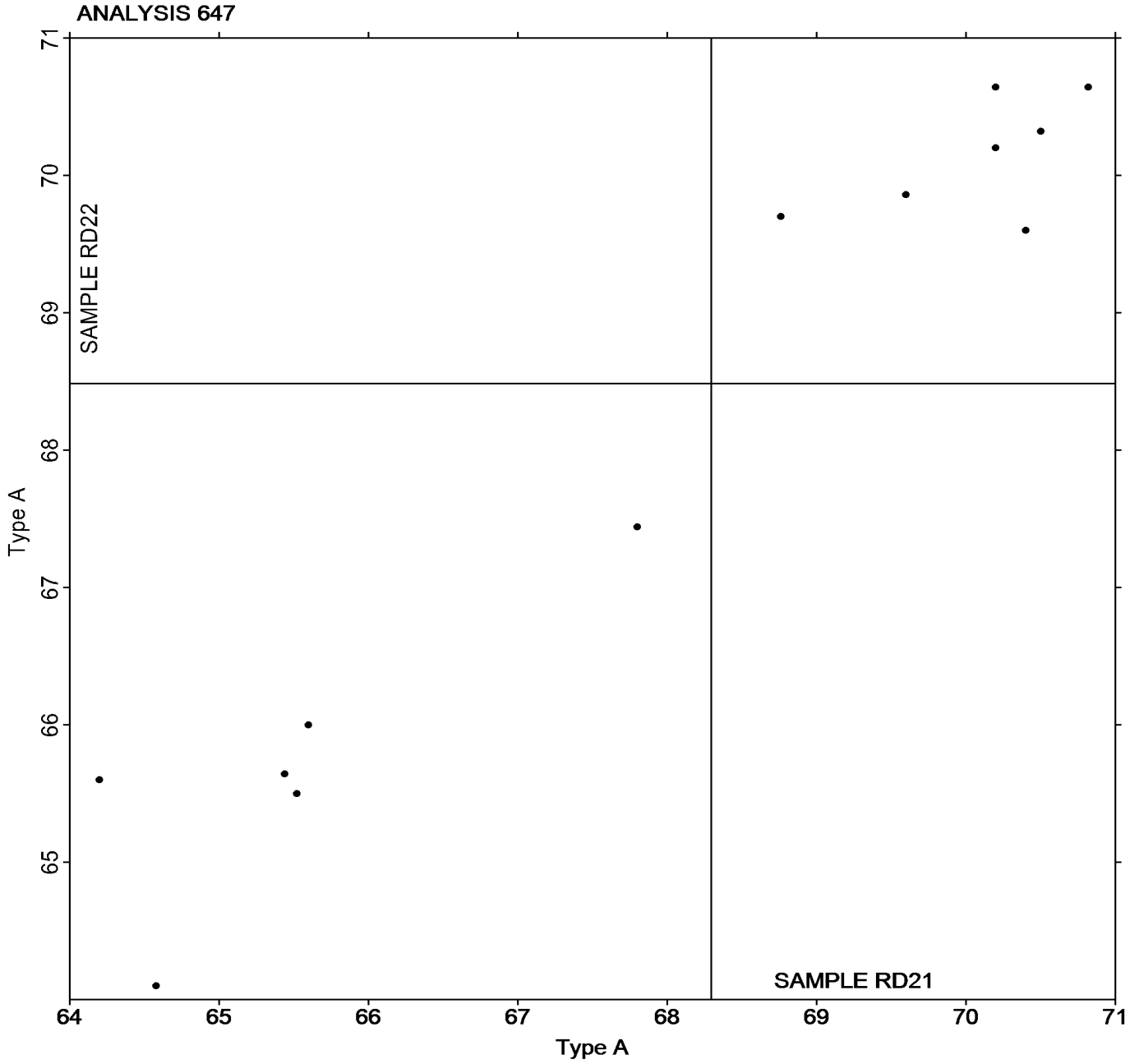
	Sample RD21	Sample RD22
Grand Means	68.295 Type A	68.483 Type A
Stnd Dev Btwn Labs	2.507 Type A	2.459 Type A

Statistics based on 15 of 15 reporting participants

Samples RD21: Nitrile O-Ring & RD22: Nitrile O-Ring

Grand Mean Sample **RD21** = 68.295 Type A

Grand Mean Sample **RD22** = 68.483 Type A



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

WebCode	Data Flag	Sample RD21 Lab Mean	Sample RD21 Diff from Grand Mean	Sample RD21 CPV	Sample RD22 Lab Mean	Sample RD22 Diff from Grand Mean	Sample RD22 CPV
34F8UL		76.72	0.57	0.18	77.36	1.04	0.32
3LW9QA		75.16	-0.99	-0.31	75.08	-1.24	-0.38
7MVPB9		75.46	-0.69	-0.21	75.92	-0.40	-0.12
AAXVKJ		74.00	-2.15	-0.67	74.20	-2.12	-0.66
HLJY7L		76.36	0.21	0.07	75.98	-0.34	-0.10
JCX98Z		76.56	0.41	0.13	76.84	0.52	0.16
JFVR6T		78.14	1.99	0.62	78.32	2.00	0.62
PJVNGF		82.80	6.65	2.07	83.00	6.68	2.07
TFXTTW		69.24	-6.91	-2.15	69.50	-6.82	-2.11
TYDVWB		76.08	-0.07	-0.02	75.92	-0.40	-0.12
XVY3VK		77.08	0.93	0.29	77.36	1.04	0.32

Summary Statistics

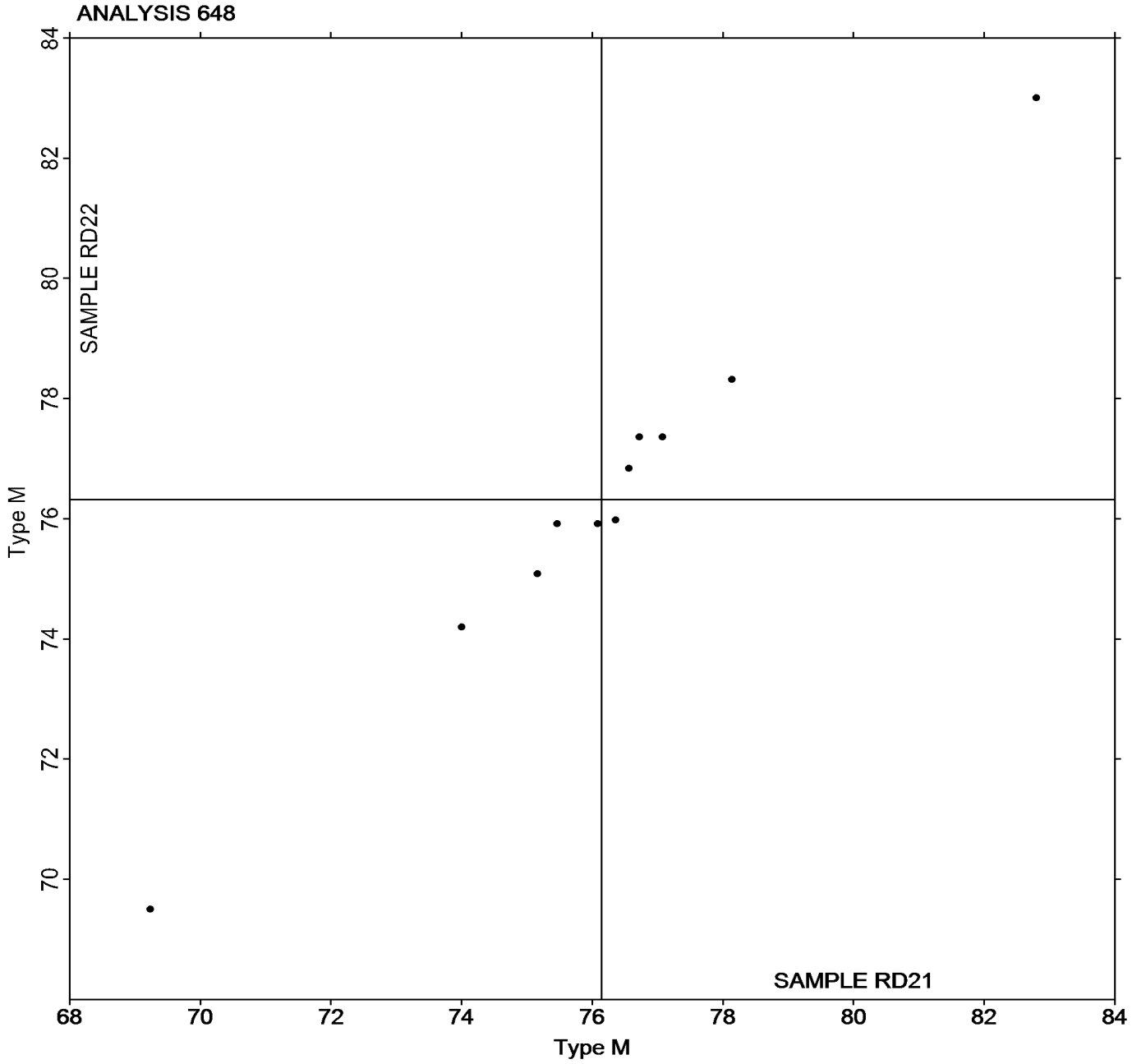
	Sample RD21	Sample RD22
Grand Means	76.145 Type M	76.316 Type M
Stnd Dev Btwn Labs	3.216 Type M	3.225 Type M

Statistics based on 11 of 11 reporting participants

Samples RD21: Nitrile O-Ring & RD22: Nitrile O-Ring

Grand Mean Sample **RD21** = 76.145 Type M

Grand Mean Sample **RD22** = 76.316 Type M



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

WebCode	Data Flag	Sample RD21 Lab Mean	Sample RD21 Diff from Grand Mean	Sample RD21 CPV	Sample RD22 Lab Mean	Sample RD22 Diff from Grand Mean	Sample RD22 CPV
2JU3NW		1.215	0.000	0.01	1.215	0.001	0.33
34F8UL		1.211	-0.004	-0.97	1.210	-0.003	-0.88
3LW9QA		1.218	0.003	0.83	1.218	0.004	1.13
7MVPB9		1.211	-0.003	-0.91	1.207	-0.006	-1.73
AAXVKJ		1.219	0.004	1.14	1.216	0.003	0.76
FWW3Q2	*	1.222	0.007	1.92	1.212	-0.001	-0.32
HLJY7L		1.211	-0.004	-1.08	1.209	-0.004	-1.16
JCX98Z		1.209	-0.006	-1.59	1.211	-0.003	-0.72
JFVR6T		1.211	-0.004	-1.06	1.210	-0.004	-1.03
PA9QTV		1.215	0.000	-0.02	1.211	-0.003	-0.69
PJVNGF		1.214	-0.001	-0.17	1.213	-0.001	-0.16
TFXTTW		1.219	0.004	1.14	1.219	0.006	1.57
TYDVWB		1.219	0.004	1.05	1.219	0.006	1.53
WA4JNG		1.213	-0.002	-0.48	1.214	0.000	0.11
XVY3VK		1.216	0.001	0.30	1.217	0.003	0.87
ZE4DJL		1.214	0.000	-0.10	1.215	0.001	0.40

Summary Statistics

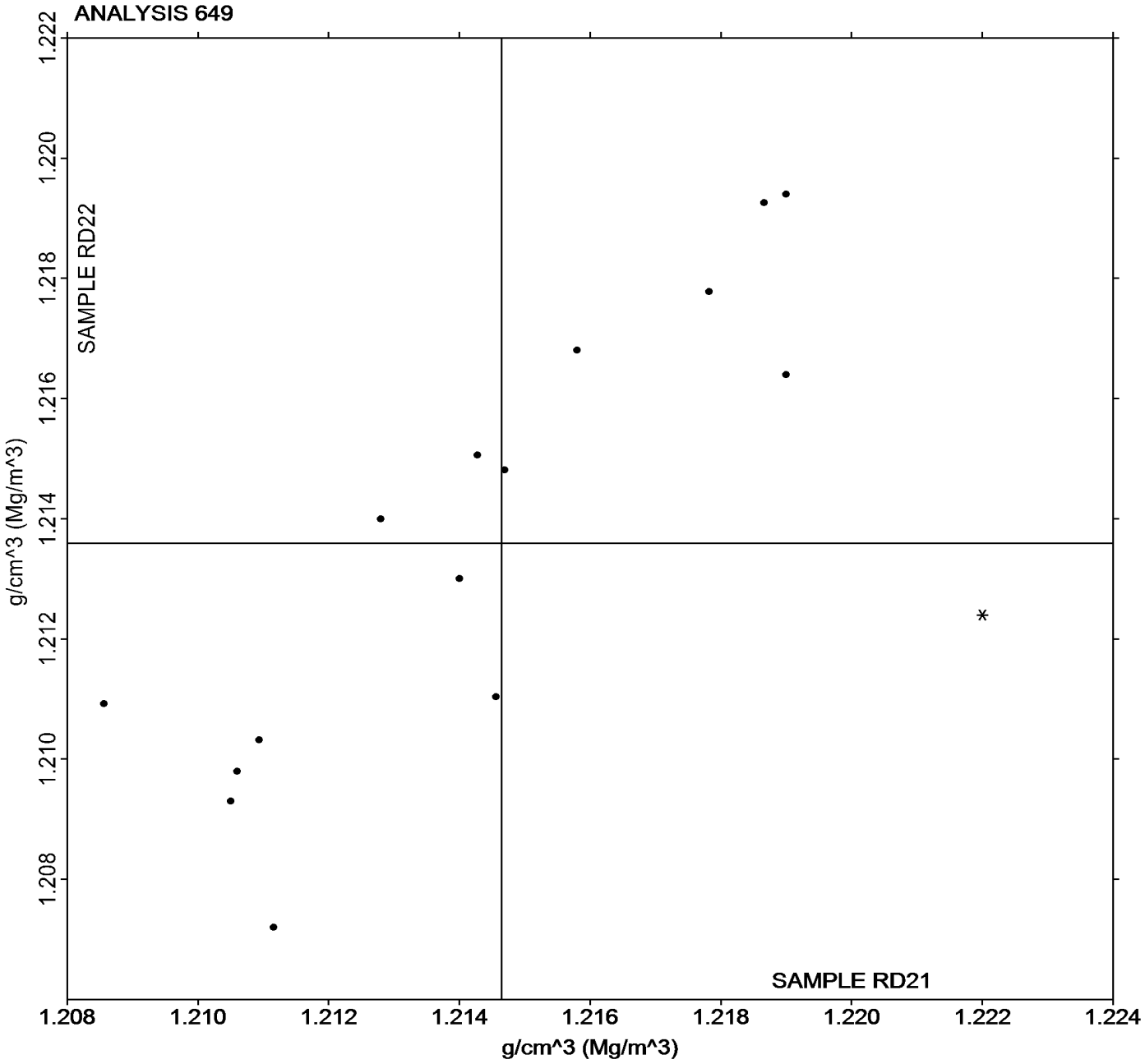
	Sample RD21	Sample RD22
Grand Means	1.2146 g/cm^3 (Mg/m^3)	1.2136 g/cm^3 (Mg/m^3)
Stnd Dev Btwn Labs	0.0038 g/cm^3 (Mg/m^3)	0.0037 g/cm^3 (Mg/m^3)

Statistics based on 16 of 16 reporting participants

Samples RD21: Nitrile O-Ring & RD22: Nitrile O-Ring

Grand Mean Sample **RD21** = 1.2146 g/cm ^ 3 (Mg/m ^ 3)

Grand Mean Sample **RD22** = 1.2136 g/cm ^ 3 (Mg/m ^ 3)



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

WebCode	Data Flag	Sample RD23 Lab Mean	Sample RD23 Diff from Grand Mean	Sample RD23 CPV	Sample RD24 Lab Mean	Sample RD24 Diff from Grand Mean	Sample RD24 CPV
34F8UL		8.800	-0.111	-0.10	9.867	0.500	0.51
3LW9QA		8.760	-0.151	-0.13	9.733	0.366	0.37
7MVPB9		10.333	1.422	1.26	9.333	-0.034	-0.03
AAXVKJ		9.000	0.089	0.08	9.000	-0.367	-0.37
HLJY7L		8.333	-0.578	-0.51	9.000	-0.367	-0.37
JCX98Z		8.000	-0.911	-0.81	9.000	-0.367	-0.37
JFVR6T		8.267	-0.644	-0.57	8.433	-0.934	-0.95
PA9QTV		11.800	2.889	2.55	11.800	2.433	2.46
PJVNGF		7.800	-1.111	-0.98	10.433	1.066	1.08
TYDVWB		8.000	-0.911	-0.81	9.000	-0.367	-0.37
XVY3VK		8.807	-0.104	-0.09	8.303	-1.064	-1.08
ZE4DJL		9.033	0.122	0.11	8.500	-0.867	-0.88

Summary Statistics

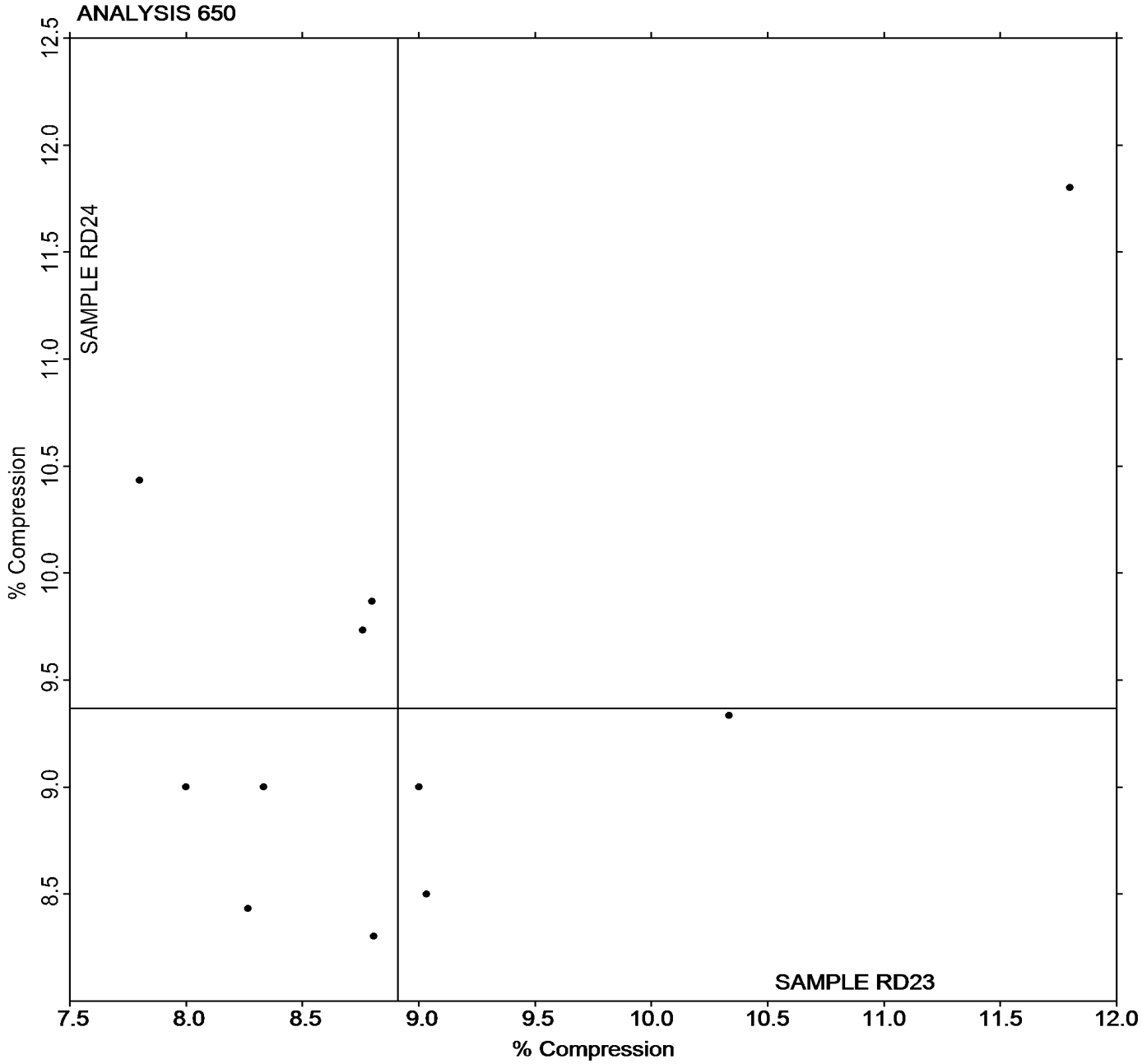
	Sample RD23	Sample RD24
Grand Means	8.9111 % Compression	9.3669 % Compression
Stnd Dev Btwn Labs	1.1314 % Compression	0.9879 % Compression

