Collaborative Testing Services, Inc.

Rubber Interlaboratory Testing Program

Summary Report #155- 1st Qtr 08

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
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
660	Mooney Viscosity (4-minute readings)
661	Mooney Viscosity (8-minute butyl readings)
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.: MaximumTorque

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. More than 2400 labs from the U.S., as well as more than 55 countries, currently participate in the CTS programs.

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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.

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1HHWT9		3,066.0	-134.6	-1.05	3,025.5	-144.7	-1.23	ZZ
1QUDN3		3,274.5	73.9	0.58	3,106.5	-63.7	-0.54	ZZ
1U737C		3,285.1	84.5	0.66	3,198.1	27.9	0.24	ZZ
1VQFXH		3,363.0	162.4	1.27	3,351.5	181.3	1.54	ZZ
1YBZFR		3,222.0	21.4	0.17	3,300.5	130.3	1.11	ZZ
24D2SZ		3,166.0	-34.6	-0.27	3,232.0	61.8	0.52	ZZ
2EGP8J		3,099.0	-101.6	-0.79	3,169.0	-1.2	-0.01	ZZ
2PNJ6G	*	3,073.5	-127.1	-0.99	3,241.5	71.3	0.61	ZZ
2YWWL		3,045.8	-154.8	-1.21	3,045.8	-124.4	-1.06	ZZ
39GE1J		3,183.5	-17.1	-0.13	3,175.0	4.8	0.04	ZZ
3ACX2J		3,186.5	-14.1	-0.11	3,208.0	37.8	0.32	ZZ
3G5HHR		3,480.5	279.9	2.19	3,394.0	223.8	1.90	ZZ
3KVNBP		3,249.0	48.4	0.38	3,172.5	2.3	0.02	ZZ
473ECM		3,376.5	175.9	1.37	3,287.5	117.2	1.00	ZZ
4E2WS1	X	2,984.5	-216.1	-1.69	3,196.0	25.8	0.22	ZZ
4EUZ19		3,161.0	-39.6	-0.31	3,034.5	-135.7	-1.15	ZZ
4JAFE5		3,330.8	130.2	1.02	3,206.8	36.6	0.31	ZZ
4KQL5F		3,267.0	66.4	0.52	3,263.0	92.8	0.79	ZZ
5L956C		3,261.5	60.9	0.48	3,156.0	-14.2	-0.12	ZZ
5MX5MP		3,260.0	59.4	0.46	3,218.0	47.8	0.41	ZZ
6BTCV9		3,191.5	-9.1	-0.07	3,119.0	-51.2	-0.44	ZZ
6WQ784		3,204.0	3.4	0.03	3,129.5	-40.7	-0.35	ZZ
6ZKSD2	*	3,000.5	-200.1	-1.56	3,158.5	-11.7	-0.10	ZZ
74YHX4		2,939.5	-261.1	-2.04	2,886.5	-283.7	-2.41	ZZ
7GNLY8		3,366.0	165.4	1.29	3,371.5	201.3	1.71	ZZ
7USVHR		3,268.5	67.9	0.53	3,179.5	9.3	0.08	ZZ
8TQGK3		3,123.0	-77.6	-0.61	3,057.5	-112.7	-0.96	ZZ
8V63FY		3,320.0	119.4	0.93	3,212.0	41.8	0.35	ZZ
94C9X5		3,381.0	180.4	1.41	3,350.5	180.3	1.53	ZZ
9EEGQQ		3,286.0	85.4	0.67	3,230.5	60.3	0.51	ZZ
AWHFM	X	2,676.0	-524.6	-4.10	2,995.1	-175.2	-1.49	ZZ
B7VZJJ		3,228.5	27.9	0.22	3,295.5	125.3	1.06	ZZ
B999U5		3,002.3	-198.3	-1.55	2,973.3	-196.9	-1.67	ZZ
BFG3E9		2,988.0	-212.6	-1.66	3,048.0	-122.2	-1.04	ZZ
BTW1NA		2,924.5	-276.1	-2.16	2,993.5	-176.7	-1.50	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample A81-A82 Lab Mean	Sample A81-A82 Diff from Grand Mean	Sample A81-A82 CPV	Sample A83-A84 Lab Mean	Sample A83-A84 Diff from Grand Mean	Sample A83-A84 CPV	Instr Code
CMH2G4		3,106.5	-94.1	-0.73	3,069.5	-100.7	-0.86	ZZ
CPNQYE		3,241.5	40.9	0.32	3,127.5	-42.7	-0.36	ZZ
CRPV1F		3,133.6	-67.0	-0.52	3,216.2	46.0	0.39	ZZ
CS538J		3,214.5	13.9	0.11	3,080.5	-89.7	-0.76	ZZ
CS7RT1		3,252.0	51.4	0.40	3,280.5	110.3	0.94	ZZ
DJUMAN		3,121.5	-79.1	-0.62	3,148.5	-21.7	-0.18	ZZ
EF4A2M		3,203.0	2.4	0.02	3,236.0	65.8	0.56	ZZ
EH6FXU		3,271.3	70.7	0.55	3,145.3	-25.0	-0.21	ZZ
EHCSAD		3,068.5	-132.1	-1.03	3,145.5	-24.7	-0.21	ZZ
EU7NA9		3,152.5	-48.1	-0.38	3,143.0	-27.2	-0.23	ZZ
F2UZP7		3,288.0	87.4	0.68	3,309.3	139.0	1.18	ZZ
FF44GU		3,180.0	-20.6	-0.16	3,068.3	-101.9	-0.87	ZZ
FMNX8C		3,282.0	81.4	0.64	3,239.5	69.3	0.59	ZZ
G3WHR9		3,426.5	226.0	1.76	3,393.9	223.7	1.90	ZZ
GK711K		3,130.7	-69.9	-0.55	3,043.6	-126.6	-1.08	ZZ
GXC9PW		3,234.5	33.9	0.26	3,207.0	36.8	0.31	ZZ
H2VFCG		3,219.9	19.3	0.15	3,111.1	-59.2	-0.50	ZZ
HB9NHW		3,145.5	-55.1	-0.43	3,086.0	-84.2	-0.72	ZZ
HHEYU4		3,134.1	-66.5	-0.52	3,041.7	-128.6	-1.09	ZZ
J6TLTD		3,214.5	13.9	0.11	3,279.0	108.8	0.92	ZZ
J7AL5F		3,349.5	148.9	1.16	3,208.5	38.3	0.33	ZZ
JA32SH		3,055.7	-144.9	-1.13	3,020.2	-150.0	-1.27	ZZ
K9KTDT		3,285.2	84.6	0.66	3,163.4	-6.8	-0.06	ZZ
L17FJ5		3,070.8	-129.8	-1.01	3,123.3	-46.9	-0.40	ZZ
L841WW	X	3,299.4	98.8	0.77	3,502.3	332.0	2.82	ZZ
L9NBWV		3,153.0	-47.6	-0.37	3,051.5	-118.7	-1.01	ZZ
LWMKN		3,191.0	-9.6	-0.07	3,123.0	-47.2	-0.40	ZZ
M2EZW5		3,112.0	-88.6	-0.69	3,070.0	-100.2	-0.85	ZZ
MLKJMC		3,102.0	-98.6	-0.77	3,091.0	-79.2	-0.67	ZZ
MPQZ62		3,390.0	189.4	1.48	3,300.0	129.8	1.10	ZZ
MTNZKK		3,214.0	13.4	0.10	3,223.5	53.3	0.45	ZZ
MY2LK3		3,006.0	-194.6	-1.52	3,033.0	-137.2	-1.17	ZZ
MYS9PK		3,335.4	134.8	1.05	3,228.7	58.4	0.50	ZZ
N8DLKX		3,073.0	-127.6	-1.00	3,001.0	-169.2	-1.44	ZZ
NHR681		3,309.5	108.9	0.85	3,292.5	122.3	1.04	ZZ

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Tensile Strength (psi)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
NLCVN5		3,247.0	46.4	0.36	3,082.5	-87.7	-0.75	ZZ
NN865S		3,217.0	16.4	0.13	3,175.6	5.4	0.05	ZZ
NTQPZ2		3,113.3	-87.3	-0.68	3,068.3	-101.9	-0.87	ZZ
P5QPE6		3,293.8	93.2	0.73	3,260.5	90.2	0.77	ZZ
PARVPN		3,316.5	115.9	0.91	3,262.0	91.8	0.78	ZZ
PNMWU		3,288.0	87.4	0.68	3,246.7	76.5	0.65	ZZ
PR7T9F		3,251.5	50.9	0.40	3,260.5	90.3	0.77	ZZ
Q4LJ6V		3,334.3	133.7	1.04	3,285.9	115.7	0.98	ZZ
R24V1N		3,285.5	84.9	0.66	3,178.5	8.3	0.07	ZZ
RNYGGX		3,232.9	32.3	0.25	3,090.8	-79.5	-0.68	ZZ
RQ7FS8		3,093.7	-106.9	-0.83	3,103.1	-67.1	-0.57	ZZ
RTQKHQ		3,199.5	-1.1	-0.01	3,169.5	-0.7	-0.01	ZZ
RVKSUL		2,957.3	-243.2	-1.90	2,950.8	-219.4	-1.86	ZZ
SBAZPY		3,263.5	62.9	0.49	3,249.0	78.8	0.67	ZZ
SGR47D		3,241.3	40.7	0.32	3,242.9	72.6	0.62	ZZ
SMTLYK		3,263.4	62.8	0.49	3,256.1	85.9	0.73	ZZ
SQSWW6	*	3,574.9	374.3	2.92	3,526.3	356.0	3.02	ZZ
SQX6VZ		3,031.3	-169.3	-1.32	3,002.3	-167.9	-1.43	ZZ
SV85RA		3,485.5	284.9	2.22	3,345.0	174.8	1.48	ZZ
SXLPT9		3,228.0	27.4	0.21	3,180.5	10.3	0.09	ZZ
TETNPP		2,966.0	-234.6	-1.83	2,973.0	-197.2	-1.68	ZZ
TS99P2		3,436.0	235.4	1.84	3,437.5	267.3	2.27	ZZ
TWBEW2		3,104.0	-96.6	-0.75	3,128.5	-41.7	-0.35	ZZ
TWTWQ		3,183.6	-17.0	-0.13	3,256.1	85.9	0.73	ZZ
UM5WY4		3,014.0	-186.6	-1.46	2,911.0	-259.2	-2.20	ZZ
UVCZX2		3,138.0	-62.6	-0.49	3,102.0	-68.2	-0.58	ZZ
UVLDS9		3,054.0	-146.6	-1.14	3,067.5	-102.7	-0.87	ZZ
UZJP4P		3,037.6	-163.0	-1.27	3,132.3	-37.9	-0.32	ZZ
VCLJWR		3,155.0	-45.6	-0.36	3,085.3	-85.0	-0.72	ZZ
W5156R		3,282.5	81.9	0.64	3,254.5	84.3	0.72	ZZ
WAKAM		3,226.4	25.8	0.20	3,234.2	64.0	0.54	ZZ
WGEY1S		3,175.0	-25.6	-0.20	3,163.5	-6.7	-0.06	ZZ
WP4YR9		3,342.4	141.8	1.11	3,249.6	79.4	0.67	ZZ
WXNUD		3,276.4	75.8	0.59	3,293.8	123.6	1.05	ZZ
Y9V9JV		3,285.1	84.5	0.66	3,270.6	100.4	0.85	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample A81-A82 Lab Mean	Sample A81-A82 Diff from Grand Mean	Sample A81-A82 CPV	Sample A83-A84 Lab Mean	Sample A83-A84 Diff from Grand Mean	Sample A83-A84 CPV	Instr Code
Z9L1MN		2,914.0	-286.6	-2.24	2,950.0	-220.2	-1.87	ZZ
ZQM81N		3,111.0	-89.6	-0.70	3,166.5	-3.7	-0.03	ZZ