Statistics based on 12 of 12 reporting participants

Samples RD23: Nitrile O-Ring & RD24: Nitrile O-Ring

Grand Mean Sample **RD23** = 8.9111 % Compression

Grand Mean Sample **RD24** = 9.3669 % Compression



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

WebCode	Data Flag	Sample V21-V22 Lab Mean	Diff from Grand Mean	CPV	Sample V23-V24 Lab Mean	Diff from Grand Mean	CPV	Instr Code
2TN4B2		46.22	-1.04	-0.76	53.20	0.50	0.48	MR
34RXQJ		45.13	-2.12	-1.56	52.55	-0.15	-0.15	MR
36AXZZ		46.88	-0.37	-0.27	51.45	-1.25	-1.22	MR
467PBD		46.43	-0.83	-0.61	50.94	-1.76	-1.72	MV
6WQB42		48.47	1.21	0.89	52.98	0.28	0.27	MR
7XWZXX	*	44.61	-2.65	-1.94	53.98	1.28	1.25	TA
87668U		48.65	1.39	1.02	52.05	-0.65	-0.64	MR
9BEM42		47.95	0.69	0.51	53.90	1.20	1.17	MR
A92GXQ		48.52	1.26	0.92	54.00	1.29	1.26	MR
ALVP48		49.91	2.66	1.95	53.71	1.00	0.98	ML
BRX62U		48.36	1.11	0.81	53.31	0.60	0.59	MR
BVH8W7		45.85	-1.41	-1.03	51.42	-1.29	-1.25	MR
C3RV7Y		47.12	-0.14	-0.10	52.27	-0.44	-0.43	MM
C83X33		49.39	2.14	1.57	53.61	0.91	0.88	XX
D339YZ		45.43	-1.82	-1.34	51.44	-1.26	-1.23	MR
FBBMU2		48.63	1.38	1.01	52.73	0.03	0.03	MR
G6F6YL		46.48	-0.77	-0.57	54.23	1.53	1.49	MR
GW6QBY		49.04	1.78	1.30	54.46	1.75	1.71	MR
H3P7EW		46.68	-0.58	-0.42	52.62	-0.08	-0.08	MV
JFVR6T		44.12	-3.14	-2.30	52.35	-0.35	-0.34	MR
K3LAB4		46.69	-0.56	-0.41	52.35	-0.35	-0.34	MR
MAAXP6		48.12	0.87	0.64	53.34	0.64	0.62	MV
NGV6VG		48.24	0.98	0.72	53.82	1.12	1.09	XX
PK6YAD		46.39	-0.86	-0.63	51.18	-1.53	-1.49	MR
QMUPUH		46.77	-0.49	-0.36	51.62	-1.09	-1.06	MP
RQ3CZ8		46.90	-0.36	-0.26	51.87	-0.84	-0.82	MR
T6M8WH		46.21	-1.05	-0.77	52.01	-0.70	-0.68	MV
URBYYW		47.30	0.04	0.03	52.13	-0.57	-0.56	MR
UWNVCL	M	48.00	0.74	0.55	No data reported for this sample			MV
VA8X8H		46.07	-1.19	-0.87	50.32	-2.39	-2.33	XX
VNQRPN		47.79	0.54	0.39	52.85	0.15	0.14	MR
VPKF9J		49.19	1.93	1.42	54.07	1.37	1.33	MR
WQNGL2		48.20	0.94	0.69	53.07	0.36	0.35	MR
WRXLW6		46.30	-0.95	-0.70	52.55	-0.15	-0.15	TV
XBXMXH		47.78	0.53	0.39	52.02	-0.69	-0.67	MR
XF6FM7		48.27	1.01	0.74	54.10	1.40	1.36	MR
XYKRDC		45.79	-1.47	-1.08	52.12	-0.58	-0.57	MV
Y3D7HD		47.65	0.39	0.29	53.17	0.46	0.45	MR

WebCode	Data Flag	Sample V21-V22 Lab Mean	Sample V21-V22 Diff from Grand Mean	Sample V21-V22 CPV	Sample V23-V24 Lab Mean	Sample V23-V24 Diff from Grand Mean	Sample V23-V24 CPV	Instr Code
ZE4DJL		48.18	0.93	0.68	52.97	0.26	0.26	ML

Summary Statistics

	Sample V21-V22	Sample V23-V24
Grand Means	47.255 ML 1 + 4	52.704 ML 1 + 4
Stnd Dev Btwn Labs	1.364 ML 1 + 4	1.026 ML 1 + 4

Statistics based on 38 of 39 reporting participants

Samples V21-V22: NBR & V23-V24: Butyl

Comments on Assigned Data Flags for Test #660

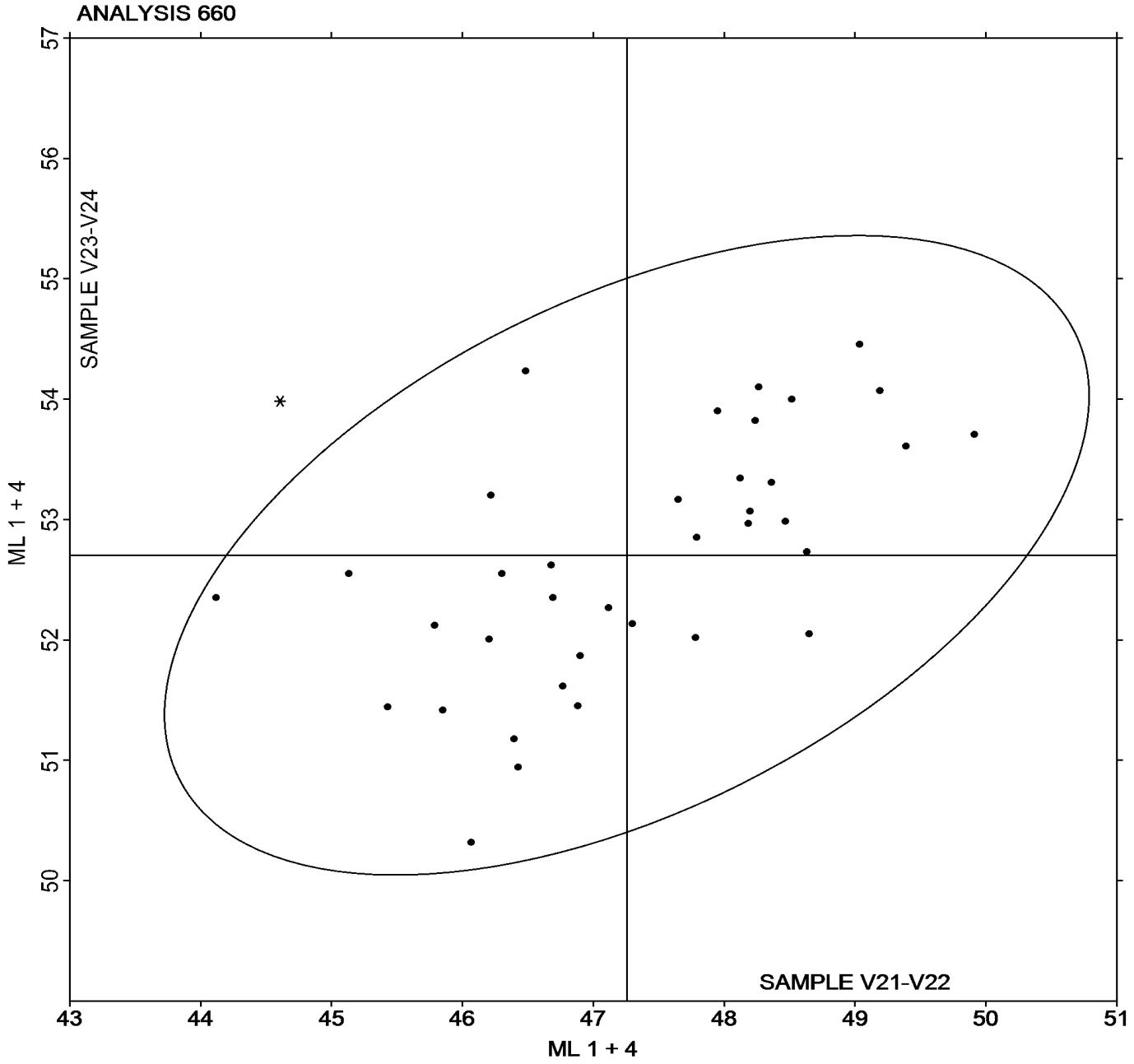
UWNVCL (M) - Participant did not submit data for sample group V23-V24.

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MM	Alpha Technologies Model 1xxx or OSM
MP	Monsanto Compact Mooney Viscometer	MR	Alpha Technologies Model MV2000/MV2000E
MV	MonTech	TA	TA Instruments (any model)
TV	Tech Pro Visc Tech (any model)	XX	Instrument make/model not specified by lab

Grand Mean Sample **V21-V22** = 47.255 ML 1 + 4

Grand Mean Sample **V23-V24** = 52.704 ML 1 + 4



Mooney Viscosity: 4-min NBR/SBR & 8-min butyl readings (ML)

WebCode	Data Flag	Sample V21-V22 Lab Mean	Sample V21-V22 Diff from Grand Mean	Sample V21-V22 CPV	Sample V23-V24 Lab Mean	Sample V23-V24 Diff from Grand Mean	Sample V23-V24 CPV	Instr Code
2TN4B2		46.22	-1.05	-0.76	50.47	0.10	0.10	MR
36AXZZ		46.88	-0.38	-0.28	48.59	-1.78	-1.72	MR
467PBD		46.43	-0.84	-0.60	49.56	-0.81	-0.78	MV
6WQB42		48.47	1.20	0.87	50.42	0.05	0.05	MR
7XWZXX		44.61	-2.66	-1.92	50.95	0.59	0.57	TA
87668U		48.65	1.39	1.00	50.07	-0.30	-0.29	MR
9BEM42		47.95	0.69	0.49	51.45	1.08	1.05	MR
ALVP48		49.91	2.65	1.91	50.76	0.39	0.38	ML
BRX62U		48.36	1.10	0.79	50.93	0.56	0.54	MR
BVH8W7		45.85	-1.41	-1.02	49.37	-1.00	-0.97	MR
C3RV7Y		47.12	-0.15	-0.11	52.28	1.92	1.85	MR
C83X33		49.39	2.13	1.53	50.54	0.17	0.16	XX
D339YZ		45.43	-1.83	-1.32	49.31	-1.06	-1.02	MR
FBBMU2		48.63	1.37	0.99	50.43	0.07	0.06	MR
G6F6YL		46.48	-0.78	-0.56	52.18	1.82	1.76	MR
GW6QBY		49.04	1.77	1.28	51.73	1.36	1.31	MR
H3P7EW		46.68	-0.59	-0.42	50.62	0.26	0.25	MV
JFVR6T		44.12	-3.15	-2.27	50.07	-0.30	-0.29	MR
K3LAB4		46.69	-0.57	-0.41	49.95	-0.42	-0.40	MR
MAAXP6		48.12	0.86	0.62	51.55	1.19	1.15	MV
PK6YAD		46.39	-0.87	-0.63	49.06	-1.31	-1.27	MR
QMUPUH	X	46.77	-0.50	-0.36	61.27	10.90	10.54	MP
RQ3CZ8		46.90	-0.36	-0.26	49.07	-1.30	-1.26	MR
T6M8WH		46.21	-1.06	-0.76	49.97	-0.40	-0.39	MV
VA8X8H		46.07	-1.20	-0.86	47.85	-2.52	-2.43	XX
VNQRPN		47.79	0.53	0.38	50.71	0.34	0.33	MR
VPKF9J		49.19	1.92	1.39	51.81	1.44	1.39	MR
WQNGL2		48.20	0.94	0.67	50.87	0.50	0.48	MR
WRXLW6		46.30	-0.96	-0.69	50.12	-0.25	-0.24	TV
XBXMXH		47.78	0.52	0.37	49.65	-0.72	-0.69	MR
XF6FM7		48.27	1.00	0.72	51.20	0.83	0.80	MR
XYKRDC		45.79	-1.48	-1.06	49.12	-1.24	-1.20	MV
Y3D7HD		47.65	0.39	0.28	51.03	0.67	0.64	MR
ZE4DJL		48.18	0.92	0.66	50.47	0.10	0.10	ML

Summary Statistics		
Grand Means	47.265 ML 1 + 8	50.368 ML 1 + 8
Stnd Dev Btwn Labs	1.387 ML 1 + 8	1.034 ML 1 + 8
		Statistics based on 33 of 34 reporting participants

Samples V21-V22: NBR & V23-V24: Butyl

Comments on Assigned Data Flags for Test #661

QMUPUH (X) - Data for sample group V23-V24 are high. Inconsistent within the determinations of sample group V21-V22.

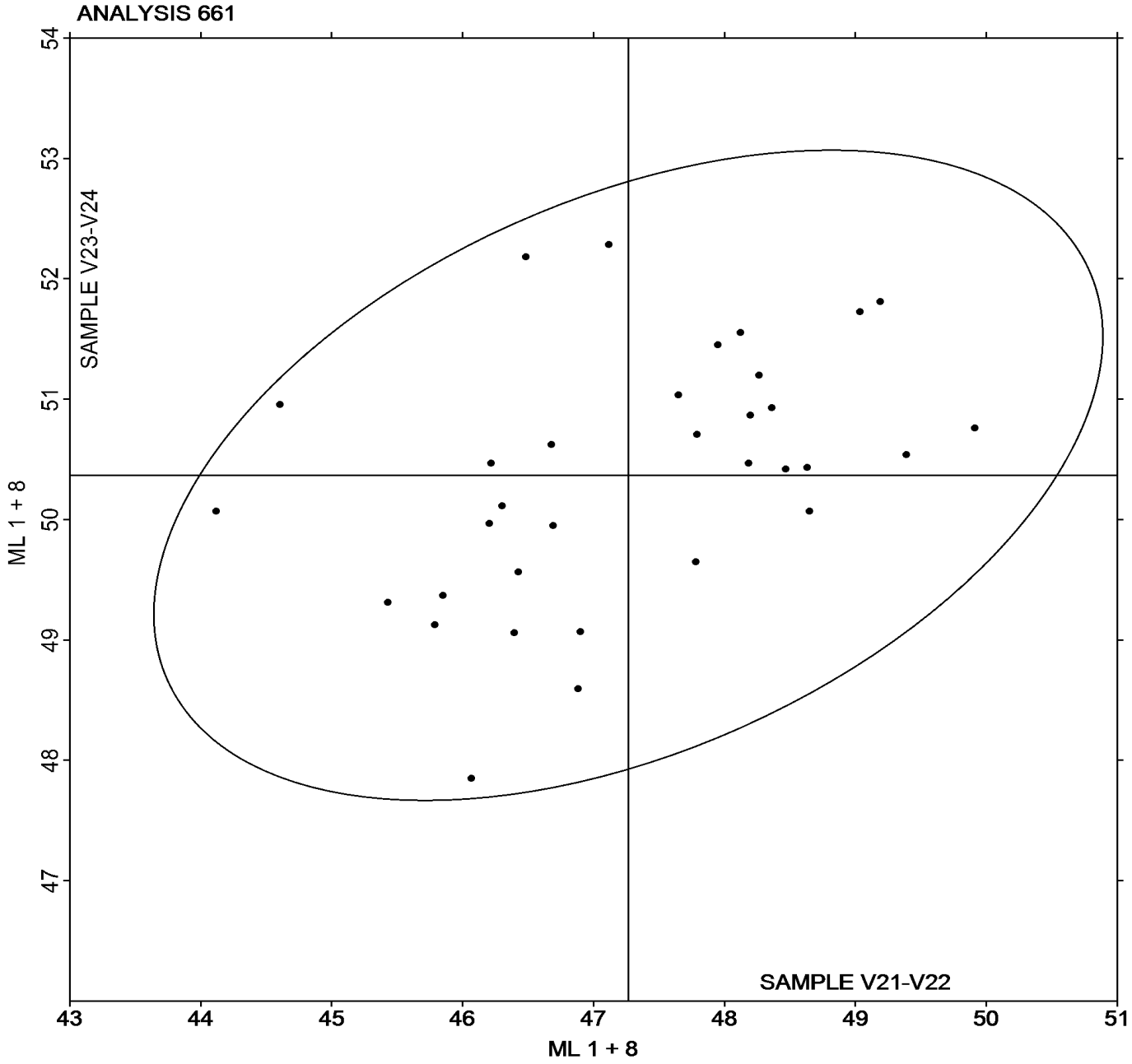
Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MP	Monsanto Compact Mooney Viscometer
MR	Alpha Technologies Model MV2000/MV2000E	MV	Montech
TA	TA Instruments (any model)	TV	Tech Pro Visc Tech (any model)
XX	Instrument make/model not specified by lab		

Mooney Viscosity: 4-min NBR/SBR & 8-min butyl readings (ML)

Grand Mean Sample **V21-V22** = 47.265 ML 1 + 8

Grand Mean Sample **V23-V24** = 50.368 ML 1 + 8



WebCode	Data Flag	Sample V21-V22 Lab Mean	Sample V21-V22 Diff from Grand Mean	Sample V21-V22 CPV	Sample V23-V24 Lab Mean	Sample V23-V24 Diff from Grand Mean	Sample V23-V24 CPV	Instr Code
6WQB42		5.283	0.764	0.77	6.283	0.421	0.52	MR
ALVP48		4.949	0.430	0.44	6.064	0.202	0.25	ML
BRX62U	X	18.568	14.049	14.24	10.302	4.439	5.53	MR
C83X33		5.000	0.481	0.49	7.000	1.137	1.42	XX
D339YZ		4.775	0.256	0.26	5.935	0.072	0.09	MR
FBBMU2		5.193	0.674	0.68	6.240	0.377	0.47	MR
GW6QBY		2.400	-2.119	-2.15	4.400	-1.463	-1.82	MR
H3P7EW	X	42.000	37.481	37.99	54.000	48.137	59.94	MV
MAAXP6		1.868	-2.651	-2.69	3.992	-1.871	-2.33	MV
RQ3CZ8		4.920	0.401	0.41	5.892	0.029	0.04	MR
T6M8WH		3.700	-0.819	-0.83	5.100	-0.763	-0.95	MV
URBYYW		4.100	-0.419	-0.42	6.100	0.237	0.30	MR
UWNVCL	M	2.967	-1.552	-1.57	No data reported for this sample			MV
VA8X8H		5.150	0.631	0.64	6.100	0.237	0.30	XX
VNQRPN		4.705	0.186	0.19	6.012	0.149	0.19	MR
WQNGL2		4.917	0.398	0.40	6.112	0.249	0.31	MR
WRXLW6	X	663.200	658.681	667.71	665.700	659.837	821.59	TV
XBXMXH		4.860	0.341	0.35	6.150	0.287	0.36	MR
XF6FM7		5.200	0.681	0.69	7.167	1.304	1.62	MR
XYKRDC		5.080	0.561	0.57	5.188	-0.674	-0.84	MV
ZE4DJL		4.720	0.201	0.20	5.928	0.066	0.08	ML

Summary Statistics

	Sample V21-V22	Sample V23-V24
Grand Means	4.5189 seconds	5.8625 seconds
Stnd Dev Btwn Labs	0.9865 seconds	0.8031 seconds

Statistics based on 17 of 21 reporting participants

Samples V21-V22: NBR & V23-V24: Butyl

Comments on Assigned Data Flags for Test #662

BRX62U (X) - Data for all samples are high. Inconsistent within the determinations of sample group V21-V22.