Summary Statistics

	A81-A82		A83-A84	
Grand Means	3,200.59	psi	3,170.24	psi
Stnd Dev Btwn Labs	128.05	psi	117.69	psi

Statistics based on 104 of 107 reporting participants

Summary Statistics in SI Units

	A81-A82		A83-A84	
Grand Means	22.067	MPa	21.86	MPa
Stnd Dev Btwn Labs	0.883	MPa	0.81	MPa

Statistics based on 104 of 107 reporting participants

Samples A81-A82: Polyisoprene compound, batch #1 & A83-A84: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #605

4E2WS1 (X) - Inconsistency in testing between Sample sets. Also inconsistent in testing within Sample Set A83-A84.

AWHFMH (X) - Data for Sample A82 are low.

L841WW (X) - Data for Sample set A83-A84 are high.

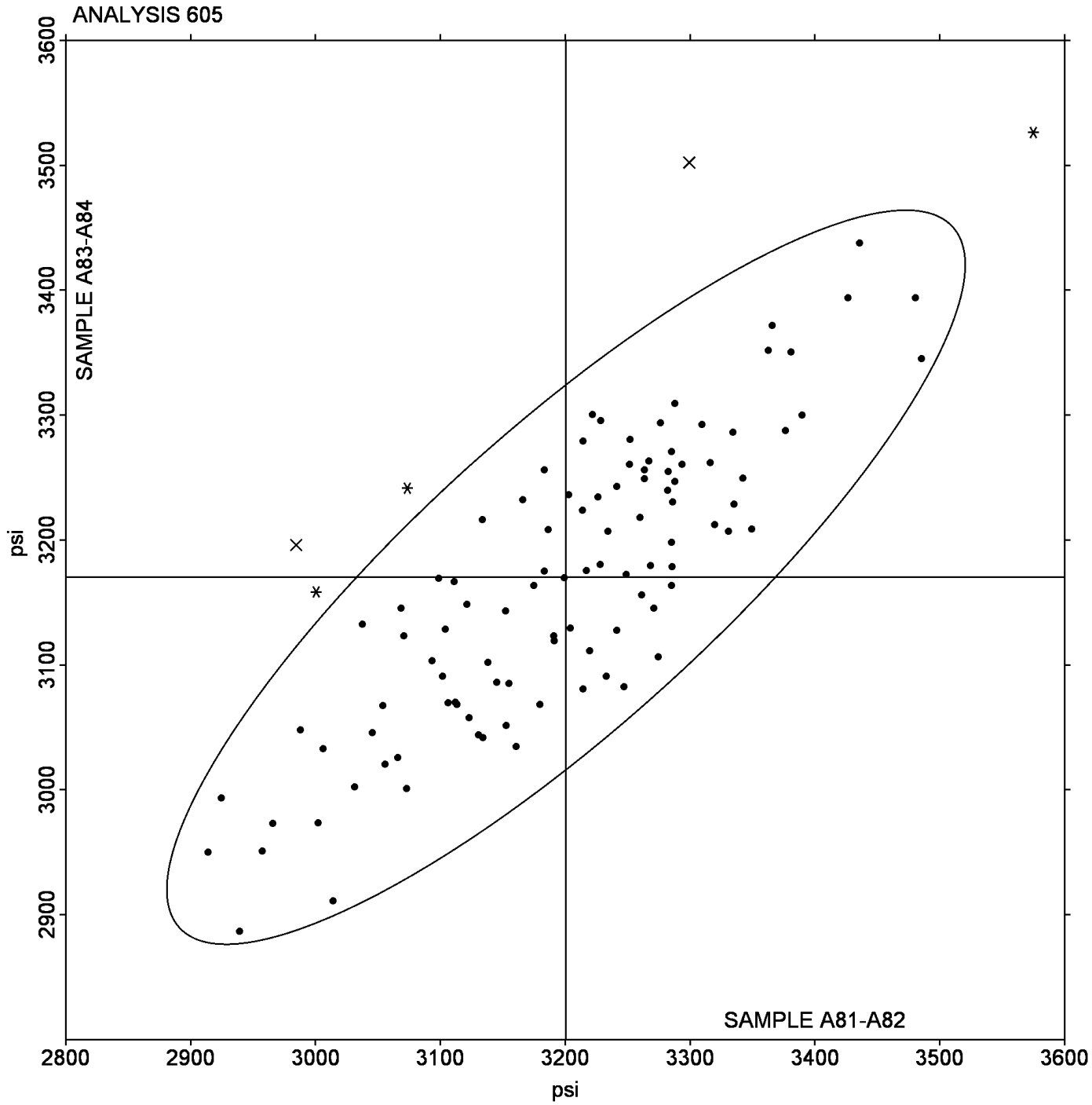
Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

Grand Mean Sample **A81-A82** = 3,200.59 psi

Grand Mean Sample **A83-A84** = 3,170.24 psi



Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample A81-A82 Lab Mean	Sample A81-A82 Diff from Grand Mean	Sample A81-A82 CPV	Sample A83-A84 Lab Mean	Sample A83-A84 Diff from Grand Mean	Sample A83-A84 CPV	Instr Code
14WR3E		523.5	-17.9	-0.85	531.5	-12.1	-0.59	ZZ
16UAPL		505.0	-36.4	-1.72	511.5	-32.1	-1.56	ZZ
1CFDKW	M	504.0	-37.4	-1.76	496.0	-47.6	-2.31	ZZ
1L191R		553.0	11.6	0.54	543.0	-0.6	-0.03	ZZ
2FA3CF		537.0	-4.4	-0.21	546.0	2.4	0.12	ZZ
2WJZQN		563.0	21.6	1.02	542.0	-1.6	-0.08	ZZ
2XTKCB		567.3	25.9	1.22	556.8	13.2	0.64	ZZ
3AHNNE		586.5	45.1	2.12	589.0	45.4	2.20	ZZ
4GCSKJ		536.0	-5.4	-0.26	527.5	-16.1	-0.78	ZZ
4LNWYY		528.5	-12.9	-0.61	527.0	-16.6	-0.80	ZZ
544BBT		543.5	2.1	0.10	538.5	-5.1	-0.25	ZZ
5QG8KP		520.0	-21.4	-1.01	540.0	-3.6	-0.17	ZZ
5YSCRL		512.3	-29.1	-1.37	501.9	-41.7	-2.02	ZZ
64QNJB		515.0	-26.4	-1.25	525.0	-18.6	-0.90	ZZ
6PR44M		555.0	13.6	0.64	560.0	16.4	0.79	ZZ
6S7K5F		532.5	-8.9	-0.42	549.0	5.4	0.26	ZZ
6SA5Z8		568.0	26.6	1.25	565.0	21.4	1.04	ZZ
6SJELY		503.0	-38.4	-1.81	500.0	-43.6	-2.11	ZZ
76ULNA	*	585.0	43.6	2.05	563.0	19.4	0.94	ZZ
7BVE9M		566.7	25.2	1.19	566.0	22.4	1.09	ZZ
85KNEF	*	530.0	-11.4	-0.54	506.5	-37.1	-1.80	ZZ
85KVCZ	X	660.0	118.6	5.59	677.5	133.9	6.49	ZZ
86Z6DC		541.5	0.1	0.00	560.0	16.4	0.79	ZZ
88CJC8		553.5	12.1	0.57	564.5	20.9	1.01	ZZ
8H8V42	*	494.8	-46.7	-2.20	490.5	-53.1	-2.57	ZZ
8HHZ4J		562.5	21.1	0.99	563.5	19.9	0.96	ZZ
8JF6TS		587.5	46.1	2.17	583.0	39.4	1.91	ZZ
8RWMG		575.0	33.6	1.58	570.0	26.4	1.28	ZZ
9F7HN1		536.0	-5.4	-0.26	546.0	2.4	0.12	ZZ
9VE3SD		506.0	-35.4	-1.67	503.0	-40.6	-1.97	ZZ
B3KM6T		545.6	4.1	0.19	552.5	8.9	0.43	ZZ
B7LQ8Z		528.0	-13.4	-0.63	531.5	-12.1	-0.59	ZZ
BCPR2P	X	500.5	-40.9	-1.93	476.0	-67.6	-3.27	ZZ
BKVZKB		547.0	5.6	0.26	558.0	14.4	0.70	ZZ
BTD1V6	*	485.0	-56.4	-2.66	505.5	-38.1	-1.85	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
C6WZXZ		548.0	6.6	0.31	541.0	-2.6	-0.13	ZZ
C7BF96		550.5	9.1	0.43	555.5	11.9	0.58	ZZ
C8QNVN		527.0	-14.4	-0.68	526.5	-17.1	-0.83	ZZ
CC8ZV3		540.0	-1.4	-0.07	545.0	1.4	0.07	ZZ
D9QKX2		517.5	-23.9	-1.13	524.0	-19.6	-0.95	ZZ
DG2QNE		537.5	-3.9	-0.19	547.5	3.9	0.19	ZZ
DLLKZ6		533.5	-7.9	-0.37	554.5	10.9	0.53	ZZ
DZFWSB	X	615.0	73.6	3.47	627.0	83.4	4.04	ZZ
EFS337		490.5	-50.9	-2.40	500.5	-43.1	-2.09	ZZ
EKDP92		559.5	18.1	0.85	570.0	26.4	1.28	ZZ
F3RLAC		556.5	15.1	0.71	554.5	10.9	0.53	ZZ
FCX8FQ		546.6	5.1	0.24	541.0	-2.6	-0.12	ZZ
FULHDD		535.5	-5.9	-0.28	552.5	8.9	0.43	ZZ
HH6LQ7		510.0	-31.4	-1.48	520.8	-22.8	-1.11	ZZ
J6X1CJ		584.0	42.6	2.01	584.0	40.4	1.96	ZZ
J7H1XW		565.5	24.1	1.13	559.0	15.4	0.75	ZZ
JDLHGV		529.9	-11.6	-0.55	524.4	-19.2	-0.93	ZZ
KS349M		552.3	10.9	0.51	559.5	15.9	0.77	ZZ
LEYC9L		571.0	29.6	1.39	554.0	10.4	0.50	ZZ
LQ96J8		537.5	-3.9	-0.19	550.0	6.4	0.31	ZZ
M6QUV	X	565.5	24.1	1.13	594.0	50.4	2.44	ZZ
MBH2DV		553.0	11.6	0.54	563.0	19.4	0.94	ZZ
MVFD49		548.5	7.1	0.33	547.5	3.9	0.19	ZZ
N1H2LW		576.5	35.1	1.65	590.0	46.4	2.25	ZZ
NM4VLG		558.5	17.1	0.80	549.5	5.9	0.29	ZZ
NSZPWP		545.0	3.6	0.17	536.0	-7.6	-0.37	ZZ
PEYEJN		536.2	-5.3	-0.25	541.5	-2.1	-0.10	ZZ
PGRFFZ		537.5	-3.9	-0.19	535.0	-8.6	-0.42	ZZ
PRXBEP		528.0	-13.4	-0.63	539.5	-4.1	-0.20	ZZ
QJC3LC		558.0	16.6	0.78	567.0	23.4	1.13	ZZ
QUBB77		515.0	-26.4	-1.25	519.5	-24.1	-1.17	ZZ
QY4W47		538.0	-3.4	-0.16	541.5	-2.1	-0.10	ZZ
RAZY3Z		542.0	0.6	0.03	560.5	16.9	0.82	ZZ
RKCTQ5		557.0	15.6	0.73	563.5	19.9	0.96	ZZ
SA4MF8		533.0	-8.4	-0.40	536.5	-7.1	-0.34	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
SEFKNH		552.5	11.0	0.52	548.5	4.9	0.24	ZZ
SGT1D5		545.4	3.9	0.18	542.0	-1.6	-0.08	ZZ
SME1L3		558.5	17.1	0.80	562.0	18.4	0.89	ZZ
SRYG5F		551.0	9.6	0.45	552.0	8.4	0.41	ZZ
SVTNVY		520.8	-20.6	-0.97	531.4	-12.2	-0.59	ZZ
SW9XS4		581.5	40.1	1.89	583.5	39.9	1.93	ZZ
SYCSC2	X	486.5	-54.9	-2.59	521.0	-22.6	-1.09	ZZ
SZ5SAC		554.5	13.1	0.62	546.0	2.4	0.12	ZZ
T9BD7R	X	493.5	-47.9	-2.26	453.5	-90.1	-4.36	ZZ
TAV2XK		543.0	1.6	0.07	553.5	9.9	0.48	ZZ
TE4XD8		546.0	4.6	0.21	565.0	21.4	1.04	ZZ
THZVG8		542.0	0.6	0.03	543.5	-0.1	0.00	ZZ
TV1CA3		535.5	-5.9	-0.28	556.0	12.4	0.60	ZZ
U6HF2K		534.5	-6.9	-0.33	545.5	1.9	0.09	ZZ
UABF5U		566.2	24.8	1.17	560.7	17.1	0.83	ZZ
UCBUA8		504.0	-37.4	-1.76	514.0	-29.6	-1.43	ZZ
ULFM4U		525.0	-16.4	-0.77	510.0	-33.6	-1.63	ZZ
V52Q9S		533.5	-7.9	-0.37	543.0	-0.6	-0.03	ZZ
VCVT5Q		549.0	7.6	0.36	555.5	11.9	0.58	ZZ
VED7B6	X	617.9	76.4	3.60	613.9	70.3	3.41	ZZ
W4858F		556.5	15.1	0.71	555.5	11.9	0.58	ZZ
WCRUJD		543.0	1.6	0.07	540.0	-3.6	-0.17	ZZ
WKY2H		541.5	0.1	0.00	537.5	-6.1	-0.30	ZZ
WNJXD3		550.0	8.6	0.40	555.0	11.4	0.55	ZZ
WQ5R2P		532.0	-9.4	-0.44	541.5	-2.1	-0.10	ZZ
WYEXXS		530.0	-11.4	-0.54	539.0	-4.6	-0.22	ZZ
XBX6YX		535.5	-5.9	-0.28	528.0	-15.6	-0.76	ZZ
XN9NGV		540.3	-1.2	-0.06	523.5	-20.1	-0.98	ZZ
XRAPGS		527.5	-13.9	-0.66	535.0	-8.6	-0.42	ZZ
XTWDW		533.0	-8.4	-0.40	533.0	-10.6	-0.51	ZZ
Y5RTHT		517.5	-23.9	-1.13	519.0	-24.6	-1.19	ZZ
YANC3N		527.5	-13.9	-0.66	518.0	-25.6	-1.24	ZZ
YNSPEG		522.5	-18.9	-0.89	523.0	-20.6	-1.00	ZZ
ZUU5JV		566.5	25.1	1.18	553.5	9.9	0.48	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

Summary Statistics		
Grand Means		
	541.44 percent	543.60 percent
Stnd Dev Btwn Labs		
	21.22 percent	20.64 percent

Statistics based on 96 of 104 reporting participants

Samples A81-A82: Polyisoprene compound, batch #1 & A83-A84: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #606

1CFDKW (M) - Data not reported for Sample set A81.

85KVCZ (X) - Data for all Samples are high.

BCPR2P (X) - Data for Sample set A83-A84 are low.

DZFWSB (X) - Data for all Samples are high.

M6QUVM (X) - Inconsistency in testing between Sample sets.

SYCSC2 (X) - Inconsistency in testing between Sample sets. Also inconsistent in testing within Sample sets A81-A82.

T9BD7R (X) - Data for Sample set A83-A84 are low.

VED7B6 (X) - Data for all Samples are high. Possible Systematic Error.

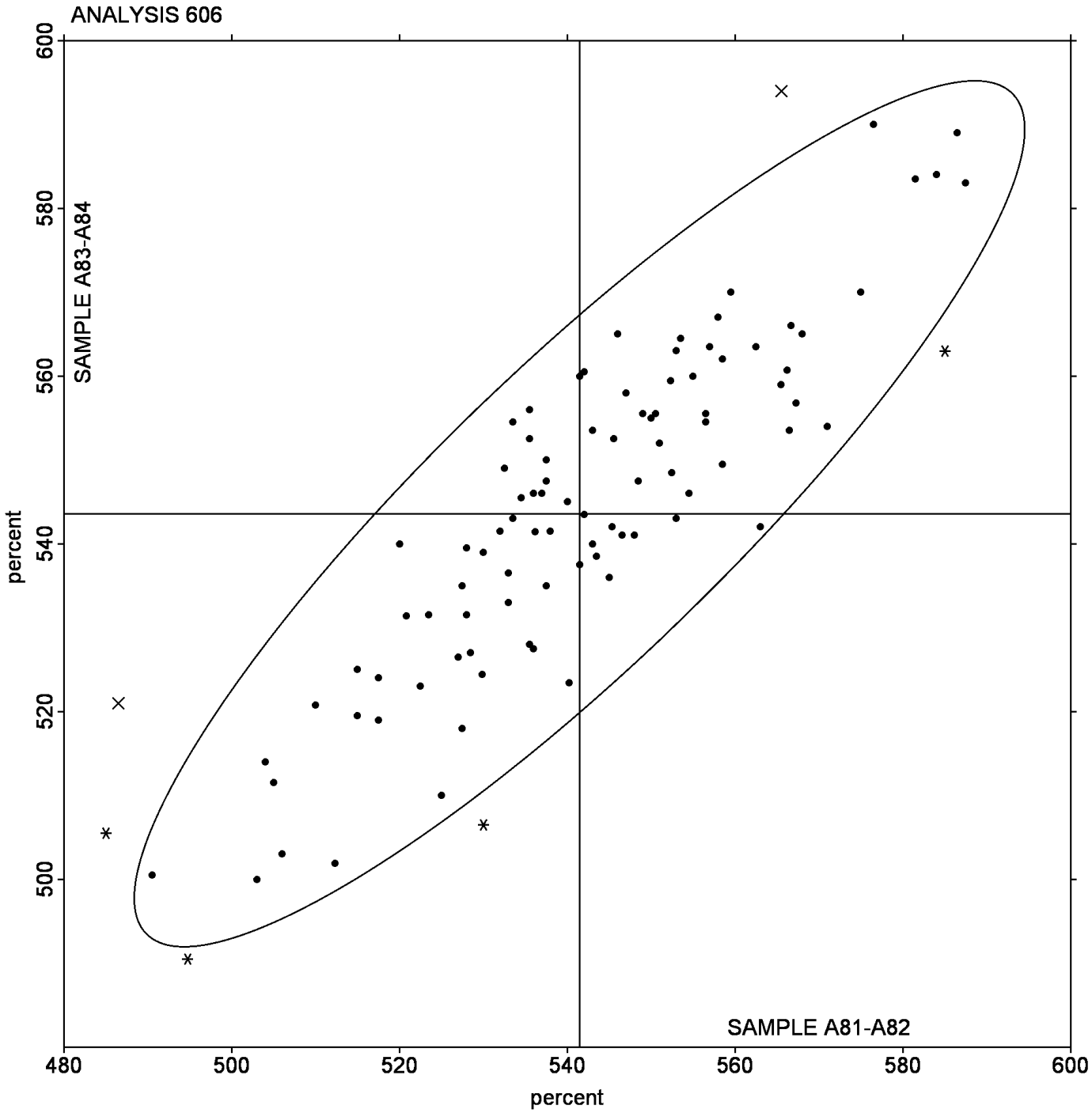
Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