H3P7EW (X) - Extreme Data.

UWNVCL (M) - Participant did not submit data for sample group V23-V24.

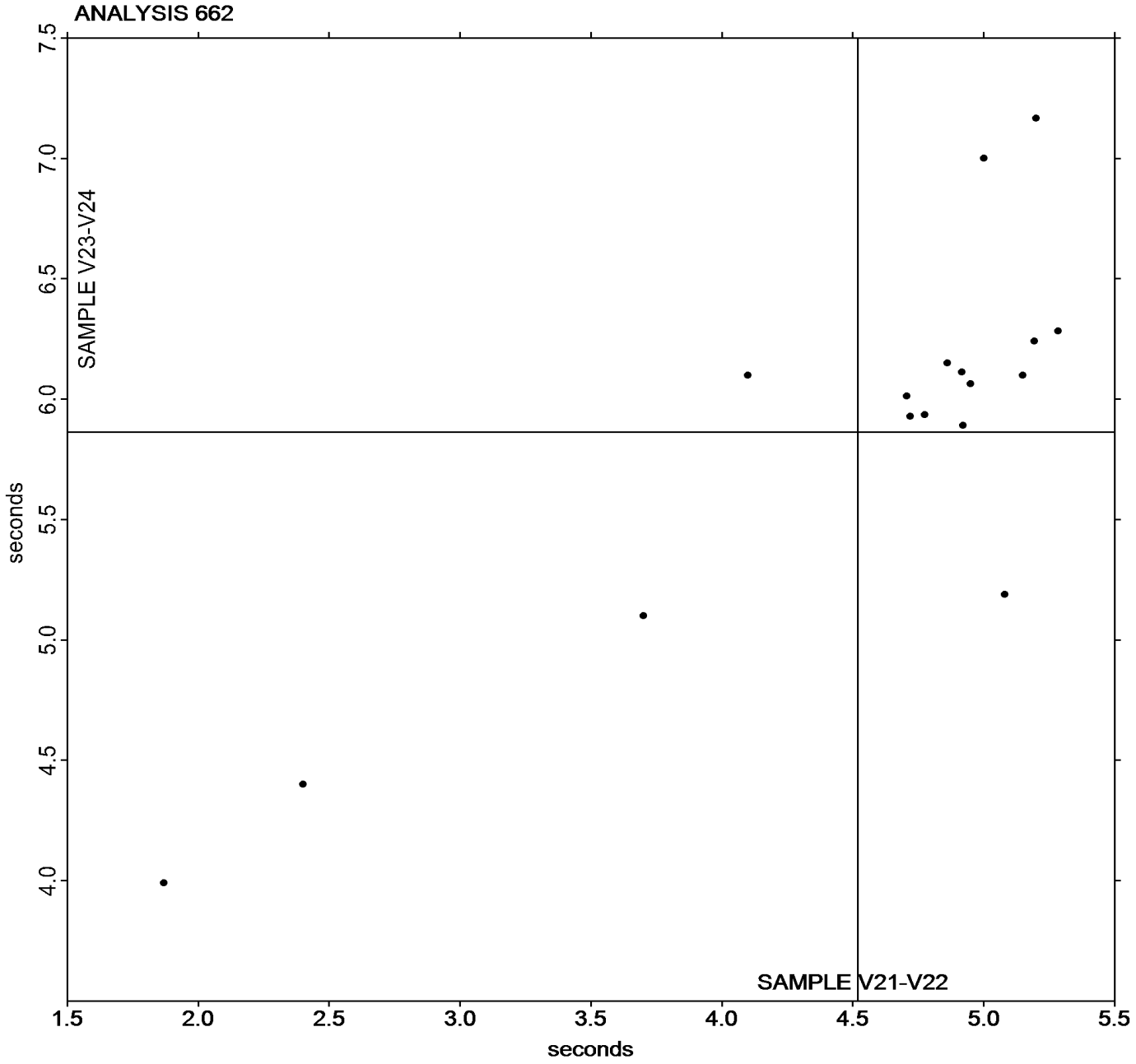
WRXLW6 (X) - Extreme Data.

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	MonTech	TV	Tech Pro Visc Tech (any model)
XX	Instrument make/model not specified by lab		

Grand Mean Sample **V21-V22** = 4.5189 seconds

Grand Mean Sample **V23-V24** = 5.8625 seconds



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

WebCode	Data Flag	Sample V21-V22 Lab Mean	Sample V21-V22 Diff from Grand Mean	Sample V21-V22 CPV	Sample V23-V24 Lab Mean	Sample V23-V24 Diff from Grand Mean	Sample V23-V24 CPV	Instr Code
6WQB42	X	993.09	901.10	285.50	635.69	541.43	250.55	MR
ALVP48		91.12	-0.87	-0.28	94.15	-0.12	-0.05	ML
BRX62U	*	84.11	-7.89	-2.50	91.61	-2.66	-1.23	MR
C83X33		91.20	-0.80	-0.25	93.10	-1.17	-0.54	XX
D339YZ		91.30	-0.70	-0.22	93.98	-0.29	-0.13	MR
FBBMU2		90.54	-1.46	-0.46	93.20	-1.07	-0.49	MR
GW6QBY		97.60	5.61	1.78	98.27	4.00	1.85	MR
H3P7EW		93.67	1.67	0.53	95.33	1.07	0.49	MV
MAAXP6		99.59	7.59	2.41	99.39	5.12	2.37	MV
RQ3CZ8		91.61	-0.38	-0.12	94.67	0.40	0.19	MR
T6M8WH		93.50	1.50	0.48	95.95	1.68	0.78	MV
UWNVCL	M	96.73	4.73	1.50	No data reported for this sample			MV
VA8X8H		91.10	-0.90	-0.28	94.18	-0.08	-0.04	XX
VNQRPN		91.73	-0.27	-0.08	93.95	-0.31	-0.14	MR
WQNGL2		91.10	-0.90	-0.29	93.68	-0.59	-0.27	MR
WRXLW6		93.57	1.57	0.50	94.23	-0.04	-0.02	TV
XBXMXH		91.59	-0.40	-0.13	94.53	0.27	0.12	MR
XF6FM7		90.28	-1.71	-0.54	92.17	-2.10	-0.97	MR
XYKRDC	*	90.84	-1.16	-0.37	89.97	-4.29	-1.99	MV
ZE4DJL		91.49	-0.50	-0.16	94.44	0.17	0.08	ML

Summary Statistics

	Sample V21-V22	Sample V23-V24
Grand Means	91.996 percent	94.266 percent
Stnd Dev Btwn Labs	3.156 percent	2.161 percent

Statistics based on 18 of 20 reporting participants

Samples V21-V22: NBR & V23-V24: Butyl

Comments on Assigned Data Flags for Test #663

6WQB42 (X) - Extreme Data.

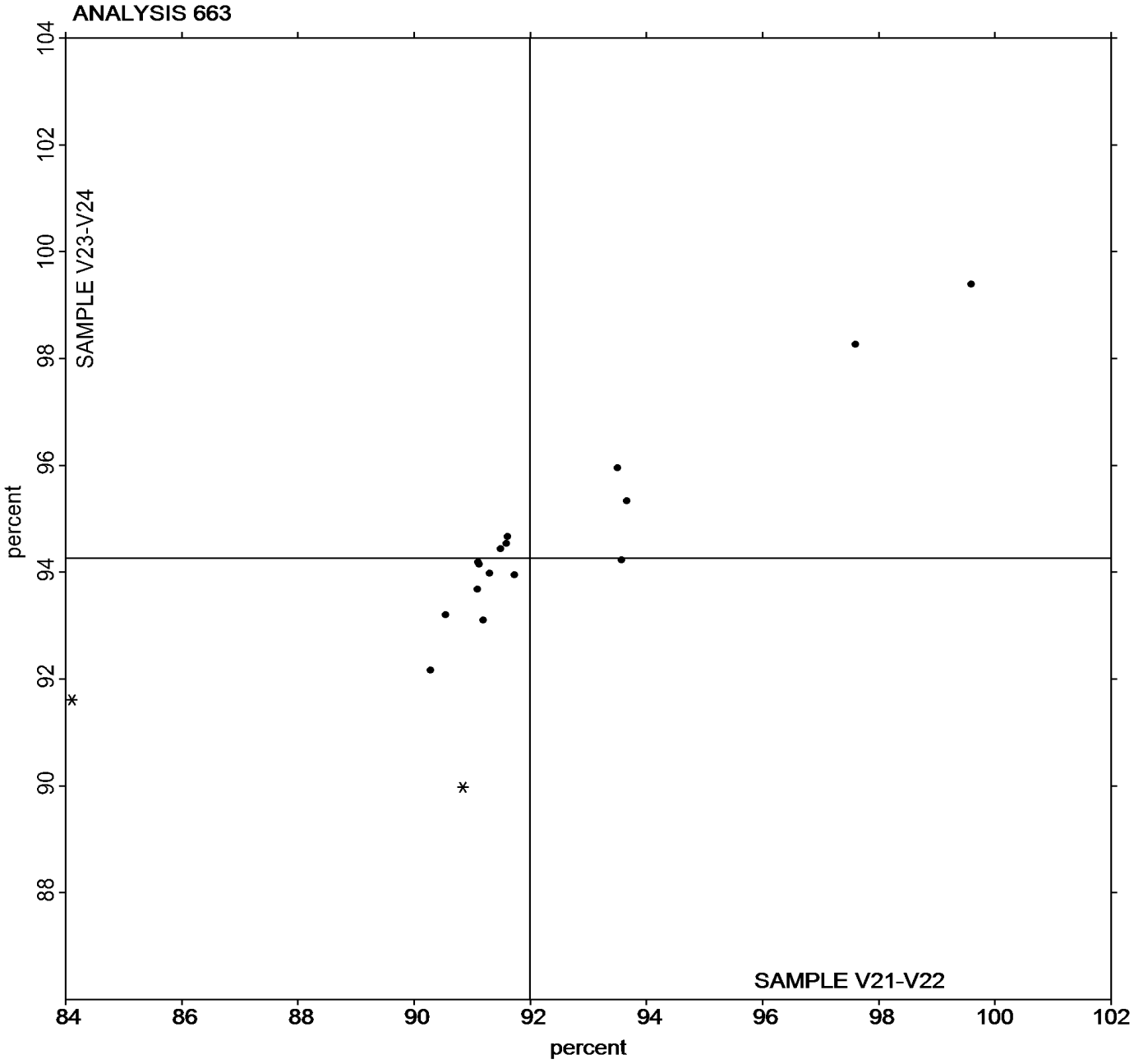
UWNVCL (M) - Participant did not submit data for sample group V23-V24.

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	Montech	TV	Tech Pro Visc Tech (any model)
XX	Instrument make/model not specified by lab		

Grand Mean Sample **V21-V22** = 91.996 percent

Grand Mean Sample **V23-V24** = 94.266 percent



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

WebCode	Data Flag	Sample V21-V22 Lab Mean	Sample V21-V22 Diff from Grand Mean	Sample V21-V22 CPV	Sample V23-V24 Lab Mean	Sample V23-V24 Diff from Grand Mean	Sample V23-V24 CPV	Instr Code
6WQB42		530.2	120.6	1.19	409.9	73.2	1.02	MR
ALVP48		522.9	113.2	1.12	391.0	54.4	0.75	ML
BRX62U		463.5	53.8	0.53	348.0	11.3	0.16	MR
C83X33		474.5	64.8	0.64	433.7	97.1	1.35	XX
D339YZ		430.9	21.2	0.21	349.5	12.8	0.18	MR
GW6QBY	*	109.6	-300.1	-2.96	142.1	-194.5	-2.70	MR
H3P7EW		306.7	-103.0	-1.02	262.7	-74.0	-1.02	MV
RQ3CZ8		423.4	13.7	0.13	308.3	-28.4	-0.39	MR
T6M8WH		313.7	-96.0	-0.95	226.9	-109.7	-1.52	MV
UWNVCL	M	143.4	-266.3	-2.63	No data reported for this sample			MV
VA8X8H		443.0	33.3	0.33	330.2	-6.4	-0.09	XX
VNQRPN		435.0	25.3	0.25	351.0	14.3	0.20	MR
WQNGL2		466.7	57.0	0.56	372.8	36.2	0.50	MR
WRXLW6		306.2	-103.5	-1.02	343.4	6.8	0.09	TV
XBXMXH		435.0	25.3	0.25	332.5	-4.1	-0.06	XX
XF6FM7		406.3	-3.4	-0.03	383.7	47.0	0.65	MR
XYKRDC		452.5	42.8	0.42	408.9	72.3	1.00	MV
ZE4DJL		444.8	35.1	0.35	328.4	-8.3	-0.11	ML

Summary Statistics

	Sample V21-V22	Sample V23-V24
Grand Means	409.70 M-s	336.64 M-s
Stnd Dev Btwn Labs	101.37 M-s	72.16 M-s

Statistics based on 17 of 18 reporting participants

Samples V21-V22: NBR & V23-V24: Butyl

Comments on Assigned Data Flags for Test #664

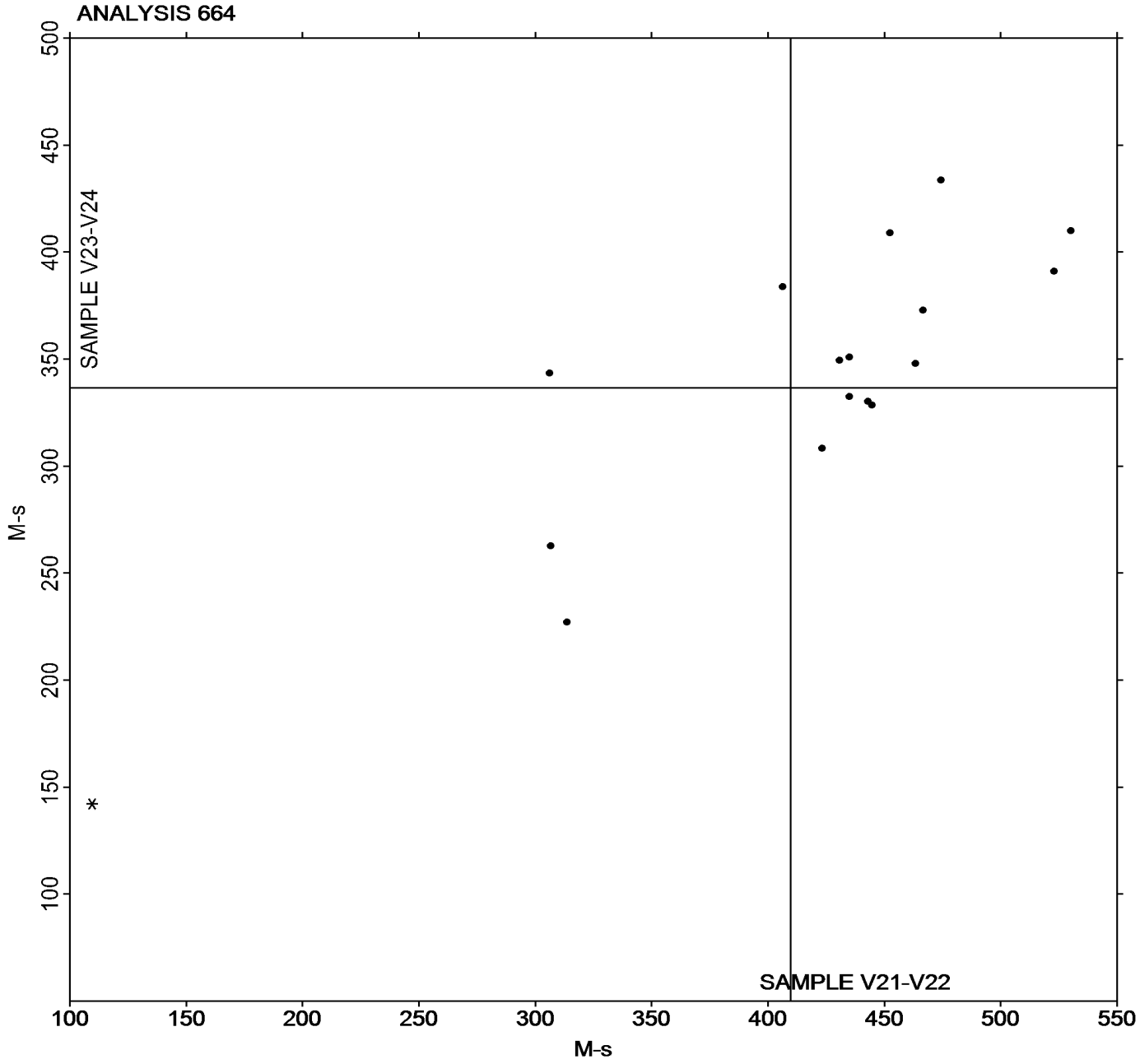
UWNVCL (M) - Participant did not submit data for sample group V23-V24.

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	MonTech	TV	Tech Pro Visc Tech (any model)
XX	Instrument make/model not specified by lab		

Grand Mean Sample **V21-V22** = 409.70 M-s

Grand Mean Sample **V23-V24** = 336.64 M-s



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

WebCode	Data Flag	Sample Z21-Z22 Lab Mean	Sample Z21-Z22 Diff from Grand Mean	Sample Z21-Z22 CPV	Sample Z23-Z24 Lab Mean	Sample Z23-Z24 Diff from Grand Mean	Sample Z23-Z24 CPV
9BEM42		1.822	0.040	0.64	4.537	0.106	1.01
K3LAB4		1.710	-0.072	-1.15	4.327	-0.104	-0.99
T6M8WH		1.813	0.032	0.51	4.430	-0.001	-0.01

Summary Statistics

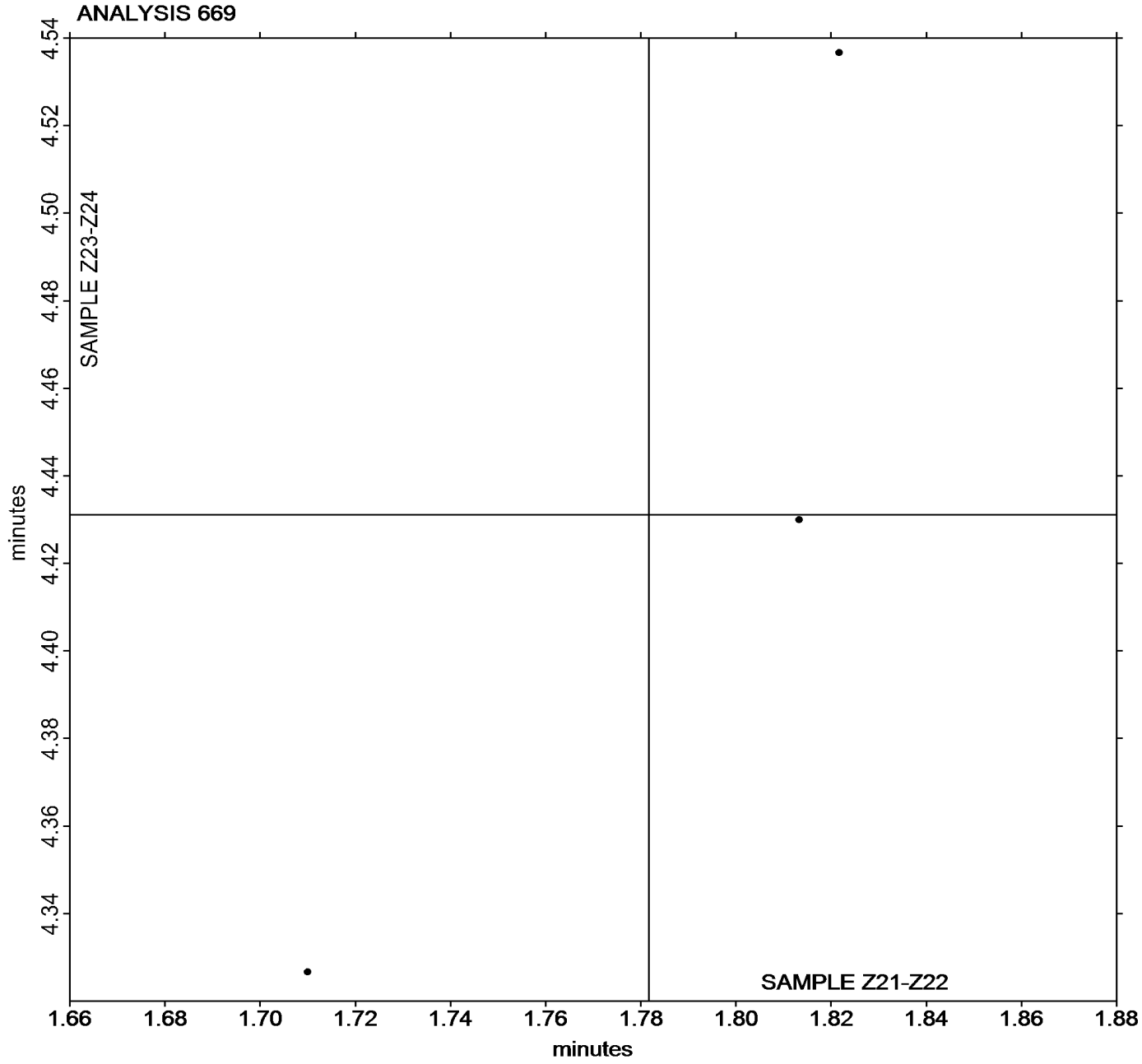
	Sample Z21-Z22	Sample Z23-Z24
Grand Means	1.7817 minutes	4.4311 minutes
Stnd Dev Btwn Labs	0.0622 minutes	0.1050 minutes

Statistics based on 3 of 3 reporting participants

Samples Z21-Z22: EPDM compound, batch #1 & Z23-Z24: EPDM compound, batch #2

Grand Mean Sample **Z21-Z22** = 1.7817 minutes

Grand Mean Sample **Z23-Z24** = 4.4311 minutes



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

WebCode	Data Flag	Sample Z21-Z22 Lab Mean	Sample Z21-Z22 Diff from Grand Mean	Sample Z21-Z22 CPV	Sample Z23-Z24 Lab Mean	Sample Z23-Z24 Diff from Grand Mean	Sample Z23-Z24 CPV
9BEM42		1.308	0.016	0.29	3.820	0.079	0.95
K3LAB4		1.233	-0.059	-1.11	3.653	-0.087	-1.04
T6M8WH		1.337	0.044	0.82	3.748	0.008	0.09

Summary Statistics

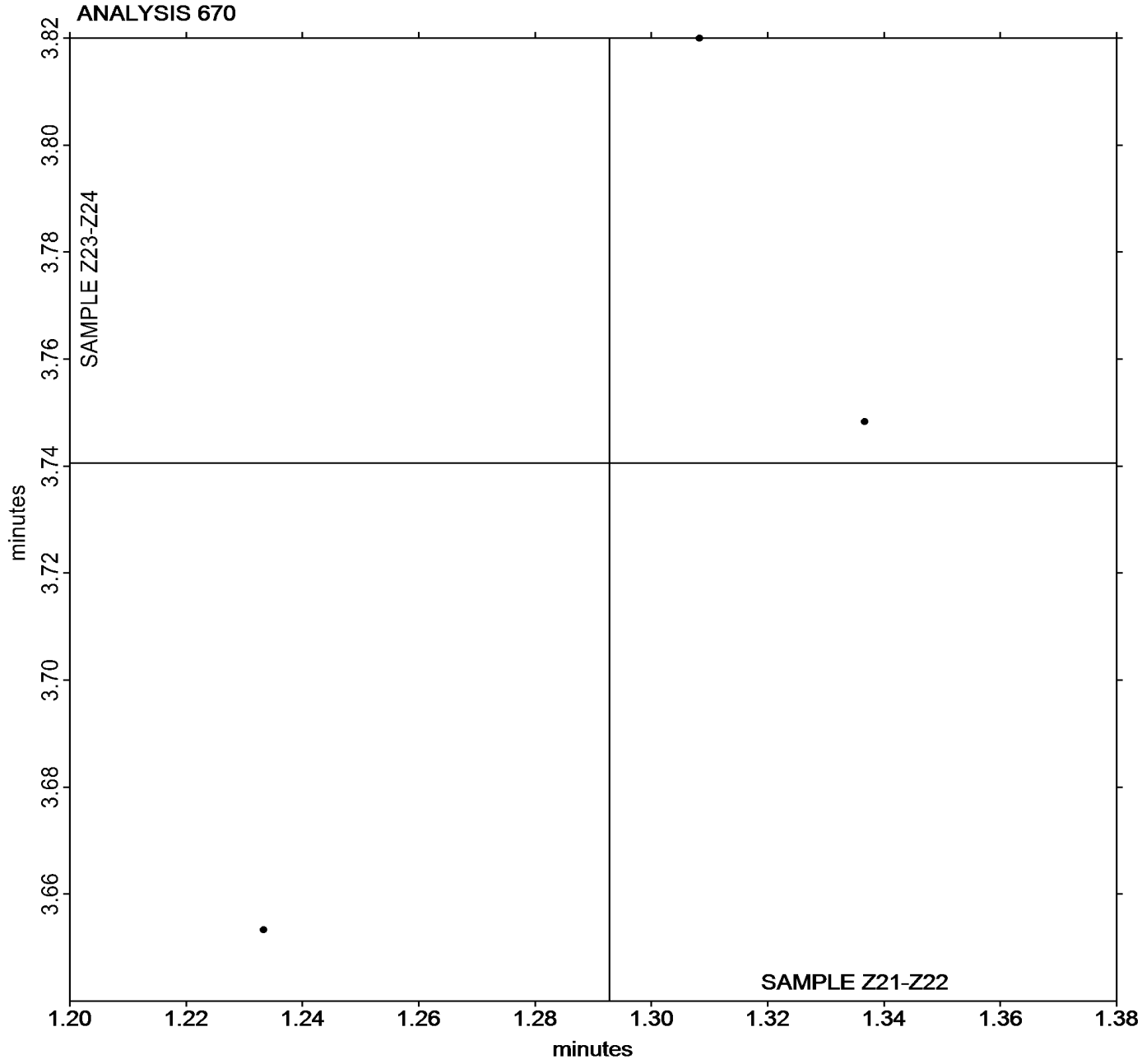
	Sample Z21-Z22	Sample Z23-Z24
Grand Means	1.2928 minutes	3.7406 minutes
Stnd Dev Btwn Labs	0.0534 minutes	0.0836 minutes

Statistics based on 3 of 3 reporting participants

Samples Z21-Z22: EPDM compound, batch #1 & Z23-Z24: EPDM compound, batch #2

Grand Mean Sample **Z21-Z22** = 1.2928 minutes

Grand Mean Sample **Z23-Z24** = 3.7406 minutes



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

WebCode	Data Flag	Sample Z21-Z22 Lab Mean	Sample Z21-Z22 Diff from Grand Mean	Sample Z21-Z22 CPV	Sample Z23-Z24 Lab Mean	Sample Z23-Z24 Diff from Grand Mean	Sample Z23-Z24 CPV
9BEM42		3.450	0.084	0.81	9.065	0.083	0.56
K3LAB4		3.248	-0.117	-1.12	8.810	-0.172	-1.15
T6M8WH		3.398	0.033	0.31	9.070	0.088	0.59

Summary Statistics

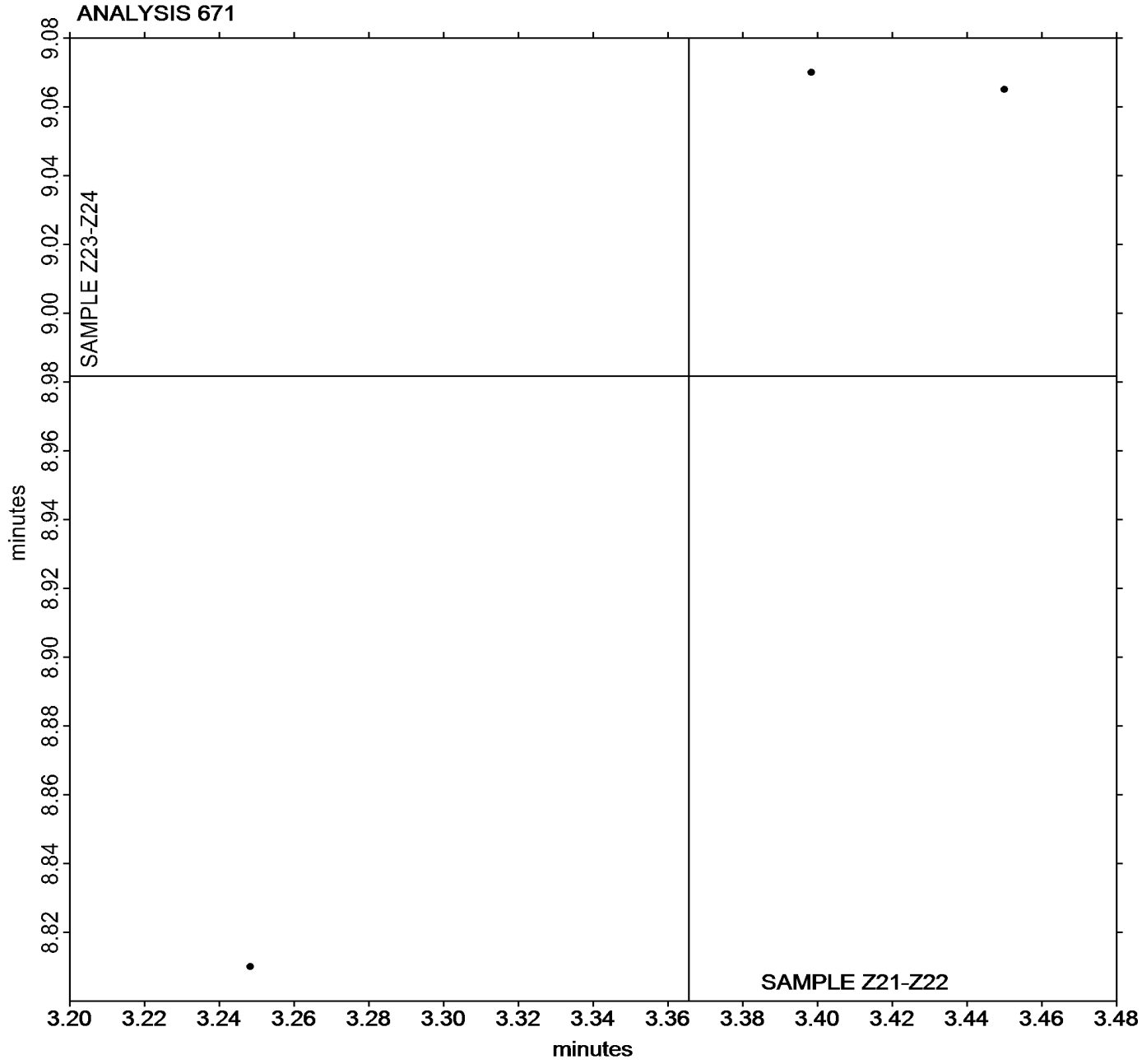
	Sample Z21-Z22	Sample Z23-Z24
Grand Means	3.3656 minutes	8.9817 minutes
Stnd Dev Btwn Labs	0.1048 minutes	0.1487 minutes

Statistics based on 3 of 3 reporting participants

Samples Z21-Z22: EPDM compound, batch #1 & Z23-Z24: EPDM compound, batch #2

Grand Mean Sample **Z21-Z22** = 3.3656 minutes

Grand Mean Sample **Z23-Z24** = 8.9817 minutes



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

WebCode	Data Flag	Sample Z21-Z22 Lab Mean	Sample Z21-Z22 Diff from Grand Mean	Sample Z21-Z22 CPV	Sample Z23-Z24 Lab Mean	Sample Z23-Z24 Diff from Grand Mean	Sample Z23-Z24 CPV
9BEM42		11.77	-0.77	-0.64	15.35	-1.12	-1.03
K3LAB4		13.93	1.39	1.15	17.53	1.06	0.97
T6M8WH		11.92	-0.62	-0.52	16.53	0.06	0.06

Summary Statistics

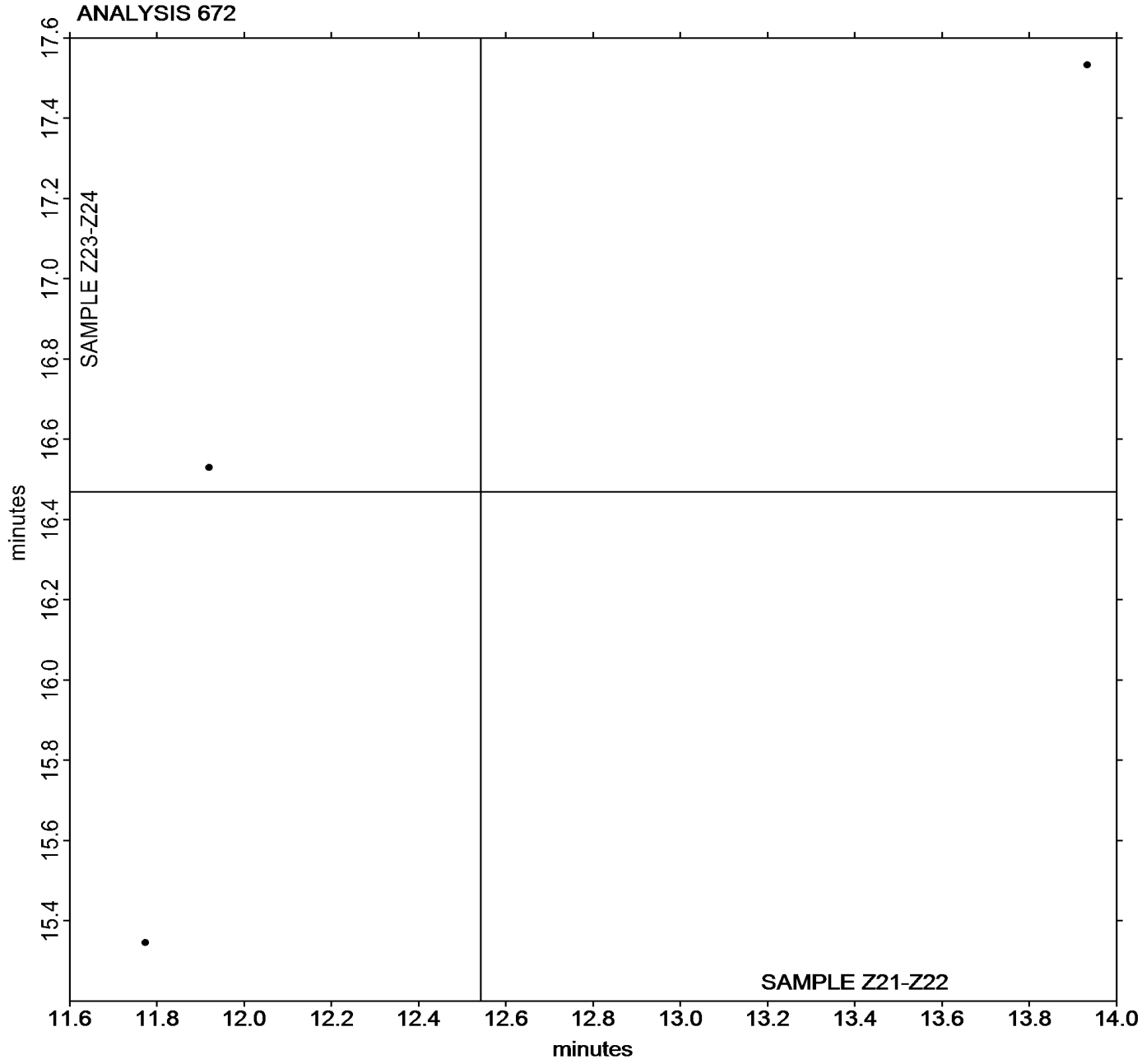
	Sample Z21-Z22	Sample Z23-Z24
Grand Means	12.542 minutes	16.469 minutes
Stnd Dev Btwn Labs	1.207 minutes	1.095 minutes

Statistics based on 3 of 3 reporting participants

Samples Z21-Z22: EPDM compound, batch #1 & Z23-Z24: EPDM compound, batch #2

Grand Mean Sample **Z21-Z22** = 12.542 minutes

Grand Mean Sample **Z23-Z24** = 16.469 minutes



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

WebCode	Data Flag	Sample Z21-Z22 Lab Mean	Sample Z21-Z22 Diff from Grand Mean	Sample Z21-Z22 CPV	Sample Z23-Z24 Lab Mean	Sample Z23-Z24 Diff from Grand Mean	Sample Z23-Z24 CPV
9BEM42		6.693	-1.140	-0.92	7.578	-0.857	-1.03
K3LAB4		7.660	-0.173	-0.14	8.483	0.048	0.06
T6M8WH		9.147	1.313	1.06	9.243	0.808	0.97

Summary Statistics

	Sample Z21-Z22	Sample Z23-Z24
Grand Means	7.8333 lbf.in	8.4350 lbf.in
Stnd Dev Btwn Labs	1.2358 lbf.in	0.8336 lbf.in

Statistics based on 3 of 3 reporting participants

Summary Statistics in SI Units

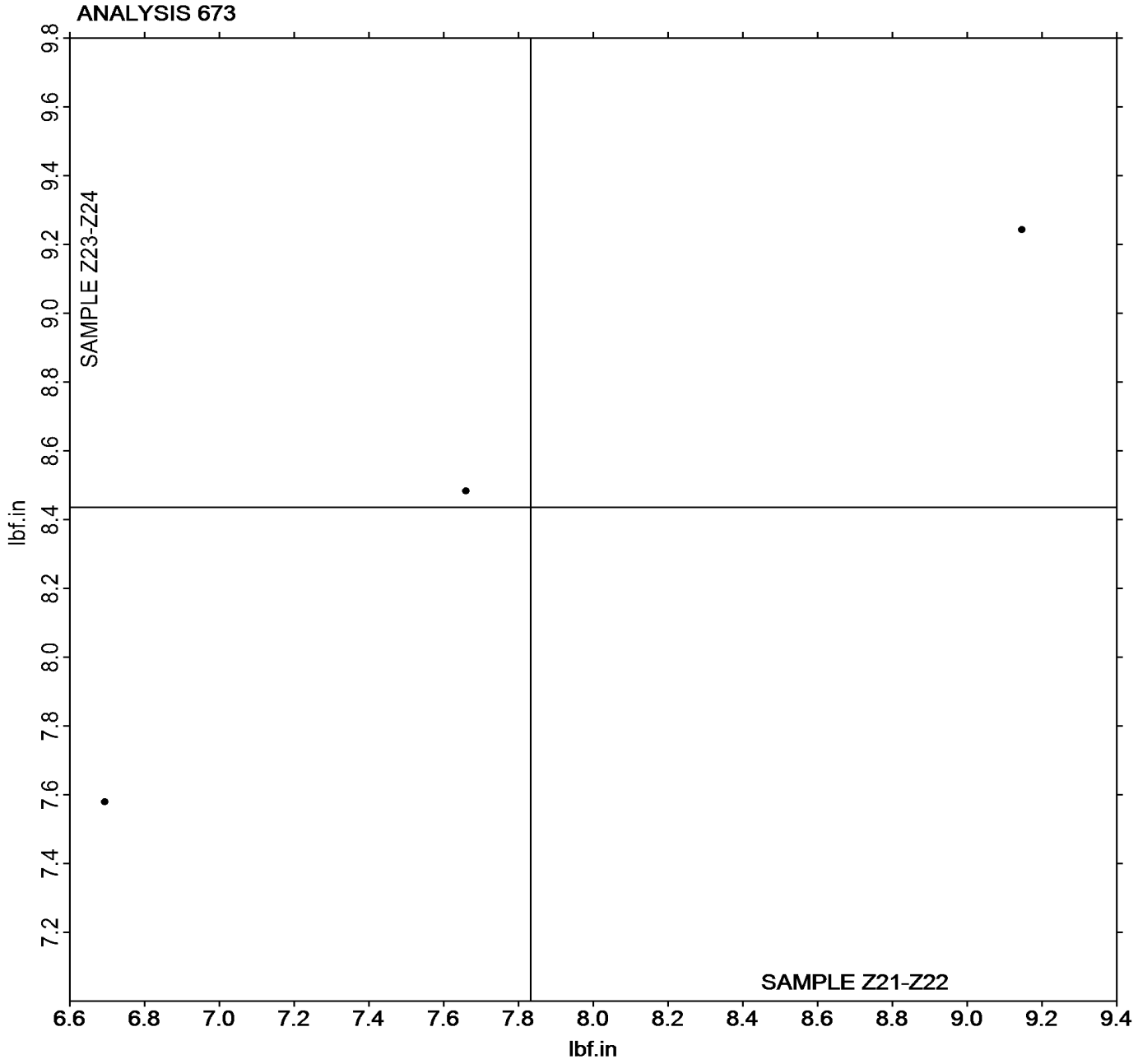
	Sample Z21-Z22	Sample Z23-Z24
Grand Means	8.8505 dN.m	9.5303 dN.m
Stnd Dev Btwn Labs	1.3963 dN.m	0.9418 dN.m