Grand Mean Sample **A81-A82** = 541.44 percent

Grand Mean Sample **A83-A84** = 543.60 percent



Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1B743J		1,247.3	-39.8	-0.47	1,240.1	-24.4	-0.30	ZZ
1QSMMZ		1,293.0	5.8	0.07	1,246.0	-18.5	-0.22	ZZ
1QVYSY		1,290.5	3.3	0.04	1,258.0	-6.5	-0.08	ZZ
1TYFZ7		1,324.0	36.8	0.43	1,261.5	-3.0	-0.04	ZZ
234AL4		1,300.5	13.3	0.16	1,258.5	-6.0	-0.07	ZZ
28EEZ4		1,322.5	35.3	0.42	1,298.5	34.0	0.41	ZZ
298L2F		1,134.5	-152.7	-1.80	1,099.5	-165.0	-2.00	ZZ
3REWQC		1,369.2	82.0	0.97	1,338.7	74.2	0.90	ZZ
471TEL		1,345.5	58.3	0.69	1,302.5	38.0	0.46	ZZ
4BKS2H		1,353.2	66.0	0.78	1,314.1	49.6	0.60	ZZ
4D4VJL		1,276.5	-10.7	-0.13	1,275.0	10.5	0.13	ZZ
5282SB		1,183.5	-103.7	-1.22	1,171.5	-93.0	-1.13	ZZ
53N2B1		1,227.0	-60.2	-0.71	1,218.5	-46.0	-0.56	ZZ
5CK7NJ		1,334.7	47.6	0.56	1,341.8	77.3	0.94	ZZ
5KFBDG		1,205.0	-82.2	-0.97	1,188.5	-76.0	-0.92	ZZ
5UU1M8		1,283.6	-3.6	-0.04	1,269.8	5.4	0.07	ZZ
5YZXVM		1,215.0	-72.2	-0.85	1,252.0	-12.5	-0.15	ZZ
6ABEDK		1,377.0	89.8	1.06	1,332.0	67.5	0.82	ZZ
6QH52X		1,262.5	-24.7	-0.29	1,197.5	-67.0	-0.81	ZZ
6SSN68		1,218.5	-68.7	-0.81	1,145.0	-119.5	-1.45	ZZ
7UUGBJ		1,263.3	-23.9	-0.28	1,258.2	-6.2	-0.08	ZZ
86JRHP		1,246.0	-41.2	-0.48	1,214.5	-50.0	-0.61	ZZ
87QBSH	*	1,470.7	183.5	2.16	1,492.9	228.4	2.77	ZZ
89MYVU	*	1,062.0	-225.2	-2.65	1,068.0	-196.5	-2.38	ZZ
8UW3LA		1,202.5	-84.7	-1.00	1,197.0	-67.5	-0.82	ZZ
93JF3L		1,319.0	31.8	0.37	1,318.5	54.0	0.66	ZZ
95BBSH	*	1,486.6	199.5	2.35	1,486.6	222.2	2.70	ZZ
9E2SVB		1,339.5	52.3	0.62	1,286.5	22.0	0.27	ZZ
9F8ETN		1,430.0	142.8	1.68	1,447.5	183.0	2.22	ZZ
9JZBZV		1,294.5	7.3	0.09	1,213.0	-51.5	-0.62	ZZ
ACF9TJ		1,433.0	145.8	1.72	1,356.5	92.0	1.12	ZZ
AJ2SX1		1,355.2	68.0	0.80	1,375.4	110.9	1.35	ZZ
AKGWST		1,397.0	109.8	1.29	1,336.0	71.5	0.87	ZZ
AXEPY8		1,392.9	105.7	1.25	1,314.8	50.3	0.61	ZZ
AXYJNP		1,277.8	-9.4	-0.11	1,240.1	-24.4	-0.30	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
B4RCP2		1,290.8	3.7	0.04	1,261.8	-2.6	-0.03	ZZ
B64MCU		1,359.5	72.3	0.85	1,262.0	-2.5	-0.03	ZZ
BSD5VP		1,233.0	-54.2	-0.64	1,226.5	-38.0	-0.46	ZZ
C87WRB	*	1,424.0	136.8	1.61	1,476.5	212.0	2.57	ZZ
C8C6X2		1,348.4	61.2	0.72	1,315.8	51.3	0.62	ZZ
D2KCB3	X	3,072.4	1,785.2	21.03	3,123.3	1,858.8	22.56	ZZ
D6WGQ		1,226.5	-60.7	-0.71	1,253.5	-11.0	-0.13	ZZ
DHTEK8		1,295.5	8.3	0.10	1,293.5	29.0	0.35	ZZ
DKSR79		1,390.5	103.3	1.22	1,362.5	98.0	1.19	ZZ
DNEDVP		1,268.5	-18.7	-0.22	1,258.5	-6.0	-0.07	ZZ
E7RADE		1,334.4	47.2	0.56	1,276.3	11.9	0.14	ZZ
EB8X75		1,164.5	-122.7	-1.44	1,153.0	-111.5	-1.35	ZZ
EK6QPX		1,296.0	8.8	0.10	1,276.0	11.5	0.14	ZZ
EXUS9A		1,380.8	93.6	1.10	1,338.3	73.9	0.90	ZZ
GM6YW		1,264.0	-23.2	-0.27	1,265.0	0.5	0.01	ZZ
GP86TX		1,149.0	-138.2	-1.63	1,151.5	-113.0	-1.37	ZZ
H5ZMU	*	1,079.8	-207.4	-2.44	1,132.5	-132.0	-1.60	ZZ
HR6X7N		1,238.5	-48.7	-0.57	1,250.3	-14.2	-0.17	ZZ
HZPMF3		1,456.3	169.2	1.99	1,435.8	171.3	2.08	ZZ
JA1RXU		1,221.5	-65.7	-0.77	1,196.0	-68.5	-0.83	ZZ
KARJYP		1,117.0	-170.2	-2.00	1,126.0	-138.5	-1.68	ZZ
KE5YPF		1,462.8	175.6	2.07	1,375.8	111.3	1.35	ZZ
L7D8A8		1,251.5	-35.7	-0.42	1,266.0	1.5	0.02	ZZ
LD5JFQ		1,304.8	17.7	0.21	1,220.7	-43.7	-0.53	ZZ
LM1HBG		1,249.5	-37.7	-0.44	1,168.0	-96.5	-1.17	ZZ
LR2V92		1,263.4	-23.8	-0.28	1,246.5	-18.0	-0.22	ZZ
MAWQZ		1,360.0	72.8	0.86	1,313.5	49.0	0.60	ZZ
MEHES8		1,091.5	-195.7	-2.30	1,108.0	-156.5	-1.90	ZZ
P2K8TU		1,276.0	-11.2	-0.13	1,249.5	-15.0	-0.18	ZZ
P2MSVB	X	1,538.0	250.8	2.95	1,577.0	312.5	3.79	ZZ
PF3ZMF		1,392.5	105.3	1.24	1,390.5	126.0	1.53	ZZ
Q1AWYJ		1,275.5	-11.7	-0.14	1,257.0	-7.5	-0.09	ZZ
Q4YCGP		1,256.5	-30.7	-0.36	1,275.0	10.5	0.13	ZZ
QUPNBY		1,285.0	-2.2	-0.03	1,190.0	-74.5	-0.90	ZZ
R12WC1		1,264.0	-23.2	-0.27	1,286.5	22.0	0.27	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
R1UFH2		1,247.0	-40.2	-0.47	1,187.5	-77.0	-0.93	ZZ
RGCGU5		1,218.0	-69.2	-0.81	1,238.0	-26.5	-0.32	ZZ
RWCTR		1,275.5	-11.7	-0.14	1,254.5	-10.0	-0.12	ZZ
SCTPH5		1,284.3	-2.8	-0.03	1,309.0	44.5	0.54	ZZ
SDC3AT	X	1,345.0	57.8	0.68	1,583.0	318.5	3.87	ZZ
T8G8TY		1,271.0	-16.2	-0.19	1,262.5	-2.0	-0.02	ZZ
TQZ6US	*	1,269.5	-17.7	-0.21	1,163.0	-101.5	-1.23	ZZ
UARTFM		1,233.0	-54.2	-0.64	1,237.0	-27.5	-0.33	ZZ
UBSR3R		1,260.5	-26.7	-0.31	1,231.0	-33.5	-0.41	ZZ
UC2KX1		1,406.5	119.3	1.41	1,343.0	78.5	0.95	ZZ
VDL6EV		1,281.5	-5.7	-0.07	1,203.0	-61.5	-0.75	ZZ
VTQ9EF		1,312.6	25.4	0.30	1,245.2	-19.3	-0.23	ZZ
VXL3AX		1,232.8	-54.3	-0.64	1,276.3	11.9	0.14	ZZ
WAA2A		1,165.5	-121.7	-1.43	1,157.0	-107.5	-1.30	ZZ
WKJLG3		1,190.0	-97.1	-1.14	1,203.1	-61.4	-0.74	ZZ
WMRWF		1,298.5	11.3	0.13	1,304.0	39.5	0.48	ZZ
WQ31V6		1,309.0	21.8	0.26	1,266.2	1.7	0.02	ZZ
X9552M		1,274.5	-12.7	-0.15	1,264.5	0.0	0.00	ZZ
XVGT5X		1,261.8	-25.3	-0.30	1,232.8	-31.6	-0.38	ZZ
XZNLLY		1,279.5	-7.7	-0.09	1,222.0	-42.5	-0.52	ZZ
Y22MV9		1,241.5	-45.6	-0.54	1,253.1	-11.3	-0.14	ZZ
Y83K7D		1,311.5	24.3	0.29	1,280.0	15.5	0.19	ZZ
YHK72P		1,409.0	121.8	1.43	1,381.5	117.0	1.42	ZZ
YML6KT		1,337.0	49.8	0.59	1,279.5	15.0	0.18	ZZ
YSW64X		1,222.5	-64.7	-0.76	1,219.0	-45.5	-0.55	ZZ
YUDM5R		1,350.0	62.8	0.74	1,372.5	108.0	1.31	ZZ
Z63UCQ		1,184.0	-103.2	-1.22	1,129.0	-135.5	-1.64	ZZ
ZF9SY8	X	938.7	-348.4	-4.10	931.6	-332.8	-4.04	ZZ
ZKASFH		1,349.5	62.3	0.73	1,337.0	72.5	0.88	ZZ