Statistics based on 3 of 3 reporting participants

Samples Z21-Z22: EPDM compound, batch #1 & Z23-Z24: EPDM compound, batch #2

Grand Mean Sample **Z21-Z22** = 7.8333 lbf.in

Grand Mean Sample **Z23-Z24** = 8.4350 lbf.in



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

WebCode	Data Flag	Sample Z21-Z22 Lab Mean	Sample Z21-Z22 Diff from Grand Mean	Sample Z21-Z22 CPV	Sample Z23-Z24 Lab Mean	Sample Z23-Z24 Diff from Grand Mean	Sample Z23-Z24 CPV
9BEM42		50.14	1.81	0.74	23.78	-0.60	-1.15
K3LAB4		49.31	0.99	0.40	24.66	0.28	0.55
T6M8WH		45.52	-2.80	-1.14	24.69	0.31	0.60

Summary Statistics

	Sample Z21-Z22	Sample Z23-Z24
Grand Means	48.320 lbf.in	24.373 lbf.in
Stnd Dev Btwn Labs	2.461 lbf.in	0.518 lbf.in

Statistics based on 3 of 3 reporting participants

Summary Statistics in SI Units

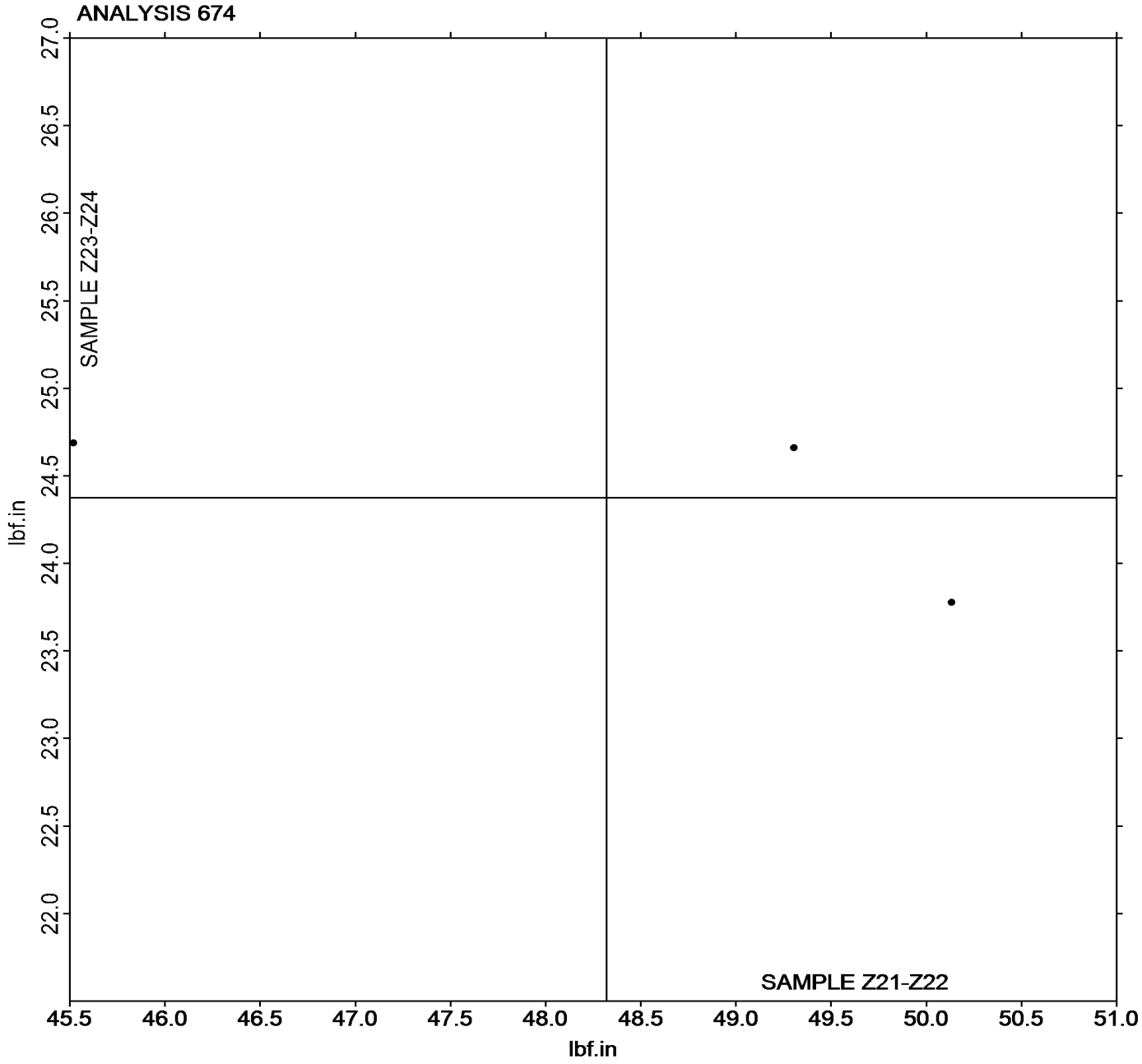
	Sample Z21-Z22	Sample Z23-Z24
Grand Means	54.594 dN.m	27.538 dN.m
Stnd Dev Btwn Labs	2.781 dN.m	0.586 dN.m

Statistics based on 3 of 3 reporting participants

Samples Z21-Z22: EPDM compound, batch #1 & Z23-Z24: EPDM compound, batch #2

Grand Mean Sample **Z21-Z22** = 48.320 lbf.in

Grand Mean Sample **Z23-Z24** = 24.373 lbf.in



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

WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Diff from Grand Mean	CPV	Sample Z27-Z28 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3LW9QA		2.675	0.073	0.27	2.705	0.072	0.60	MC
467PBD	*	1.807	-0.796	-3.00	2.418	-0.215	-1.80	MC
6WQB42		2.472	-0.131	-0.49	2.580	-0.053	-0.45	MC
87668U		2.498	-0.104	-0.39	2.567	-0.067	-0.56	MC
9X9EFR		2.981	0.378	1.43	2.867	0.233	1.96	MC
A6KYW9		2.493	-0.109	-0.41	2.683	0.050	0.42	MC
A92GXQ		2.338	-0.264	-0.99	2.640	0.007	0.06	MC
ALRBAJ		2.475	-0.127	-0.48	2.620	-0.013	-0.11	MC
ALVP48		2.626	0.024	0.09	2.595	-0.038	-0.32	MM
BRX62U		2.978	0.376	1.42	2.878	0.245	2.05	ME
C83X33		2.507	-0.096	-0.36	2.508	-0.125	-1.05	ME
D339YZ		2.332	-0.271	-1.02	2.607	-0.027	-0.22	ME
D92AR4		2.381	-0.222	-0.84	2.586	-0.047	-0.40	MC
DD3U8K		2.503	-0.099	-0.37	2.533	-0.100	-0.84	MC
FBBMU2		2.870	0.268	1.01	2.627	-0.007	-0.06	MC
GW6QBY		2.420	-0.182	-0.69	2.503	-0.130	-1.09	MX
H3P7EW		2.508	-0.094	-0.35	2.603	-0.030	-0.25	MC
JCX98Z		2.662	0.059	0.22	2.618	-0.015	-0.13	ME
JFVR6T		2.472	-0.131	-0.49	2.558	-0.075	-0.63	MC
K3LAB4		3.102	0.499	1.88	2.885	0.252	2.11	MC
MM6XVF		2.522	-0.081	-0.30	2.495	-0.138	-1.16	ME
NGV6VG		2.693	0.091	0.34	2.725	0.092	0.77	MP
P79EWV		2.558	-0.044	-0.17	2.645	0.012	0.10	ME
PA9QTV		2.590	-0.012	-0.05	2.717	0.083	0.70	MC
PK6YAD		2.540	-0.062	-0.23	2.675	0.042	0.35	MC
QBZ7FC		2.710	0.108	0.41	2.713	0.080	0.67	MM
QMUPUH		2.740	0.138	0.52	2.793	0.160	1.34	ME
R24PCZ	*	2.920	0.318	1.20	2.530	-0.103	-0.87	ME
RQ3CZ8		2.803	0.201	0.76	2.588	-0.045	-0.38	MC
RX4DFZ		2.227	-0.376	-1.42	2.470	-0.163	-1.37	ME
T6M8WH		2.823	0.221	0.83	2.577	-0.057	-0.48	XX
THTZQF	X	0.665	-1.937	-7.30	1.920	-0.713	-5.98	XX
URBYYW	*	2.940	0.338	1.27	2.515	-0.118	-0.99	MC
VA8X8H		2.732	0.129	0.49	2.613	-0.020	-0.17	XX
VNQRPN		2.453	-0.149	-0.56	2.617	-0.017	-0.14	MD
VPKF9J		2.840	0.238	0.90	2.732	0.098	0.82	MC
WQNGL2		2.478	-0.124	-0.47	2.657	0.023	0.20	MC
WRXLW6		3.077	0.474	1.79	2.917	0.283	2.38	MM

WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Diff from Grand Mean	CPV	Sample Z27-Z28 Lab Mean	Diff from Grand Mean	CPV	Instr Code
XYKRDC		2.088	-0.514	-1.94	2.462	-0.172	-1.44	MR
ZE4DJL		2.652	0.049	0.19	2.677	0.043	0.36	ME

Summary Statistics

	Sample Z25-Z26	Sample Z27-Z28
Grand Means	2.6022 minutes	2.6333 minutes
Stnd Dev Btwn Labs	0.2652 minutes	0.1193 minutes

Statistics based on 39 of 40 reporting participants

Samples Z25-Z26: EPDM compound, batch #1 & Z27-Z28: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #684

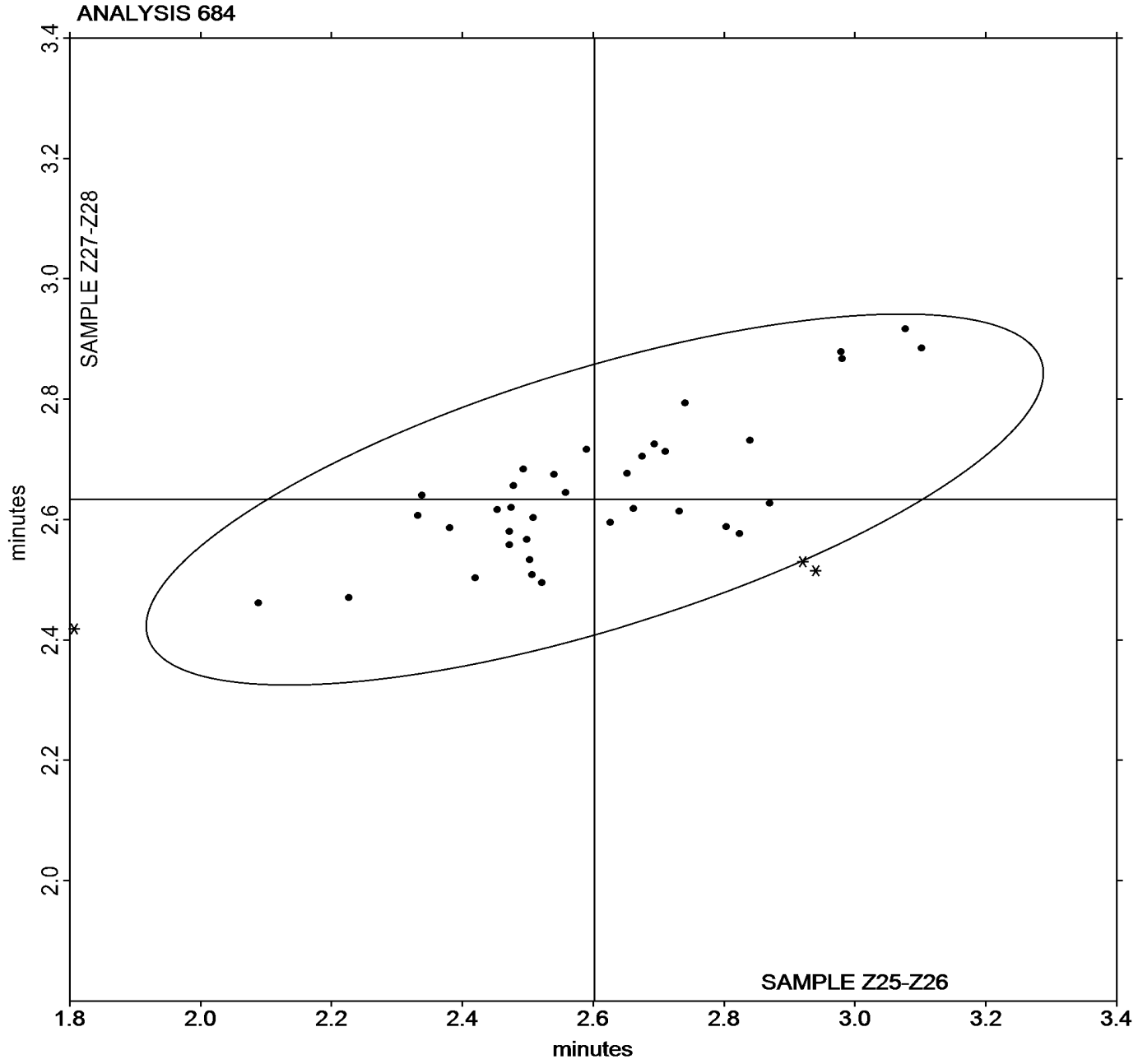
THTZQF (X) - Data for all samples are low. Inconsistent within the determinations of both sample groups.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MP	Alpha Technologies [Monsanto] MDR 2000P	MR	MonTech D-RPA 3000
MX	Rebuilt MonTech Alpha	XX	Instrument model not specified by lab

Grand Mean Sample **Z25-Z26** = 2.6022 minutes

Grand Mean Sample **Z27-Z28** = 2.6333 minutes



WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Sample Z25-Z26 Diff from Grand Mean	Sample Z25-Z26 CPV	Sample Z27-Z28 Lab Mean	Sample Z27-Z28 Diff from Grand Mean	Sample Z27-Z28 CPV	Instr Code
36AXZZ	*	2.855	-0.939	-2.98	2.153	-0.430	-2.62	MR
3LW9QA		4.013	0.219	0.69	2.753	0.170	1.04	MC
467PBD	*	3.097	-0.697	-2.21	2.352	-0.232	-1.41	MC
6WQB42		3.672	-0.122	-0.39	2.518	-0.065	-0.40	MC
87668U		3.902	0.108	0.34	2.617	0.033	0.20	MC
9X9EFR		4.175	0.381	1.21	2.895	0.311	1.90	MC
A6KYW9		3.748	-0.046	-0.15	2.627	0.043	0.26	MC
A92GXQ		3.292	-0.502	-1.59	2.470	-0.113	-0.69	MC
ALRBAJ		3.645	-0.149	-0.47	2.525	-0.058	-0.36	MC
ALVP48		3.796	0.002	0.00	2.630	0.046	0.28	MM
BRX62U		3.872	0.078	0.25	2.600	0.017	0.10	ME
C83X33		3.778	-0.016	-0.05	2.442	-0.142	-0.86	ME
D339YZ		3.848	0.054	0.17	2.690	0.107	0.65	ME
D92AR4		3.650	-0.144	-0.46	2.536	-0.047	-0.29	MC
DD3U8K		3.303	-0.491	-1.56	2.323	-0.260	-1.59	MC
FBBMU2		3.922	0.128	0.40	2.570	-0.013	-0.08	MC
GW6QBY		3.327	-0.467	-1.48	2.273	-0.310	-1.89	MX
H3P7EW		3.728	-0.066	-0.21	2.562	-0.022	-0.13	MC
JCX98Z		3.950	0.156	0.49	2.638	0.055	0.33	ME
JFVR6T		3.797	0.003	0.01	2.575	-0.008	-0.05	MC
K3LAB4		4.188	0.394	1.25	2.748	0.165	1.01	MC
MM6XVF		3.783	-0.011	-0.03	2.492	-0.092	-0.56	ME
NGV6VG		3.938	0.144	0.46	2.658	0.075	0.46	MP
P79EWV		3.597	-0.197	-0.63	2.525	-0.058	-0.36	ME
PA9QTV		3.652	-0.142	-0.45	2.598	0.015	0.09	MC
PK6YAD		3.972	0.178	0.56	2.702	0.118	0.72	MC
QBZ7FC		4.263	0.469	1.49	2.832	0.248	1.51	MM
QMUPUH		4.137	0.343	1.09	2.740	0.157	0.95	ME
R24PCZ		4.027	0.233	0.74	2.552	-0.032	-0.19	MP
RQ3CZ8		4.030	0.236	0.75	2.622	0.038	0.23	MC
RX4DFZ		3.510	-0.284	-0.90	2.402	-0.182	-1.11	ME
T6M8WH		3.542	-0.252	-0.80	2.318	-0.265	-1.62	XX
THTZQF		3.690	-0.104	-0.33	2.540	-0.043	-0.26	XX
URBYYW		3.975	0.181	0.57	2.533	-0.050	-0.31	MC
VA8X8H		3.998	0.204	0.65	2.650	0.067	0.41	XX
VE3K8X		4.003	0.209	0.66	2.687	0.103	0.63	MC
VNQRPN		3.910	0.116	0.37	2.672	0.088	0.54	MD
VPKF9J		4.250	0.456	1.44	2.770	0.187	1.14	MC

WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Sample Z25-Z26 Diff from Grand Mean	Sample Z25-Z26 CPV	Sample Z27-Z28 Lab Mean	Sample Z27-Z28 Diff from Grand Mean	Sample Z27-Z28 CPV	Instr Code
WQNGL2		3.783	-0.011	-0.03	2.625	0.042	0.25	MC
WRXLW6	*	4.503	0.709	2.25	3.048	0.465	2.84	MM
XBXMXH		3.597	-0.197	-0.63	2.538	-0.045	-0.28	MC
XYKRDC		3.615	-0.179	-0.57	2.513	-0.070	-0.43	MR
ZE4DJL		3.815	0.021	0.07	2.575	-0.008	-0.05	ME

Summary Statistics

	Sample Z25-Z26	Sample Z27-Z28
Grand Means	3.7941 minutes	2.5835 minutes
Stnd Dev Btwn Labs	0.3156 minutes	0.1640 minutes