Summary Statistics

Grand Means

1,287.17 psi — 1,264.46 psi

Stnd Dev Btwn Labs

84.90 psi — 82.38 psi

Statistics based on 95 of 99 reporting participants

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

Summary Statistics in SI Units

Grand Means	8.8746	MPa	8.72	MPa
Stnd Dev Btwn Labs	0.5854	MPa	0.57	MPa

Statistics based on 95 of 99 reporting participants

Samples A81-A82: Polyisoprene compound, batch #1 & A83-A84: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #607

D2KCB3 (X) - Data for all Samples are high.

P2MSVB (X) - Data for all Samples are high.

SDC3AT (X) - Data for Sample set A83-A84 are high.

ZF9SY8 (X) - Data for all Samples are low. Possible Systematic Error.

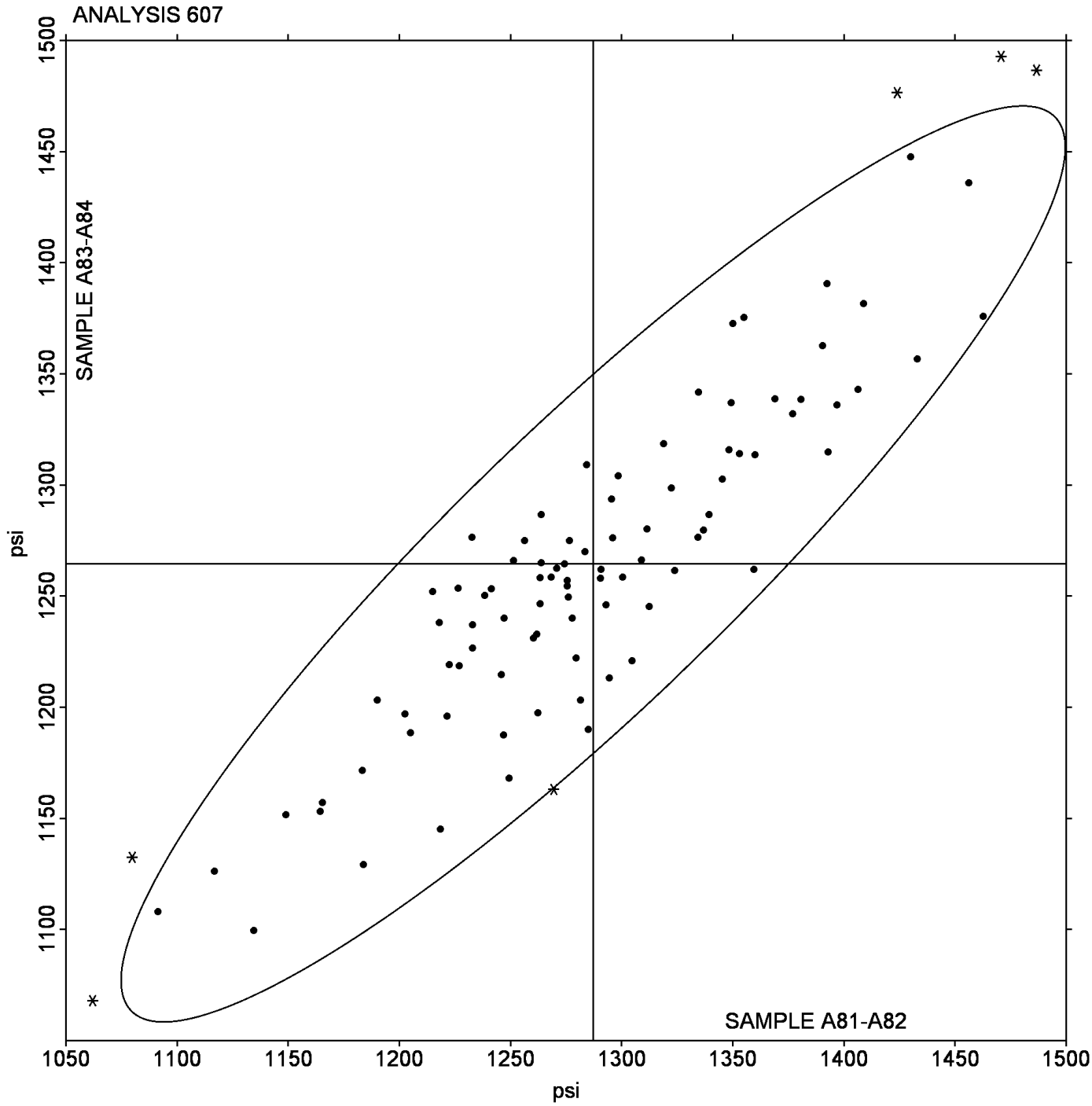
Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

Grand Mean Sample **A81-A82** = 1,287.17 psi

Grand Mean Sample **A83-A84** = 1,264.46 psi



Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1YHAG2		290.0	-1.8	-0.11	275.0	-14.9	-0.89	ZZ
22U1WD		314.1	22.3	1.34	293.5	3.6	0.22	ZZ
2LW7VL		316.9	25.1	1.50	305.3	15.4	0.93	ZZ
32R9J8		287.0	-4.8	-0.29	296.5	6.6	0.40	ZZ
3HUEPR		322.5	30.7	1.84	312.0	22.1	1.33	ZZ
3KMV7M		308.5	16.7	1.00	306.5	16.6	1.00	ZZ
3SYKLD		283.5	-8.3	-0.50	288.0	-1.9	-0.11	ZZ
48SUBW	X	368.0	76.2	4.56	372.0	82.1	4.94	ZZ
4T8RGF		296.0	4.2	0.25	297.5	7.6	0.46	ZZ
4TJY19		287.2	-4.6	-0.28	276.3	-13.6	-0.82	ZZ
4UJT5Z		290.5	-1.3	-0.08	282.5	-7.4	-0.44	ZZ
546W5M		276.3	-15.5	-0.93	291.5	1.7	0.10	ZZ
5CA8XB		291.4	-0.5	-0.03	291.7	1.8	0.11	ZZ
5RHLK9		279.5	-12.3	-0.74	262.5	-27.4	-1.65	ZZ
6KNHPA		304.5	12.7	0.76	308.0	18.1	1.09	ZZ
72JLQB		282.8	-9.0	-0.54	282.8	-7.0	-0.42	ZZ
7QMB85		286.5	-5.4	-0.32	271.2	-18.6	-1.12	ZZ
7TBTDW		301.0	9.1	0.55	291.5	1.7	0.10	ZZ
7VWHW		300.0	8.2	0.49	286.5	-3.4	-0.20	ZZ
82PS9L		281.0	-10.8	-0.65	273.5	-16.4	-0.99	ZZ
88U38L		286.0	-5.8	-0.35	291.0	1.1	0.07	ZZ
8FGSJ9		275.5	-16.3	-0.98	276.0	-13.9	-0.83	ZZ
8LY1ZK		289.0	-2.8	-0.17	293.5	3.6	0.22	ZZ
8PHKVV		312.3	20.5	1.22	306.2	16.4	0.99	ZZ
8PU6GQ		320.0	28.2	1.69	306.9	17.1	1.03	ZZ
92JXUL		311.8	20.0	1.20	304.6	14.7	0.89	ZZ
92Y8RR		283.6	-8.3	-0.49	273.4	-16.5	-0.99	ZZ
97UPYY		292.4	0.6	0.03	282.8	-7.1	-0.43	ZZ
9NUA7Y	X	227.6	-64.2	-3.84	227.6	-62.3	-3.75	ZZ
9QX6FF		303.9	12.0	0.72	297.3	7.5	0.45	ZZ
9ZJ3N9		265.5	-26.3	-1.57	258.5	-31.4	-1.89	ZZ
AHRUZB		268.0	-23.8	-1.43	269.0	-20.9	-1.26	ZZ
ARVGLB	*	295.5	3.7	0.22	267.5	-22.4	-1.35	ZZ
ARX2E4	X	226.0	-65.8	-3.94	229.5	-60.4	-3.63	ZZ
ASEN8L		290.0	-1.8	-0.11	295.5	5.6	0.34	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
AV6L1Q		302.0	10.2	0.61	297.5	7.6	0.46	ZZ
BTPXYX		279.2	-12.6	-0.75	282.8	-7.0	-0.42	ZZ
C4M474		277.5	-14.3	-0.86	284.5	-5.4	-0.32	ZZ
C7EWT1		274.5	-17.3	-1.04	269.0	-20.9	-1.26	ZZ
C8BB4A		277.0	-14.8	-0.89	276.5	-13.4	-0.80	ZZ
D7YFGQ	*	250.0	-41.8	-2.50	255.5	-34.4	-2.07	ZZ
D8YK3D	*	330.0	38.1	2.28	332.1	42.3	2.54	ZZ
E8HDY7		290.5	-1.3	-0.08	292.5	2.6	0.16	ZZ
EGCN2B		286.5	-5.3	-0.32	290.5	0.6	0.04	ZZ
ESHXZ9		291.0	-0.8	-0.05	289.0	-0.9	-0.05	ZZ
G36ZK8		278.0	-13.8	-0.83	282.5	-7.4	-0.44	ZZ
G3XEXW		289.5	-2.3	-0.14	287.0	-2.9	-0.17	ZZ
G77RLY		266.9	-24.9	-1.49	282.5	-7.3	-0.44	ZZ
GB2HTV		311.2	19.3	1.16	322.8	32.9	1.98	ZZ
GCUJR6		298.9	7.0	0.42	291.5	1.6	0.10	ZZ
GSAE63		270.5	-21.3	-1.28	269.0	-20.9	-1.26	ZZ
HG3NYC		269.0	-22.8	-1.37	272.0	-17.9	-1.08	ZZ
HRL7YA		265.0	-26.8	-1.60	283.0	-6.9	-0.41	ZZ
J1DA5Q		298.0	6.2	0.37	295.0	5.1	0.31	ZZ
JH2L7H		325.5	33.7	2.02	322.5	32.6	1.96	ZZ
JNWF5K		290.1	-1.7	-0.10	290.1	0.2	0.01	ZZ
KFFWZC		278.0	-13.8	-0.83	284.5	-5.4	-0.32	ZZ
KYNUK2		277.0	-14.8	-0.89	279.0	-10.9	-0.65	ZZ
L2YB6C		298.5	6.7	0.40	287.5	-2.4	-0.14	ZZ
LEXE3Y	X	324.5	32.7	1.96	287.5	-2.4	-0.14	ZZ
MNUG43		307.5	15.7	0.94	315.0	25.1	1.51	ZZ
N6EJE2		306.7	14.8	0.89	310.2	20.3	1.22	ZZ
P1352V		275.0	-16.8	-1.01	273.5	-16.4	-0.99	ZZ
P8E288		279.5	-12.3	-0.74	270.5	-19.4	-1.17	ZZ
P8WW9H		285.5	-6.3	-0.38	273.5	-16.4	-0.99	ZZ
QJM1NA		270.5	-21.3	-1.28	274.8	-15.0	-0.90	ZZ
QM8UB		299.0	7.2	0.43	289.0	-0.9	-0.05	ZZ
R6DRAH		269.5	-22.3	-1.34	273.0	-16.9	-1.02	ZZ
RDANTE	X	299.0	7.2	0.43	265.0	-24.9	-1.50	ZZ
RDGQ3L		307.5	15.7	0.94	299.0	9.1	0.55	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample A81-A82 Lab Mean	Sample A81-A82 Diff from Grand Mean	Sample A81-A82 CPV	Sample A83-A84 Lab Mean	Sample A83-A84 Diff from Grand Mean	Sample A83-A84 CPV	Instr Code
RJCRS2	X	2.1	-289.8	-17.34	2.2	-287.7	-17.31	ZZ
RJWM5V		312.8	21.0	1.26	309.1	19.3	1.16	ZZ
RNYCX		308.5	16.7	1.00	312.0	22.1	1.33	ZZ
RSWSPQ		303.9	12.0	0.72	296.6	6.7	0.41	ZZ
RZRUR2		302.0	10.2	0.61	308.5	18.6	1.12	ZZ
S2FM1D		279.3	-12.5	-0.75	291.0	1.1	0.06	ZZ
ST9CXZ		283.5	-8.3	-0.50	262.5	-27.4	-1.65	ZZ
T93821		308.5	16.7	1.00	297.5	7.6	0.46	ZZ
UDUKVC		314.0	22.2	1.33	308.0	18.1	1.09	ZZ
UN4Y1C		272.8	-19.0	-1.14	287.1	-2.7	-0.16	ZZ
US3E93		287.2	-4.6	-0.28	293.0	3.1	0.19	ZZ
V28C4X		303.5	11.7	0.70	294.0	4.1	0.25	ZZ
VZWQEP		288.5	-3.3	-0.20	289.0	-0.9	-0.05	ZZ
W176RT		318.8	27.0	1.61	327.3	37.4	2.25	ZZ
W1Z1FZ		283.5	-8.3	-0.50	277.0	-12.9	-0.77	ZZ
W2AU3K		286.5	-5.3	-0.32	291.5	1.6	0.10	ZZ
W6S8QJ	X	181.0	-110.8	-6.63	170.5	-119.4	-7.18	ZZ
W8U3EN		290.0	-1.8	-0.11	287.0	-2.9	-0.17	ZZ
WMA2B	X	292.5	0.7	0.04	333.5	43.6	2.63	ZZ
WSZ5XU	X	350.0	58.2	3.48	325.0	35.1	2.11	ZZ
XD11H1		327.5	35.7	2.14	325.5	35.6	2.14	ZZ
XE5F88		305.5	13.7	0.82	287.0	-2.9	-0.17	ZZ
XSC77Z		275.6	-16.2	-0.97	268.3	-21.5	-1.30	ZZ
YP5A2X		272.5	-19.3	-1.16	280.0	-9.9	-0.59	ZZ
YUY8L7		299.5	7.7	0.46	298.5	8.6	0.52	ZZ
YY5UAT		269.5	-22.3	-1.34	272.5	-17.4	-1.05	ZZ
Z9PRQP	*	320.0	28.2	1.69	333.5	43.6	2.63	ZZ
ZUTBQ2		291.0	-0.8	-0.05	290.0	0.1	0.01	ZZ

Summary Statistics

	Sample A81-A82	Sample A83-A84
Grand Means	291.82 psi	289.87 psi
Stnd Dev Btwn Labs	16.71 psi	16.62 psi

Statistics based on 89 of 98 reporting participants

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

Summary Statistics in SI Units

Grand Means	2.0120	MPa	2.00	MPa
Stnd Dev Btwn Labs	0.1152	MPa	0.11	MPa

Statistics based on 89 of 98 reporting participants

Samples A81-A82: Polyisoprene compound, batch #1 & A83-A84: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #608

48SUBW (X) - Data for all Samples are high.

9NUA7Y (X) - Data for all Samples are low. Possible Systematic Error.

ARX2E4 (X) - Data for all Samples are low. Possible Systematic Error.

LEXE3Y (X) - Inconsistency in testing between Sample sets.

RDANTE (X) - Inconsistency in testing between Sample sets. Also inconsistent in testing within Sample set A81-A82.

RJCRS2 (X) - Extreme data for both Sample sets. Lab previously reported in psi, but data may have been reported in MPa.

W6S8QJ (X) - Data for all Samples are low.

WMA2BQ (X) - Inconsistency in testing between Sample sets.

WSZ5XU (X) - Inconsistency in testing between Sample sets. Also inconsistent in testing within both sample sets.

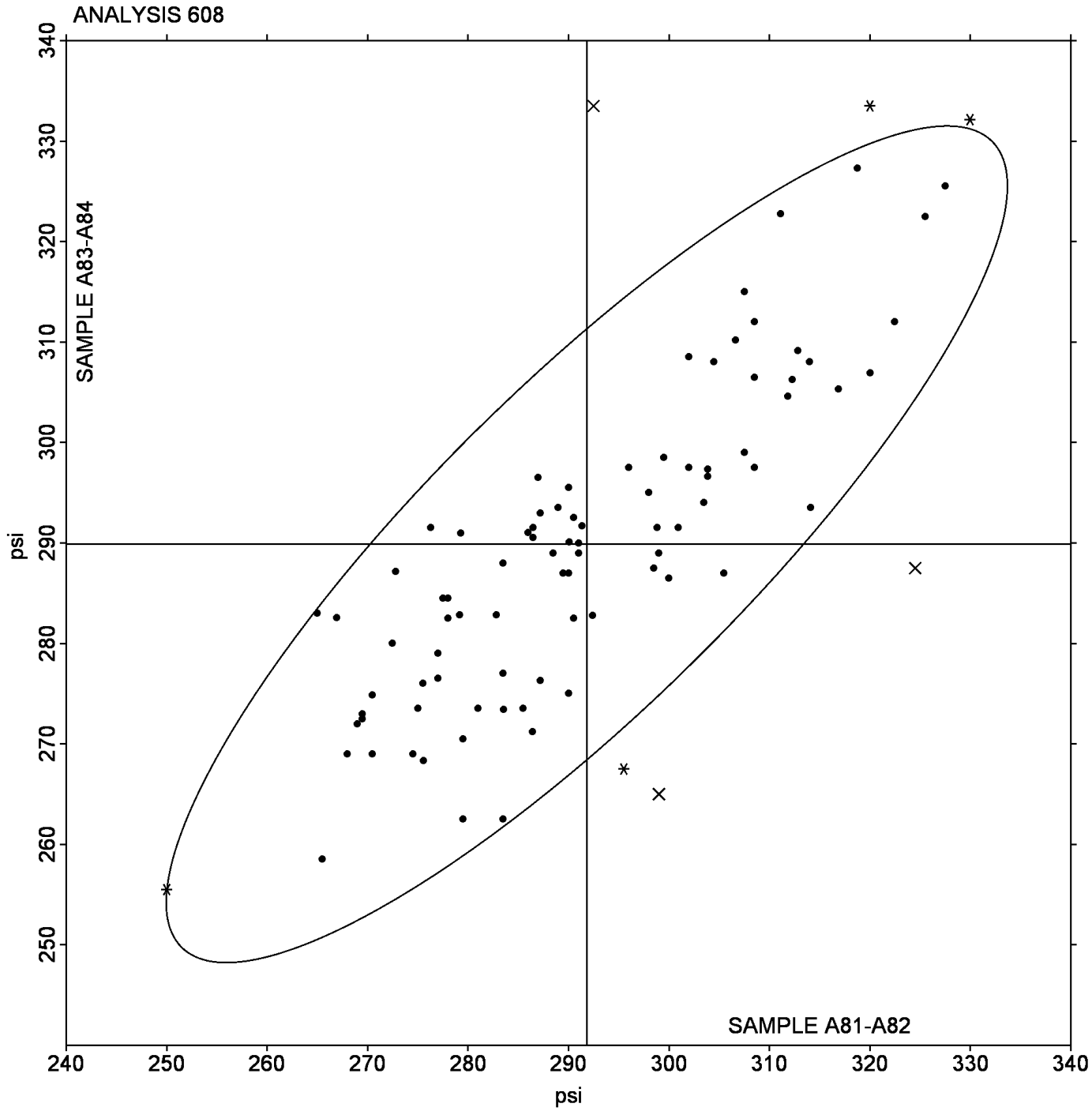
Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