Statistics based on 43 of 43 reporting participants

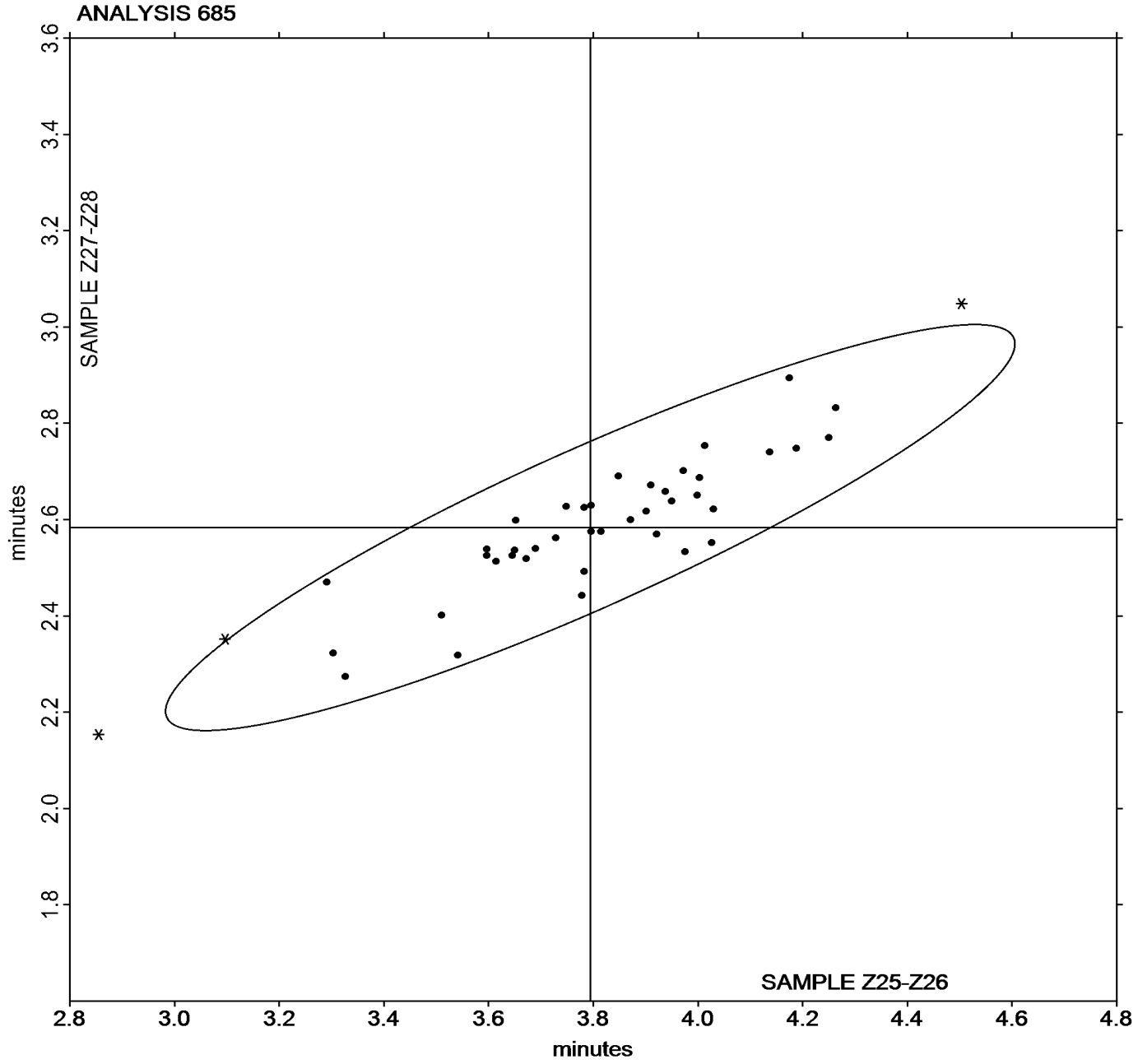
Samples Z25-Z26: EPDM compound, batch #1 & Z27-Z28: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MP	Alpha Technologies [Monsanto] MDR 2000P	MR	MonTech D-RPA 3000
MX	Rebuilt MonTech Alpha	XX	Instrument model not specified by lab

Grand Mean Sample **Z25-Z26** = 3.7941 minutes

Grand Mean Sample **Z27-Z28** = 2.5835 minutes



WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Sample Z25-Z26 Diff from Grand Mean	Sample Z25-Z26 CPV	Sample Z27-Z28 Lab Mean	Sample Z27-Z28 Diff from Grand Mean	Sample Z27-Z28 CPV	Instr Code
36AXZZ		6.858	-0.348	-1.58	5.663	-0.139	-0.70	MR
3LW9QA		7.155	-0.052	-0.23	5.963	0.161	0.81	MC
467PBD		7.073	-0.133	-0.61	5.712	-0.091	-0.46	MC
6WQB42		6.930	-0.277	-1.26	5.780	-0.023	-0.11	MC
87668U		7.227	0.020	0.09	5.708	-0.094	-0.48	MC
9X9EFR		7.297	0.091	0.41	6.025	0.222	1.12	MC
A6KYW9		7.272	0.065	0.30	5.963	0.161	0.81	MC
A92GXQ		7.248	0.042	0.19	5.862	0.059	0.30	MC
ALRBAJ		7.085	-0.122	-0.55	5.960	0.157	0.79	MC
ALVP48		7.444	0.238	1.08	5.796	-0.006	-0.03	MM
BRX62U		7.753	0.547	2.48	6.070	0.267	1.35	ME
C83X33		7.285	0.078	0.36	5.828	0.026	0.13	ME
D339YZ		6.862	-0.345	-1.57	5.735	-0.068	-0.34	ME
D92AR4		7.164	-0.043	-0.19	5.828	0.025	0.13	MC
DD3U8K		7.055	-0.152	-0.69	5.535	-0.268	-1.35	MC
FBBMU2		7.210	0.003	0.02	5.575	-0.228	-1.15	MC
GW6QBY		6.953	-0.253	-1.15	5.493	-0.309	-1.56	MX
H3P7EW		7.250	0.043	0.20	5.802	-0.001	-0.01	MC
JCX98Z		7.263	0.057	0.26	5.795	-0.008	-0.04	ME
JFVR6T		7.117	-0.090	-0.41	5.687	-0.116	-0.58	MC
K3LAB4	*	7.775	0.568	2.58	6.190	0.387	1.95	MC
MM6XVF		7.113	-0.093	-0.42	5.545	-0.258	-1.30	ME
NGV6VG		7.535	0.328	1.49	5.980	0.177	0.89	MC
P79EWV		7.260	0.053	0.24	5.870	0.067	0.34	ME
PA9QTV		7.120	-0.087	-0.39	5.932	0.129	0.65	MC
PK6YAD		7.178	-0.028	-0.13	5.877	0.074	0.37	MC
QBZ7FC		7.547	0.340	1.54	6.003	0.201	1.01	MM
QMUPUH		7.517	0.310	1.41	6.073	0.271	1.36	ME
R24PCZ		7.217	0.010	0.05	5.568	-0.234	-1.18	MP
RQ3CZ8		7.237	0.030	0.14	5.727	-0.076	-0.38	MC
RX4DFZ		6.943	-0.263	-1.20	5.620	-0.183	-0.92	ME
T6M8WH	*	6.723	-0.483	-2.19	5.295	-0.508	-2.56	XX
THTZQF		7.102	-0.105	-0.48	5.810	0.007	0.04	XX
URBYYW		6.957	-0.250	-1.13	5.407	-0.396	-1.99	MC
VA8X8H		7.190	-0.017	-0.08	5.730	-0.073	-0.37	XX
VE3K8X		7.122	-0.085	-0.39	5.497	-0.306	-1.54	MC
VNQRPN		7.252	0.045	0.20	5.813	0.011	0.05	MD
VPKF9J		7.397	0.190	0.86	5.998	0.196	0.99	MC

WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Diff from Grand Mean	CPV	Sample Z27-Z28 Lab Mean	Diff from Grand Mean	CPV	Instr Code
WQNGL2		7.182	-0.025	-0.11	5.923	0.121	0.61	MC
WRXLW6		7.418	0.212	0.96	6.058	0.256	1.29	MM
XBXMXH		7.303	0.096	0.44	6.014	0.211	1.06	MC
XYKRDC		6.975	-0.232	-1.05	5.882	0.079	0.40	MR
ZE4DJL		7.320	0.113	0.51	5.922	0.119	0.60	ME

Summary Statistics

	Sample Z25-Z26	Sample Z27-Z28
Grand Means	7.2066 minutes	5.8027 minutes
Stnd Dev Btwn Labs	0.2202 minutes	0.1985 minutes

Statistics based on 43 of 43 reporting participants

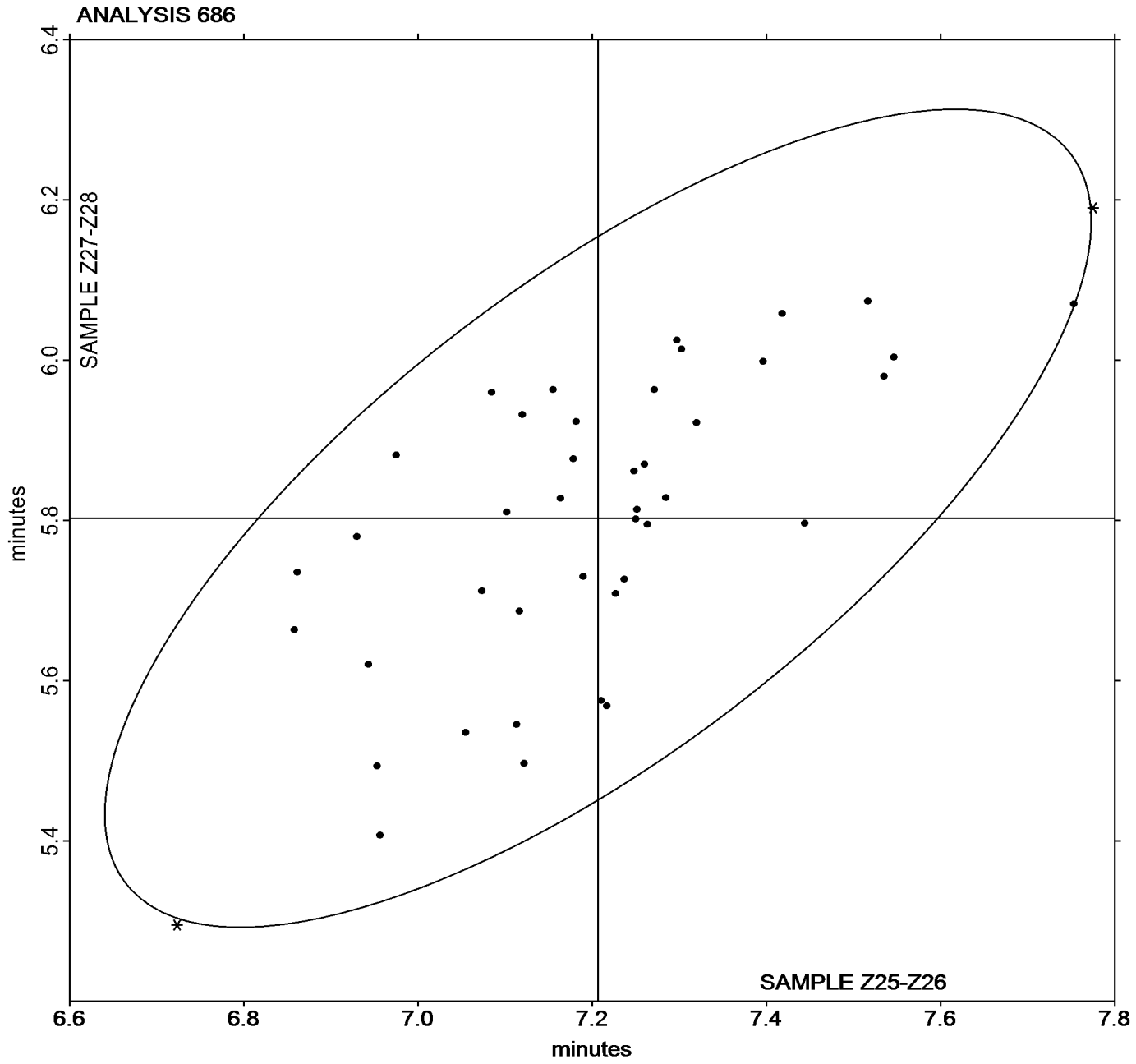
Samples Z25-Z26: EPDM compound, batch #1 & Z27-Z28: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MP	Alpha Technologies [Monsanto] MDR 2000P	MR	MonTech D-RPA 3000
MX	Rebuilt MonTech Alpha	XX	Instrument model not specified by lab

Grand Mean Sample **Z25-Z26** = 7.2066 minutes

Grand Mean Sample **Z27-Z28** = 5.8027 minutes



WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Sample Z25-Z26 Diff from Grand Mean	Sample Z25-Z26 CPV	Sample Z27-Z28 Lab Mean	Sample Z27-Z28 Diff from Grand Mean	Sample Z27-Z28 CPV	Instr Code
36AXZZ		10.99	-0.32	-1.28	9.582	-0.037	-0.13	MR
3LW9QA		11.46	0.15	0.61	9.647	0.028	0.10	MC
467PBD		11.38	0.06	0.26	9.623	0.005	0.02	MC
6WQB42		10.87	-0.45	-1.79	9.238	-0.380	-1.32	MC
87668U		11.10	-0.21	-0.86	9.387	-0.232	-0.80	MC
9X9EFR		11.34	0.03	0.14	9.792	0.173	0.60	MC
A6KYW9		11.37	0.06	0.23	9.662	0.043	0.15	MC
A92GXQ		11.49	0.18	0.71	9.642	0.023	0.08	MC
ALRBAJ		11.33	0.01	0.06	9.585	-0.033	-0.12	MC
ALVP48		11.59	0.28	1.12	9.501	-0.118	-0.41	MM
BRX62U		11.86	0.54	2.19	10.117	0.498	1.73	ME
C83X33		11.39	0.08	0.33	10.020	0.402	1.39	ME
D339YZ	X	10.22	-1.09	-4.37	8.987	-0.632	-2.19	ME
D92AR4		11.25	-0.06	-0.23	9.692	0.073	0.25	MC
DD3U8K		11.03	-0.28	-1.12	9.101	-0.518	-1.79	MC
FBBMU2		11.33	0.02	0.09	9.513	-0.105	-0.36	MC
GW6QBY		10.98	-0.33	-1.33	9.413	-0.205	-0.71	MX
H3P7EW		11.20	-0.11	-0.45	9.678	0.060	0.21	MC
JCX98Z		11.26	-0.05	-0.21	9.742	0.123	0.43	ME
JFVR6T		11.24	-0.08	-0.30	9.407	-0.212	-0.73	MC
K3LAB4	X	14.37	3.06	12.29	15.802	6.183	21.43	MC
MM6XVF		11.18	-0.13	-0.52	9.225	-0.393	-1.36	ME
NGV6VG		11.62	0.31	1.25	9.842	0.223	0.77	MC
P79EWV		11.20	-0.11	-0.43	9.513	-0.105	-0.36	ME
PA9QTV		10.93	-0.38	-1.52	9.308	-0.310	-1.07	MC
PK6YAD		11.27	-0.04	-0.18	9.433	-0.185	-0.64	MC
QBZ7FC		11.91	0.60	2.41	10.160	0.542	1.88	MM
QMUPUH		11.41	0.10	0.39	9.907	0.288	1.00	ME
R24PCZ		11.21	-0.10	-0.39	9.645	0.027	0.09	MP
RQ3CZ8		11.38	0.07	0.29	10.018	0.400	1.39	MC
RX4DFZ		11.07	-0.24	-0.98	9.548	-0.070	-0.24	XX
T6M8WH		10.93	-0.38	-1.52	8.975	-0.643	-2.23	XX
THTZQF	X	12.42	1.11	4.45	9.292	-0.327	-1.13	XX
URBYYW		11.07	-0.24	-0.97	9.092	-0.527	-1.83	MC
VA8X8H		11.28	-0.03	-0.13	9.850	0.232	0.80	XX
VE3K8X		11.43	0.12	0.48	9.315	-0.303	-1.05	MC
VNQRPN		11.36	0.05	0.19	9.527	-0.092	-0.32	MD
VPKF9J		11.69	0.37	1.51	10.203	0.585	2.03	MC

WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Diff from Grand Mean	CPV	Sample Z27-Z28 Lab Mean	Diff from Grand Mean	CPV	Instr Code
WQNGL2		11.35	0.04	0.16	9.695	0.077	0.27	MC
WRXLW6		11.48	0.17	0.68	9.860	0.242	0.84	MM
XBXMXH		11.01	-0.30	-1.21	9.781	0.162	0.56	MC
XYKRDC		11.76	0.45	1.81	9.750	0.132	0.46	MR
ZE4DJL		11.44	0.13	0.53	9.748	0.130	0.45	ME

Summary Statistics

	Sample Z25-Z26	Sample Z27-Z28
Grand Means	11.310 minutes	9.6184 minutes
Stnd Dev Btwn Labs	0.249 minutes	0.2886 minutes

Statistics based on 40 of 43 reporting participants

Samples Z25-Z26: EPDM compound, batch #1 & Z27-Z28: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #687

D339YZ (X) - Data for sample group Z25-Z26 are low.

K3LAB4 (X) - Data for all samples are high. Inconsistent within the determinations of both sample groups.

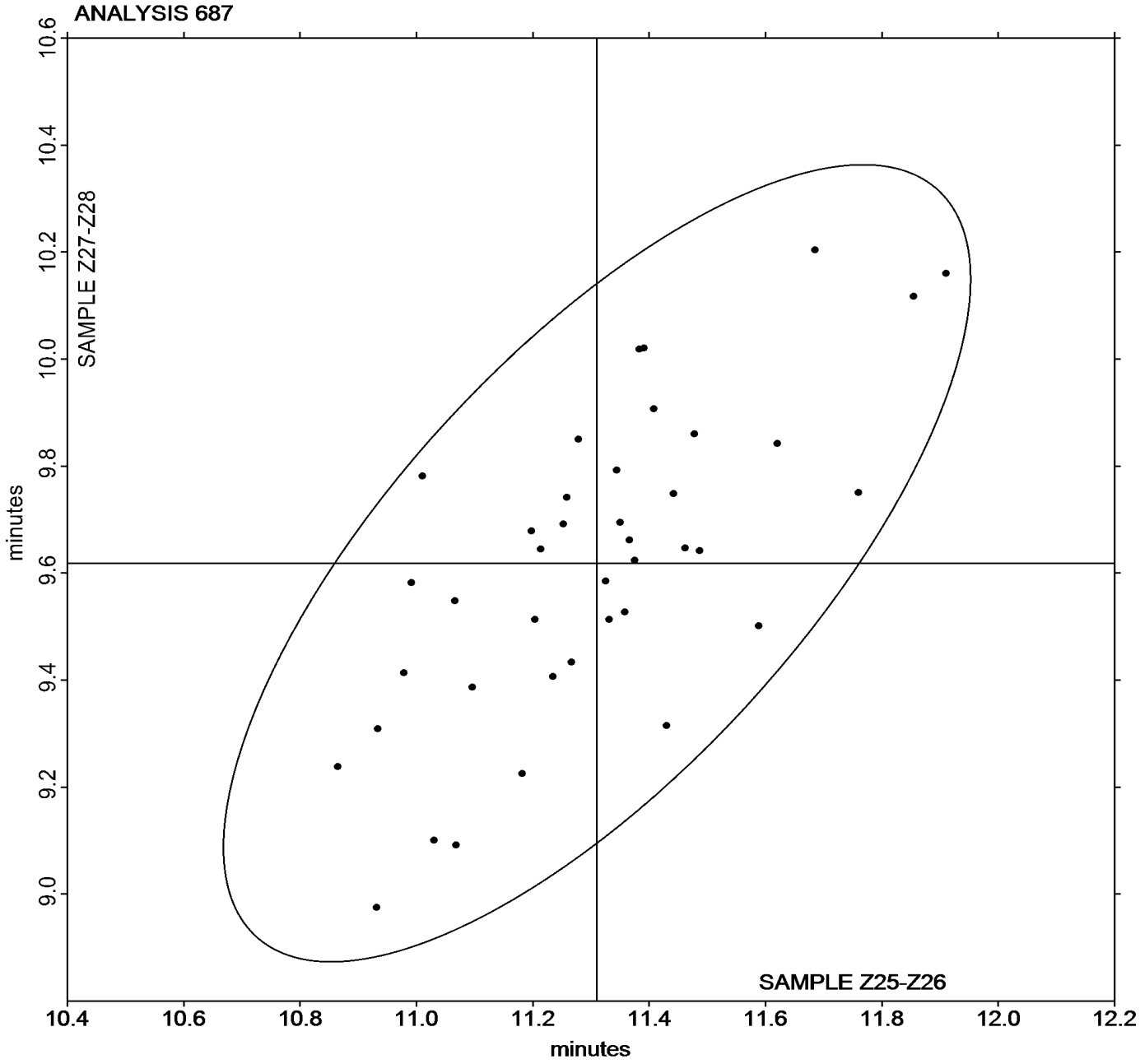
THTZQF (X) - Data for sample group Z25-Z26 are high.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MP	Alpha Technologies [Monsanto] MDR 2000P	MR	MonTech D-RPA 3000
MX	Rebuilt MonTech Alpha	XX	Instrument model not specified by lab

Grand Mean Sample **Z25-Z26** = 11.310 minutes

Grand Mean Sample **Z27-Z28** = 9.6184 minutes



WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Sample Z25-Z26 Diff from Grand Mean	Sample Z25-Z26 CPV	Sample Z27-Z28 Lab Mean	Sample Z27-Z28 Diff from Grand Mean	Sample Z27-Z28 CPV	Instr Code
36AXZZ		1.817	-0.034	-0.21	2.458	-0.114	-0.48	MR
3LW9QA		1.783	-0.067	-0.43	2.543	-0.029	-0.12	MC
467PBD		1.862	0.011	0.07	2.693	0.121	0.51	MC
6WQB42		1.689	-0.161	-1.02	2.353	-0.219	-0.92	MC
87668U		1.738	-0.112	-0.71	2.427	-0.145	-0.61	MC
9X9EFR		1.963	0.113	0.71	2.873	0.301	1.27	MC
A6KYW9		1.848	-0.002	-0.01	2.575	0.003	0.01	MC
A92GXQ		1.642	-0.209	-1.32	2.354	-0.218	-0.91	MC
ALRBAJ		1.749	-0.101	-0.64	2.368	-0.204	-0.86	MC
ALVP48		1.658	-0.192	-1.22	2.263	-0.309	-1.30	MM
BRX62U		2.012	0.162	1.02	2.832	0.260	1.09	ME
C83X33		1.745	-0.105	-0.67	2.317	-0.255	-1.07	ME
D339YZ		1.687	-0.164	-1.04	2.353	-0.219	-0.92	ME
D92AR4		1.755	-0.095	-0.60	2.477	-0.095	-0.40	MC
DD3U8K		2.130	0.280	1.77	2.959	0.387	1.63	MC
FBBMU2		2.220	0.370	2.34	3.065	0.493	2.07	MC
GW6QBY		1.967	0.116	0.74	2.698	0.126	0.53	MX
H3P7EW		1.863	0.013	0.08	2.652	0.080	0.34	MC
JCX98Z		1.873	0.023	0.14	2.577	0.005	0.02	ME
JFVR6T		1.778	-0.072	-0.46	2.442	-0.130	-0.55	MC
K3LAB4		2.050	0.200	1.26	2.953	0.381	1.60	MC
MM6XVF		1.840	-0.010	-0.07	2.510	-0.062	-0.26	ME
NGV6VG		1.713	-0.137	-0.87	2.347	-0.225	-0.95	MC
P79EWV		1.837	-0.014	-0.09	2.533	-0.039	-0.16	ME
PA9QTV		1.865	0.014	0.09	2.586	0.014	0.06	MC
PK6YAD		1.788	-0.062	-0.39	2.453	-0.119	-0.50	MC
QBZ7FC		2.062	0.211	1.34	2.867	0.295	1.24	MM
QMUPUH		1.633	-0.217	-1.38	2.223	-0.349	-1.47	ME
R24PCZ		2.127	0.276	1.75	2.900	0.328	1.38	MP
RQ3CZ8		2.147	0.296	1.88	2.973	0.401	1.69	MC
RX4DFZ		1.675	-0.175	-1.11	2.242	-0.330	-1.39	ME
T6M8WH		2.123	0.273	1.73	2.868	0.296	1.25	MM
THTZQF		1.925	0.075	0.47	2.588	0.016	0.07	XX
URBYYW	X	2.443	0.593	3.75	3.287	0.715	3.00	MC
VA8X8H		1.910	0.060	0.38	2.630	0.058	0.24	XX
VE3K8X	*	1.960	0.110	0.69	2.910	0.338	1.42	MC
VNQRPN		1.633	-0.217	-1.38	2.242	-0.330	-1.39	MD
VPKF9J		1.685	-0.165	-1.05	2.355	-0.217	-0.91	MC

MDR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Sample Z25-Z26 Diff from Grand Mean	Sample Z25-Z26 CPV	Sample Z27-Z28 Lab Mean	Sample Z27-Z28 Diff from Grand Mean	Sample Z27-Z28 CPV	Instr Code
WQNGL2		1.757	-0.094	-0.59	2.477	-0.095	-0.40	MC
WRXLW6		1.920	0.070	0.44	2.813	0.241	1.01	MM
XBXMXH		1.717	-0.133	-0.84	2.415	-0.157	-0.66	MC
XYKRDC		1.848	-0.002	-0.01	2.545	-0.027	-0.11	MR
ZE4DJL		1.724	-0.126	-0.80	2.310	-0.262	-1.10	ME

Summary Statistics

	Sample Z25-Z26	Sample Z27-Z28
Grand Means	1.8505 lbf.in	2.5719 lbf.in
Stnd Dev Btwn Labs	0.1579 lbf.in	0.2379 lbf.in

Statistics based on 42 of 43 reporting participants

Summary Statistics in SI Units

	Sample Z25-Z26	Sample Z27-Z28
Grand Means	2.0907 dN.m	2.9058 dN.m
Stnd Dev Btwn Labs	0.1784 dN.m	0.2688 dN.m

Statistics based on 42 of 43 reporting participants

Samples Z25-Z26: EPDM compound, batch #1 & Z27-Z28: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #688

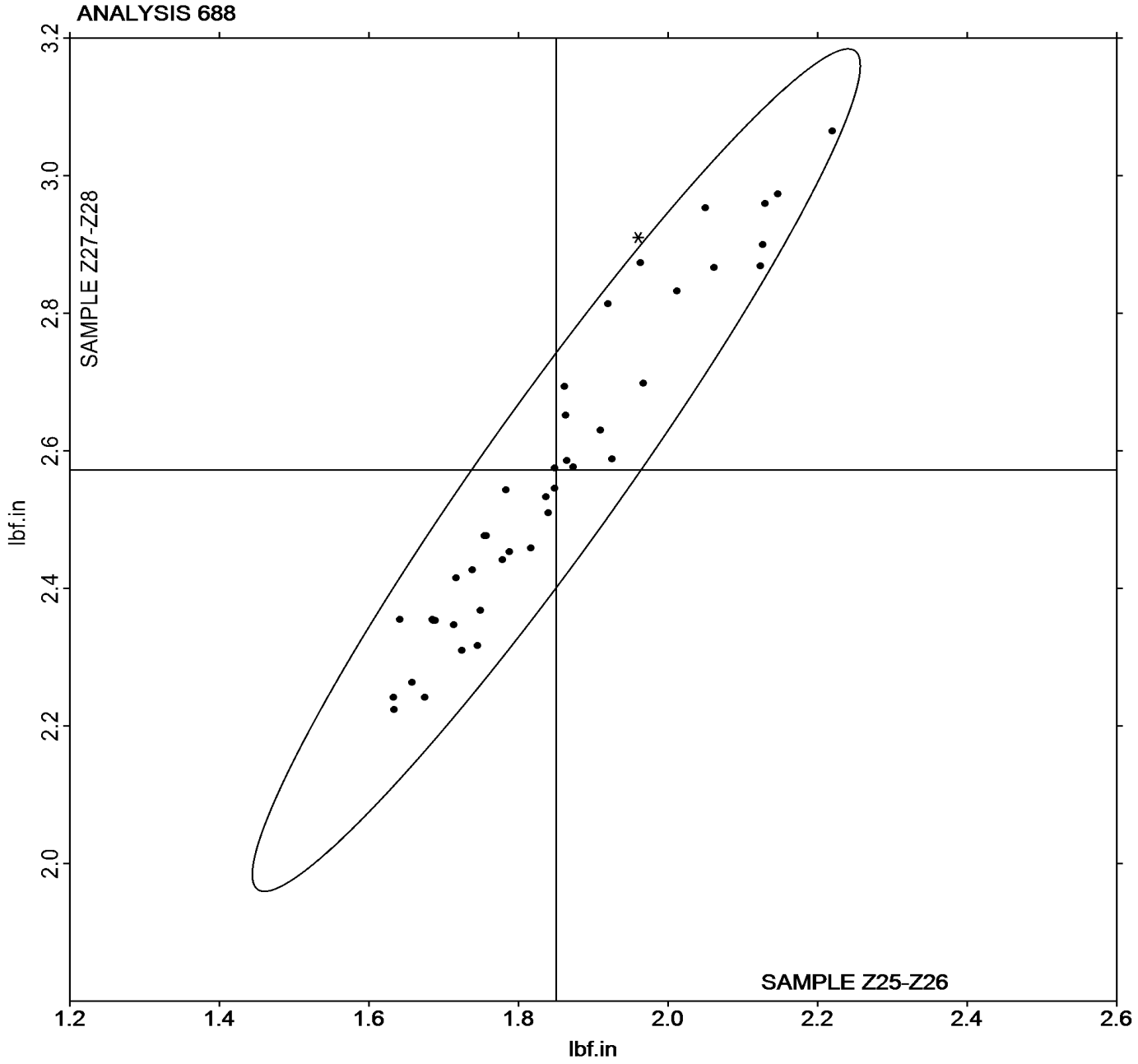
URBYYW (X) - Data for all samples are high. Inconsistent within the determinations of sample group Z25-Z26.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MP	Alpha Technologies [Monsanto] MDR 2000P	MR	MonTech D-RPA 3000
MX	Rebuilt MonTech Alpha	XX	Instrument model not specified by lab

Grand Mean Sample **Z25-Z26** = 1.8505 lbf.in

Grand Mean Sample **Z27-Z28** = 2.5719 lbf.in



MDR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Diff from Grand Mean	CPV	Sample Z27-Z28 Lab Mean	Diff from Grand Mean	CPV	Instr Code
36AXZZ		7.677	0.239	0.57	13.35	0.74	1.13	MR
3LW9QA		7.140	-0.297	-0.71	12.18	-0.44	-0.68	MC
467PBD		7.695	0.258	0.62	13.32	0.70	1.07	MC
6WQB42		6.666	-0.771	-1.84	11.64	-0.98	-1.51	MC
87668U		7.122	-0.316	-0.75	12.04	-0.58	-0.89	MC
9X9EFR		7.517	0.079	0.19	12.67	0.06	0.09	MC
A6KYW9		7.508	0.071	0.17	13.00	0.38	0.59	MC
A92GXQ		7.541	0.104	0.25	12.45	-0.17	-0.26	MC
ALRBAJ		7.129	-0.308	-0.74	12.42	-0.19	-0.30	MC
ALVP48	*	7.716	0.279	0.67	11.99	-0.63	-0.97	MM
BRX62U		7.936	0.499	1.19	13.89	1.27	1.95	ME
C83X33		7.477	0.039	0.09	12.79	0.18	0.27	ME
D339YZ		6.717	-0.721	-1.72	11.72	-0.90	-1.38	ME
D92AR4		7.537	0.099	0.24	12.82	0.21	0.32	MC
DD3U8K		8.221	0.784	1.87	13.52	0.90	1.39	MC
FBBMU2		8.208	0.771	1.84	13.55	0.94	1.44	MC
GW6QBY		7.797	0.359	0.86	13.57	0.95	1.46	MX
H3P7EW		7.722	0.284	0.68	12.97	0.35	0.54	MC
JCX98Z		7.458	0.021	0.05	12.44	-0.18	-0.27	ME
JFVR6T		7.165	-0.272	-0.65	12.30	-0.31	-0.48	MC
K3LAB4		8.080	0.643	1.54	14.05	1.43	2.20	MC
MM6XVF		7.368	-0.069	-0.16	12.55	-0.07	-0.11	ME
NGV6VG		7.495	0.058	0.14	12.48	-0.13	-0.21	MC
P79EWV		7.314	-0.124	-0.30	12.27	-0.35	-0.54	ME
PA9QTV		7.156	-0.281	-0.67	12.33	-0.29	-0.44	MC
PK6YAD		6.948	-0.489	-1.17	12.22	-0.40	-0.61	MC
QBZ7FC		7.307	-0.131	-0.31	11.97	-0.65	-1.00	MM
QMUPUH		7.123	-0.314	-0.75	12.57	-0.04	-0.07	ME
R24PCZ		7.952	0.514	1.23	12.72	0.10	0.15	MP
RQ3CZ8		7.745	0.308	0.74	12.71	0.10	0.15	MC
RX4DFZ		7.305	-0.132	-0.32	12.79	0.18	0.27	XX
T6M8WH		8.048	0.611	1.46	14.14	1.52	2.34	MM
THTZQF		8.018	0.581	1.39	13.04	0.42	0.64	XX
URBYYW		8.213	0.776	1.86	13.12	0.51	0.78	MC
VA8X8H		7.407	-0.031	-0.07	12.38	-0.23	-0.36	XX
VE3K8X		7.232	-0.206	-0.49	11.47	-1.15	-1.77	MC
VNQRPN		6.966	-0.471	-1.13	11.86	-0.76	-1.17	MD
VPKF9J		6.880	-0.557	-1.33	12.07	-0.55	-0.84	MC

Rubber Interlaboratory Testing Program

Report #214

Analysis 689

4th Qtr 2022

MDR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample Z25-Z26 Lab Mean	Sample Z25-Z26 Diff from Grand Mean	Sample Z25-Z26 CPV	Sample Z27-Z28 Lab Mean	Sample Z27-Z28 Diff from Grand Mean	Sample Z27-Z28 CPV	Instr Code
WQNGL2		7.313	-0.124	-0.30	12.73	0.12	0.18	MC
WRXLW6		6.947	-0.491	-1.17	11.78	-0.84	-1.29	MM
XBXMXH		7.166	-0.271	-0.65	12.58	-0.04	-0.06	MC
XYKRDC		6.958	-0.479	-1.14	12.21	-0.41	-0.63	MR
ZE4DJL		6.909	-0.528	-1.26	11.90	-0.72	-1.10	ME

Summary Statistics

	Sample Z25-Z26	Sample Z27-Z28
Grand Means	7.4372 lbf.in	12.618 lbf.in
Stnd Dev Btwn Labs	0.4183 lbf.in	0.651 lbf.in

Statistics based on 43 of 43 reporting participants

Summary Statistics in SI Units

	Sample Z25-Z26	Sample Z27-Z28
Grand Means	8.4029 dN.m	14.256 dN.m
Stnd Dev Btwn Labs	0.4726 dN.m	0.735 dN.m

Statistics based on 43 of 43 reporting participants

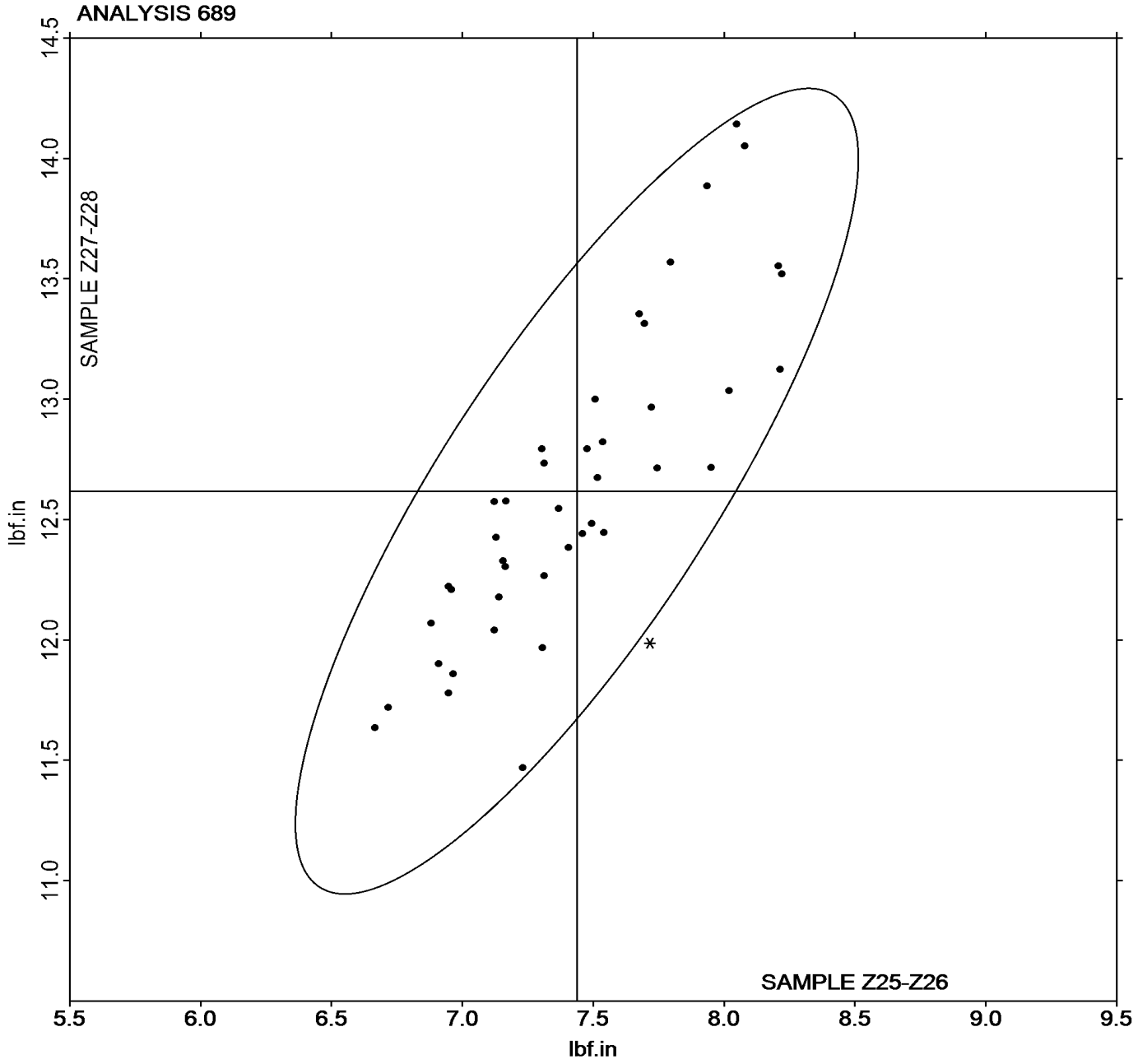
Samples Z25-Z26: EPDM compound, batch #1 & Z27-Z28: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MP	Alpha Technologies [Monsanto] MDR 2000P	MR	MonTech D-RPA 3000
MX	Rebuilt MonTech Alpha	XX	Instrument model not specified by lab

Grand Mean Sample **Z25-Z26** = 7.4372 lbf.in

Grand Mean Sample **Z27-Z28** = 12.618 lbf.in



WebCode	Data Flag	Sample H21-H22 Lab Mean	Sample H21-H22 Diff from Grand Mean	Sample H21-H22 CPV	Sample H23-H24 Lab Mean	Sample H23-H24 Diff from Grand Mean	Sample H23-H24 CPV	Instr Code
3LW9QA		308.1	-22.7	-1.40	489.1	-58.9	-1.30	PR
ALVP48		321.5	-9.4	-0.58	527.5	-20.4	-0.45	XX
DD3U8K		349.0	18.1	1.11	566.9	19.0	0.42	RP
RX4DFZ		343.8	12.9	0.79	588.3	40.4	0.89	RP
VNQRPN		344.6	13.8	0.85	581.6	33.6	0.74	RP
XBXMXH		311.3	-19.6	-1.20	503.7	-44.2	-0.98	RP
Y3D7HD		325.5	-5.3	-0.33	513.5	-34.4	-0.76	PR
ZE4DJL		343.1	12.2	0.75	612.9	65.0	1.43	XX