Grand Mean Sample **A81-A82** = 291.82 psi

Grand Mean Sample **A83-A84** = 289.87 psi



Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
18YKHX		54.50	-1.72	-1.03	55.00	-1.39	-0.79	ZZ
19DHTG		57.00	0.78	0.47	57.00	0.61	0.35	ZZ
1C985U		55.40	-0.82	-0.49	54.90	-1.49	-0.85	ZZ
1HAXBT		53.25	-2.97	-1.78	53.20	-3.19	-1.82	ZZ
1HYBQY		54.75	-1.47	-0.88	54.50	-1.89	-1.08	ZZ
2U7ELK		54.50	-1.72	-1.03	55.00	-1.39	-0.79	ZZ
2VZFHV		56.60	0.38	0.23	55.35	-1.04	-0.59	ZZ
33RARY		57.00	0.78	0.47	57.50	1.11	0.64	ZZ
3CTJFY		56.50	0.28	0.17	56.50	0.11	0.06	ZZ
3E3EA3		56.40	0.18	0.11	57.10	0.71	0.41	ZZ
3PXV5L		58.00	1.78	1.07	58.50	2.11	1.21	ZZ
3XY56W		55.50	-0.72	-0.43	56.00	-0.39	-0.22	ZZ
43ERX8		53.75	-2.47	-1.48	53.95	-2.44	-1.39	ZZ
55YGMY		57.50	1.28	0.77	58.00	1.61	0.92	ZZ
5JD25L	*	53.50	-2.72	-1.63	52.50	-3.89	-2.22	ZZ
5K9Q8Z		56.00	-0.22	-0.13	56.00	-0.39	-0.22	ZZ
66PFLB		58.50	2.28	1.37	58.00	1.61	0.92	ZZ
6CCPUD	*	61.00	4.78	2.87	61.00	4.61	2.64	ZZ
73RLPZ		55.50	-0.72	-0.43	55.50	-0.89	-0.51	ZZ
7Y6WU3		55.00	-1.22	-0.73	56.00	-0.39	-0.22	ZZ
8JY296		56.75	0.53	0.32	56.75	0.36	0.21	ZZ
8T2BK4		57.00	0.78	0.47	57.25	0.86	0.49	ZZ
8WPTAN		55.45	-0.77	-0.46	55.95	-0.44	-0.25	ZZ
91B3KK		56.05	-0.17	-0.10	56.20	-0.19	-0.11	ZZ
93A1ED		57.50	1.28	0.77	56.50	0.11	0.06	ZZ
9N3YYJ		56.65	0.43	0.26	56.90	0.51	0.29	ZZ
9QKEZC		55.00	-1.22	-0.73	54.50	-1.89	-1.08	ZZ
9QMZT6		54.30	-1.92	-1.15	54.15	-2.24	-1.28	ZZ
9SSJKM		54.50	-1.72	-1.03	55.50	-0.89	-0.51	ZZ
9W66C6		58.10	1.88	1.13	57.55	1.16	0.66	ZZ
A5CHT2		55.80	-0.42	-0.25	55.80	-0.59	-0.34	ZZ
A8MTB6		55.50	-0.72	-0.43	56.00	-0.39	-0.22	ZZ
AQ62GT		58.00	1.78	1.07	58.50	2.11	1.21	ZZ
ARNMB		56.50	0.28	0.17	57.00	0.61	0.35	ZZ
AV4UV5	*	60.50	4.28	2.57	61.00	4.61	2.64	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
AVRC2Q		55.15	-1.07	-0.64	56.10	-0.29	-0.16	ZZ
BG9VAT		53.75	-2.47	-1.48	54.35	-2.04	-1.16	ZZ
BVF35G		56.50	0.28	0.17	56.00	-0.39	-0.22	ZZ
BW9WY		57.50	1.28	0.77	59.00	2.61	1.49	ZZ
CBX7SN		55.50	-0.72	-0.43	55.50	-0.89	-0.51	ZZ
CGKTPP		55.00	-1.22	-0.73	56.00	-0.39	-0.22	ZZ
DCNJ3T		55.60	-0.62	-0.37	57.00	0.61	0.35	ZZ
DGN4LR		57.00	0.78	0.47	57.50	1.11	0.64	ZZ
DK378G	*	52.50	-3.72	-2.23	52.00	-4.39	-2.51	ZZ
DNNNC2		56.00	-0.22	-0.13	56.00	-0.39	-0.22	ZZ
DPWBJ8		55.00	-1.22	-0.73	55.00	-1.39	-0.79	ZZ
EFVC9K		57.50	1.28	0.77	58.50	2.11	1.21	ZZ
EWRRSC		58.00	1.78	1.07	59.00	2.61	1.49	ZZ
F36RNH		59.50	3.28	1.97	60.00	3.61	2.06	ZZ
FF37XX	*	59.00	2.78	1.67	58.00	1.61	0.92	ZZ
FJLSVS		55.00	-1.22	-0.73	55.50	-0.89	-0.51	ZZ
G8U14R		55.50	-0.72	-0.43	55.50	-0.89	-0.51	ZZ
GX56KR		55.50	-0.72	-0.43	56.70	0.31	0.18	ZZ
H6SMR7		56.50	0.28	0.17	56.00	-0.39	-0.22	ZZ
HGDNM9		56.25	0.03	0.02	56.50	0.11	0.06	ZZ
HT3NZ5		59.85	3.63	2.18	60.30	3.91	2.24	ZZ
J7JAW1		56.50	0.28	0.17	57.00	0.61	0.35	ZZ
JLGFTE		55.00	-1.22	-0.73	55.50	-0.89	-0.51	ZZ
JXAXKY		57.00	0.78	0.47	58.50	2.11	1.21	ZZ
KDDV4N		57.05	0.83	0.50	57.00	0.61	0.35	ZZ
KP1WVG		55.50	-0.72	-0.43	56.00	-0.39	-0.22	ZZ
KS6XY6	*	58.30	2.08	1.25	57.18	0.79	0.45	ZZ
L3U7Y8	X	61.00	4.78	2.87	59.00	2.61	1.49	ZZ
LCNAL2		59.60	3.38	2.03	59.40	3.01	1.72	ZZ
LFGGKD		56.50	0.28	0.17	56.70	0.31	0.18	ZZ
LPH5MX		56.50	0.28	0.17	57.00	0.61	0.35	ZZ
MEZE3R		54.25	-1.97	-1.18	55.20	-1.19	-0.68	ZZ
MFVUC1		59.50	3.28	1.97	59.50	3.11	1.78	ZZ
MHNRZ9	X	49.50	-6.72	-4.03	54.00	-2.39	-1.36	ZZ
MKCR55		55.55	-0.67	-0.40	54.75	-1.64	-0.94	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

		Sample A81-A82			Sample A83-A84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
MMNES9		59.00	2.78	1.67	59.00	2.61	1.49	ZZ
N7MHZ6		57.50	1.28	0.77	58.50	2.11	1.21	ZZ
NW6RF3	X	50.50	-5.72	-3.43	51.00	-5.39	-3.08	ZZ
P6C83X		54.35	-1.87	-1.12	53.75	-2.64	-1.51	ZZ
PNVD4V		56.00	-0.22	-0.13	55.50	-0.89	-0.51	ZZ
PUNEQE		54.50	-1.72	-1.03	55.00	-1.39	-0.79	ZZ
QD6V9L		57.65	1.43	0.86	57.40	1.01	0.58	ZZ
QHACXG		54.75	-1.47	-0.88	55.05	-1.34	-0.76	ZZ
QM645D		55.60	-0.62	-0.37	55.30	-1.09	-0.62	ZZ
RCXSRV		55.00	-1.22	-0.73	55.00	-1.39	-0.79	ZZ
RLK6Y8		55.00	-1.22	-0.73	55.00	-1.39	-0.79	ZZ
SE3WLX		56.00	-0.22	-0.13	56.00	-0.39	-0.22	ZZ
SFUZ6Q		54.95	-1.27	-0.76	55.35	-1.04	-0.59	ZZ
T2BKRX		55.00	-1.22	-0.73	54.00	-2.39	-1.36	ZZ
TBKWH		56.00	-0.22	-0.13	56.00	-0.39	-0.22	ZZ
TBM9W		55.50	-0.72	-0.43	55.00	-1.39	-0.79	ZZ
UVN2A3		59.50	3.28	1.97	60.00	3.61	2.06	ZZ
UWWDJP		56.75	0.53	0.32	56.45	0.06	0.04	ZZ
V3ZFNQ		55.50	-0.72	-0.43	56.00	-0.39	-0.22	ZZ
V4D32X		54.50	-1.72	-1.03	54.00	-2.39	-1.36	ZZ
V8BJJ1		55.00	-1.22	-0.73	55.45	-0.94	-0.54	ZZ
VCWRA		55.70	-0.52	-0.31	55.10	-1.29	-0.74	ZZ
VLZL1S		55.80	-0.42	-0.25	55.70	-0.69	-0.39	ZZ
VNJQJV		53.50	-2.72	-1.63	54.50	-1.89	-1.08	ZZ
W4S7CP		55.00	-1.22	-0.73	55.00	-1.39	-0.79	ZZ
W719MS		55.50	-0.72	-0.43	55.50	-0.89	-0.51	ZZ
WANWA		53.50	-2.72	-1.63	53.50	-2.89	-1.65	ZZ
WDDXT2		54.65	-1.57	-0.94	55.10	-1.29	-0.74	ZZ
WK87HC		59.05	2.83	1.70	58.95	2.56	1.46	ZZ
WNBYT		57.95	1.73	1.04	57.75	1.36	0.78	ZZ
XHWQ1		56.50	0.28	0.17	57.00	0.61	0.35	ZZ
Y3TDJU		56.00	-0.22	-0.13	56.50	0.11	0.06	ZZ
ZAFU9G		56.50	0.28	0.17	56.50	0.11	0.06	ZZ
ZDHNEF		56.00	-0.22	-0.13	56.00	-0.39	-0.22	ZZ
ZGEF3C		56.00	-0.22	-0.13	56.50	0.11	0.06	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample A81-A82 Lab Mean	Sample A81-A82 Diff from Grand Mean	Sample A81-A82 CPV	Sample A83-A84 Lab Mean	Sample A83-A84 Diff from Grand Mean	Sample A83-A84 CPV	Instr Code
ZP5M77		59.00	2.78	1.67	59.00	2.61	1.49	ZZ
ZQYKLR		56.35	0.13	0.08	57.35	0.96	0.55	ZZ
ZRUYZH		57.20	0.98	0.59	57.70	1.31	0.75	ZZ

Summary Statistics

	Sample A81-A82	Sample A83-A84
Grand Means	56.222 Type A	56.387 Type A
Stnd Dev Btwn Labs	1.667 Type A	1.750 Type A

Statistics based on 105 of 108 reporting participants

Samples A81-A82: Polyisoprene compound, batch #1 & A83-A84: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #620

L3U7Y8 (X) - Data for Sample set A81-A82 are high.