Summary Statistics

	Sample H21-H22	Sample H23-H24
Grand Means	330.86 kPa	547.95 kPa
Stnd Dev Btwn Labs	16.25 kPa	45.30 kPa

Statistics based on 8 of 8 reporting participants

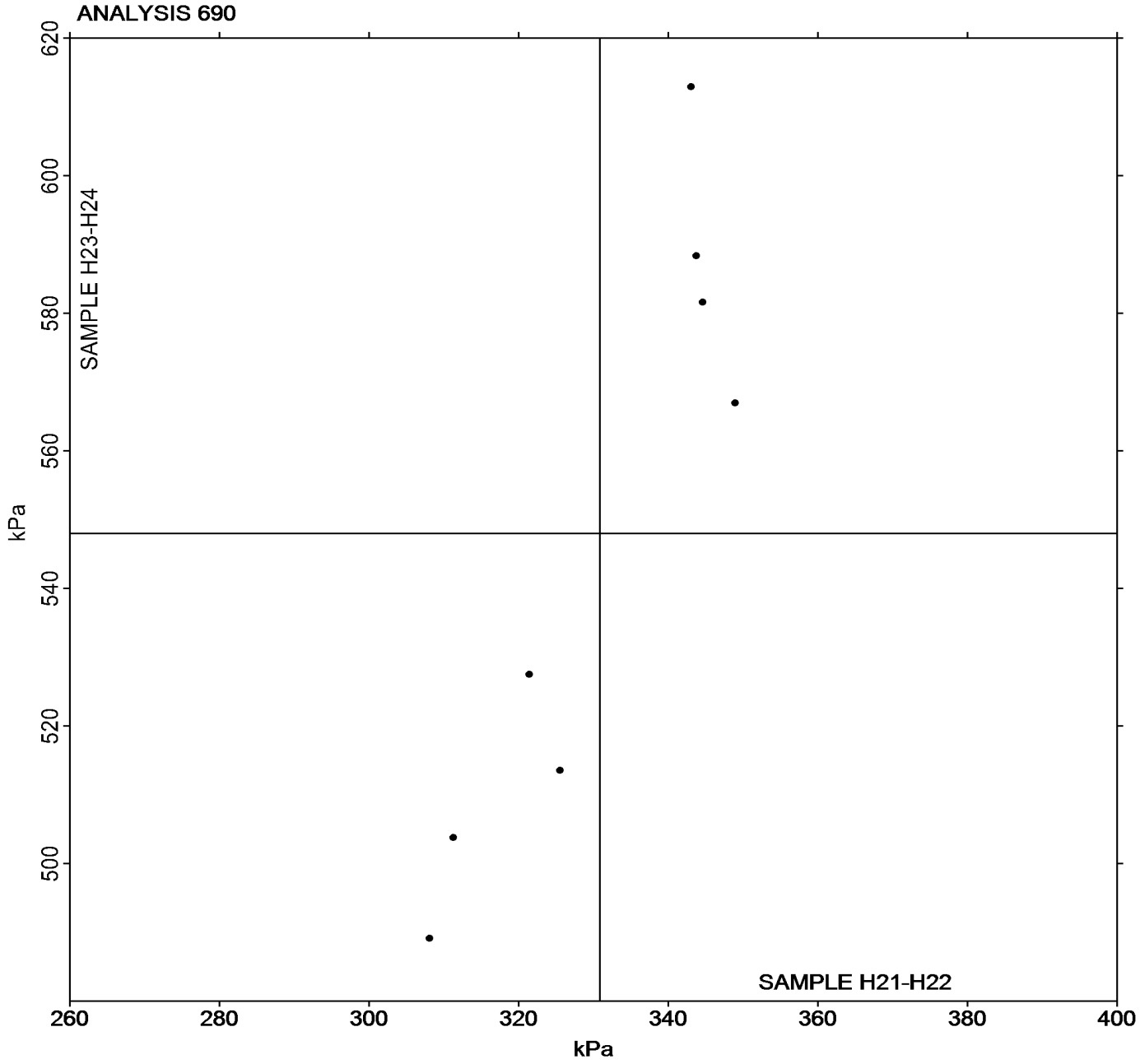
Samples H21-H22: EPDM compound, batch #1 & H23-H24: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

Grand Mean Sample **H21-H22** = 330.86 kPa

Grand Mean Sample **H23-H24** = 547.95 kPa



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

RPA Rheological Properties: Part A - G" at 20Hz (kPa)

WebCode	Data Flag	Sample H21-H22 Lab Mean	Sample H21-H22 Diff from Grand Mean	Sample H21-H22 CPV	Sample H23-H24 Lab Mean	Sample H23-H24 Diff from Grand Mean	Sample H23-H24 CPV	Instr Code
3LW9QA		102.4	-0.9	-0.21	206.1	-13.3	-0.83	PR
ALVP48		99.3	-4.1	-0.97	210.5	-8.9	-0.55	XX
DD3U8K		106.3	3.0	0.71	214.3	-5.1	-0.32	RP
RX4DFZ		102.7	-0.6	-0.15	231.4	11.9	0.74	RP
VNQRPN		107.0	3.7	0.88	233.6	14.2	0.89	RP
XBXMXH		97.0	-6.4	-1.52	203.6	-15.8	-0.99	RP
Y3D7HD		102.2	-1.1	-0.27	208.2	-11.3	-0.70	PR
ZE4DJL		109.8	6.4	1.53	247.7	28.2	1.76	XX

Summary Statistics

	Sample H21-H22	Sample H23-H24
Grand Means	103.34 kPa	219.42 kPa
Stnd Dev Btwn Labs	4.20 kPa	16.04 kPa

Statistics based on 8 of 8 reporting participants

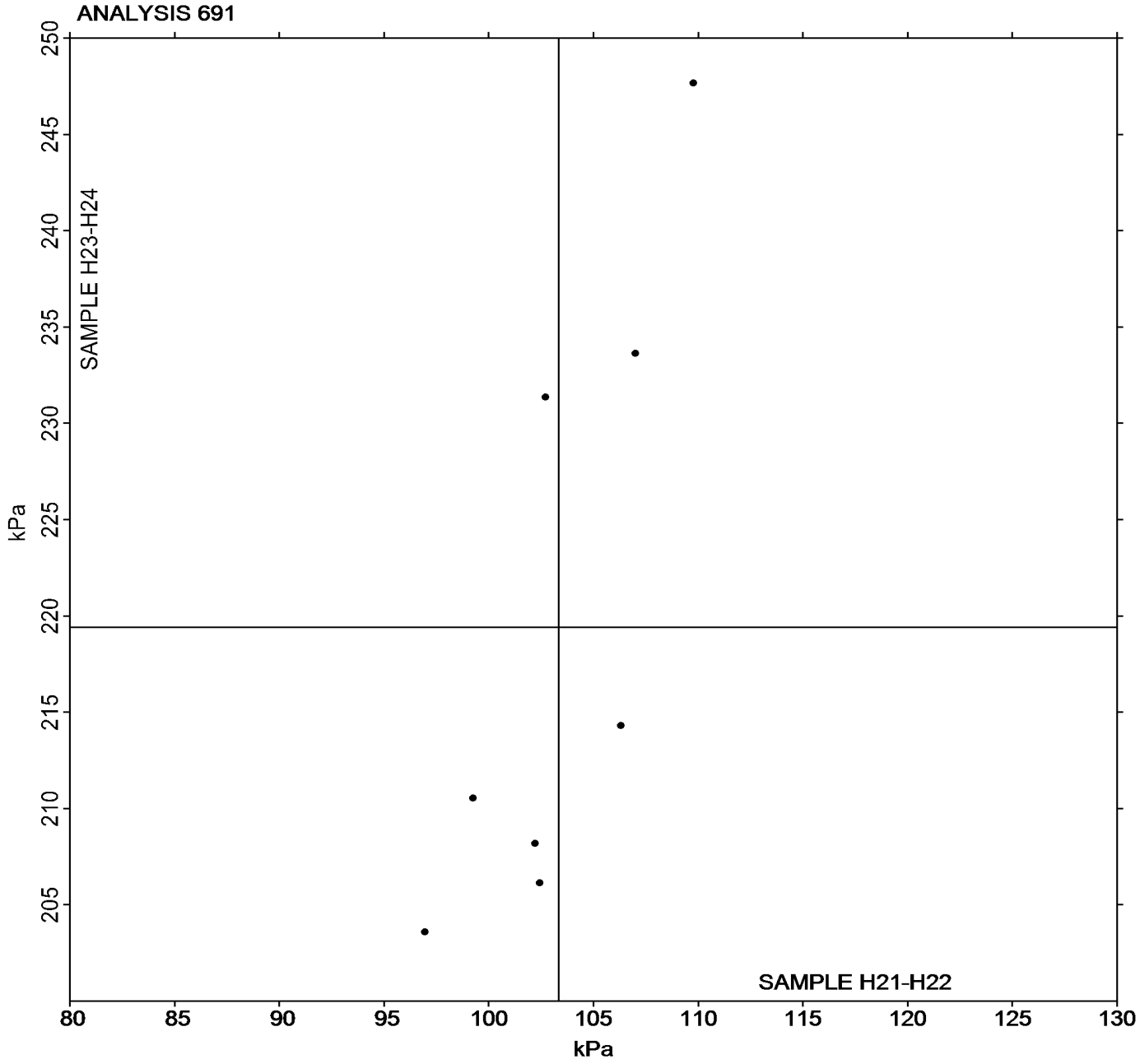
Samples H21-H22: EPDM compound, batch #1 & H23-H24: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

Grand Mean Sample **H21-H22** = 103.34 kPa

Grand Mean Sample **H23-H24** = 219.42 kPa



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

WebCode	Data Flag	Sample H21-H22 Lab Mean	Sample H21-H22 Diff from Grand Mean	Sample H21-H22 CPV	Sample H23-H24 Lab Mean	Sample H23-H24 Diff from Grand Mean	Sample H23-H24 CPV	Instr Code
3LW9QA		53.28	-6.16	-1.36	74.11	-9.21	-1.37	PR
ALVP48		58.59	-0.85	-0.19	83.94	0.62	0.09	XX
DD3U8K		68.45	9.00	1.99	95.32	12.00	1.79	RP
RX4DFZ		61.04	1.60	0.35	82.06	-1.26	-0.19	RP
VNQRPN		60.48	1.04	0.23	85.66	2.34	0.35	RP
XBXMXH		57.11	-2.34	-0.52	77.51	-5.81	-0.86	RP
Y3D7HD		55.93	-3.52	-0.78	79.25	-4.08	-0.61	PR
ZE4DJL		60.68	1.23	0.27	88.72	5.40	0.80	XX

Summary Statistics

	Sample H21-H22	Sample H23-H24
Grand Means	59.444 kPa	83.321 kPa
Stnd Dev Btwn Labs	4.515 kPa	6.717 kPa

Statistics based on 8 of 8 reporting participants

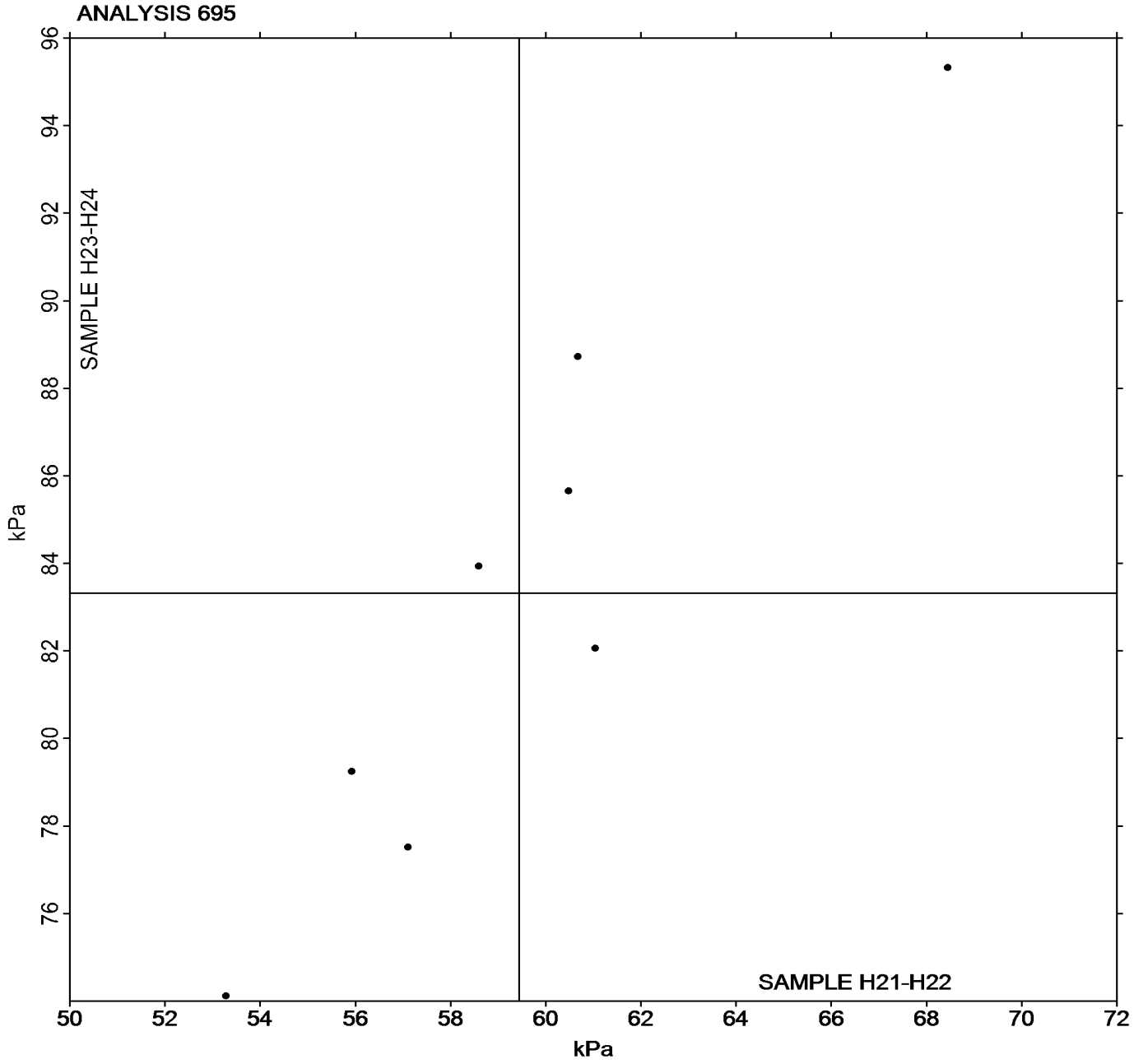
Samples H21-H22: EPDM compound, batch #1 & H23-H24: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

Grand Mean Sample **H21-H22** = 59.444 kPa

Grand Mean Sample **H23-H24** = 83.321 kPa



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

RPA Rheological Properties: Part B - G" at 1.0Hz (kPa)

WebCode	Data Flag	Sample H21-H22 Lab Mean	Sample H21-H22 Diff from Grand Mean	Sample H21-H22 CPV	Sample H23-H24 Lab Mean	Sample H23-H24 Diff from Grand Mean	Sample H23-H24 CPV	Instr Code
3LW9QA		46.43	-3.56	-1.31	66.79	-8.70	-1.31	PR
ALVP48		49.48	-0.51	-0.19	73.19	-2.30	-0.35	XX
DD3U8K		48.21	-1.78	-0.66	75.22	-0.26	-0.04	RP
RX4DFZ		52.45	2.46	0.90	80.55	5.06	0.76	RP
VNQRPN		53.43	3.44	1.26	83.27	7.79	1.17	RP
XBXMXH		46.93	-3.06	-1.13	68.47	-7.02	-1.06	RP
Y3D7HD		50.11	0.12	0.04	72.01	-3.47	-0.52	PR
ZE4DJL		52.89	2.90	1.07	84.38	8.90	1.34	XX

Summary Statistics

	Sample H21-H22	Sample H23-H24
Grand Means	49.989 kPa	75.484 kPa
Stnd Dev Btwn Labs	2.719 kPa	6.630 kPa

Statistics based on 8 of 8 reporting participants

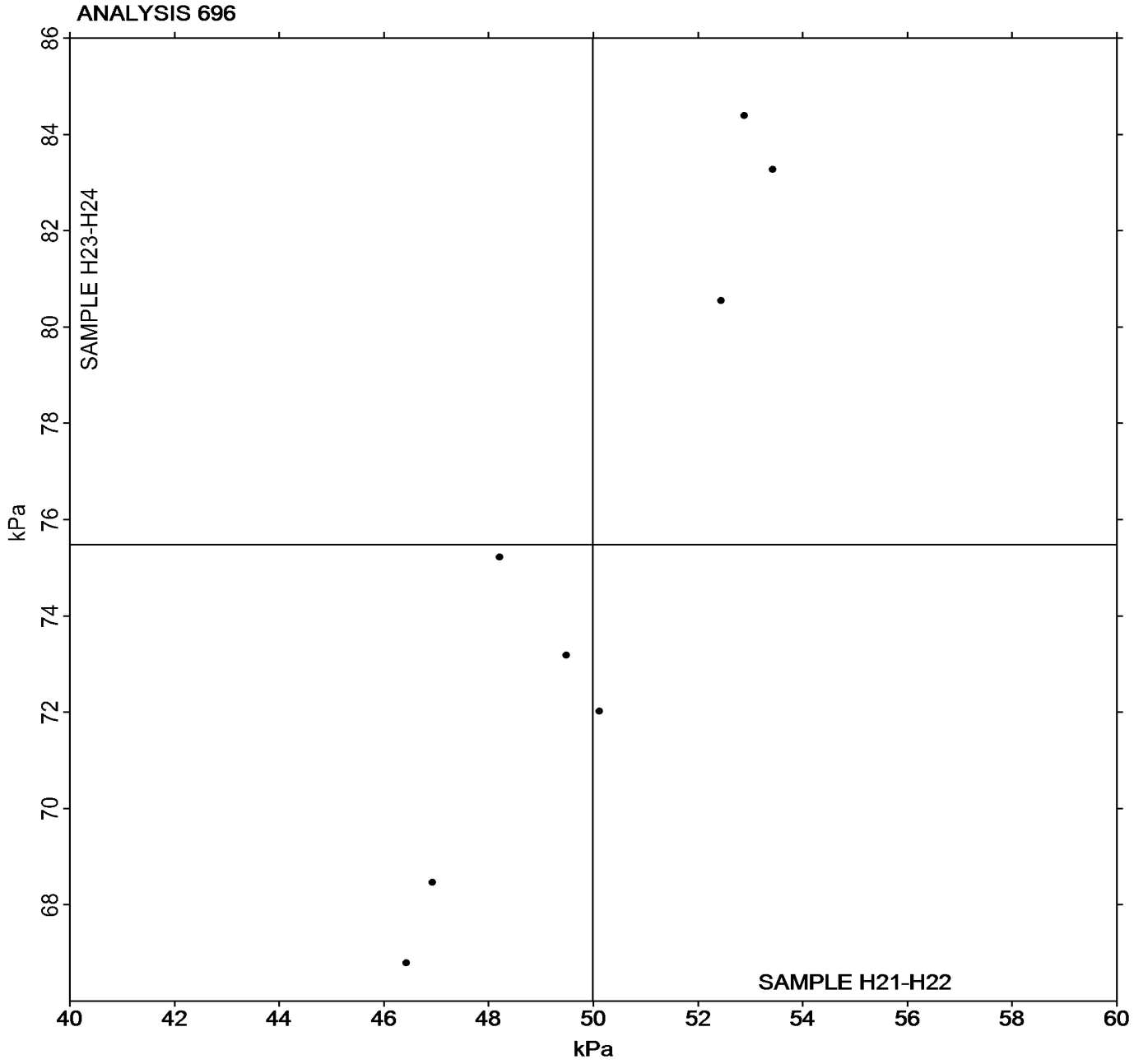
Samples H21-H22: EPDM compound, batch #1 & H23-H24: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

Grand Mean Sample **H21-H22** = 49.989 kPa

Grand Mean Sample **H23-H24** = 75.484 kPa



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

-End of Report-