MHNRZ9 (X) - Data for Sample set A81-A82 are low.

NW6RF3 (X) - Data for all Samples are low. Possible Systematic Error.

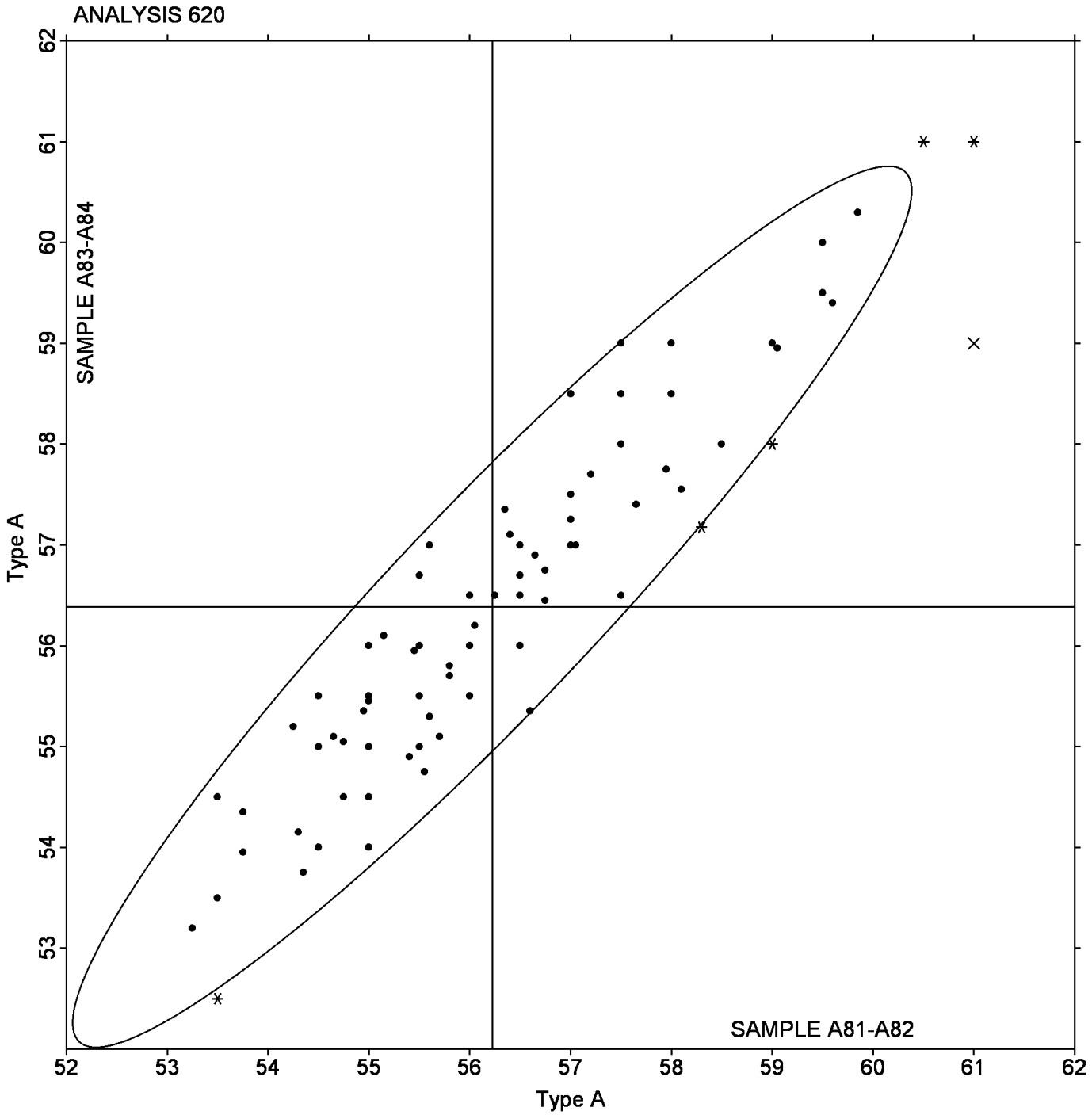
Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

Grand Mean Sample **A81-A82** = 56.222 Type A

Grand Mean Sample **A83-A84** = 56.387 Type A



Rubber Interlaboratory Testing Program

Analysis 630

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

		Sample A81-A82			Sample J81-J82			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1E87V7	X	3,199.5	-12.2	-0.10	2,486.5	-565.6	-3.52	ZZ
2G249S		3,166.0	-45.7	-0.36	3,003.0	-49.1	-0.31	ZZ
3K3HJ3		3,285.2	73.4	0.58	3,083.8	31.7	0.20	ZZ
4E2WTJ		3,186.5	-25.2	-0.20	3,225.0	172.9	1.08	ZZ
4GCAGZ		3,121.5	-90.2	-0.72	3,073.5	21.4	0.13	ZZ
5BLTTT		3,138.0	-73.7	-0.58	2,898.0	-154.1	-0.96	ZZ
5KG9J4		3,342.4	130.7	1.04	3,257.6	205.4	1.28	ZZ
8K9ZMN		3,247.0	35.3	0.28	3,040.0	-12.1	-0.08	ZZ
95LW5E		3,293.8	82.1	0.65	3,027.0	-25.2	-0.16	ZZ
9EURUK		3,309.5	97.8	0.78	3,336.5	284.4	1.77	ZZ
9WF9Q6		3,161.0	-50.7	-0.40	3,074.5	22.4	0.14	ZZ
AH96H9		3,299.4	87.7	0.70	3,327.2	275.1	1.71	ZZ
B3RXUB		3,436.0	224.3	1.78	3,202.0	149.9	0.93	ZZ
BGQWW		3,268.5	56.8	0.45	3,152.0	99.9	0.62	ZZ
EGKSC3		3,285.5	73.8	0.58	2,991.0	-61.1	-0.38	ZZ
ERQ79F	*	3,241.5	29.8	0.24	2,688.0	-364.1	-2.27	ZZ
ESYKDC		3,175.0	-36.7	-0.29	3,092.5	40.4	0.25	ZZ
F57VZA	*	3,574.9	363.2	2.88	3,130.8	78.6	0.49	ZZ
GXM7U6		3,334.3	122.6	0.97	3,413.6	361.4	2.25	ZZ
H4U1S1		3,112.0	-99.7	-0.79	2,855.5	-196.6	-1.22	ZZ
HZP8UP		3,366.0	154.3	1.22	3,116.5	64.4	0.40	ZZ
MBQN3V		3,006.0	-205.7	-1.63	2,863.0	-189.1	-1.18	ZZ
N118LM		3,214.0	2.3	0.02	2,987.0	-65.1	-0.41	ZZ
N5VG3U		3,070.8	-140.9	-1.12	2,920.8	-131.3	-0.82	ZZ
N96LG9		3,251.5	39.8	0.32	3,248.5	196.4	1.22	ZZ
NWYVG		3,191.0	-20.7	-0.16	3,134.0	81.9	0.51	ZZ
P4A923		3,376.5	164.7	1.31	2,995.3	-56.9	-0.35	ZZ
PCY6QX		3,073.5	-138.2	-1.10	2,969.5	-82.6	-0.51	ZZ
R9ADPE		3,263.4	51.7	0.41	3,053.1	0.9	0.01	ZZ
RBR3AC		3,055.7	-156.0	-1.24	2,899.7	-152.5	-0.95	ZZ
SDAWN		3,183.5	-28.2	-0.22	2,967.5	-84.6	-0.53	ZZ
T1P49G		3,261.5	49.8	0.39	2,887.0	-165.1	-1.03	ZZ
U4NRBL		3,111.0	-100.7	-0.80	3,166.5	114.4	0.71	ZZ
ULVRSS		3,267.0	55.3	0.44	3,175.5	123.4	0.77	ZZ
V93M3T		3,073.0	-138.7	-1.10	2,871.5	-180.6	-1.12	ZZ

Rubber Interlaboratory Testing Program

Analysis 630

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

		Sample A81-A82			Sample J81-J82			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
W7QA1G		3,252.0	40.3	0.32	3,040.0	-12.1	-0.08	ZZ
WE8NXV		3,102.0	-109.7	-0.87	2,905.0	-147.1	-0.92	ZZ
WWYN6		3,203.0	-8.7	-0.07	2,965.5	-86.6	-0.54	ZZ
XVC923	*	3,000.5	-211.2	-1.67	3,230.5	178.4	1.11	ZZ
ZUF91G		2,957.3	-254.4	-2.02	2,765.9	-286.2	-1.78	ZZ

Summary Statistics

	Sample A81-A82	Sample J81-J82
Grand Means	3,211.72 psi	3,052.14 psi
Stnd Dev Btwn Labs	126.15 psi	160.74 psi

Statistics based on 39 of 40 reporting participants

Summary Statistics in SI Units

	Sample A81-A82	Sample J81-J82
Grand Means	22.144 MPa	21.04 MPa
Stnd Dev Btwn Labs	0.870 MPa	1.11 MPa

Statistics based on 39 of 40 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #630

1E87V7 (X) - Data for Sample set J81-J82 are low.

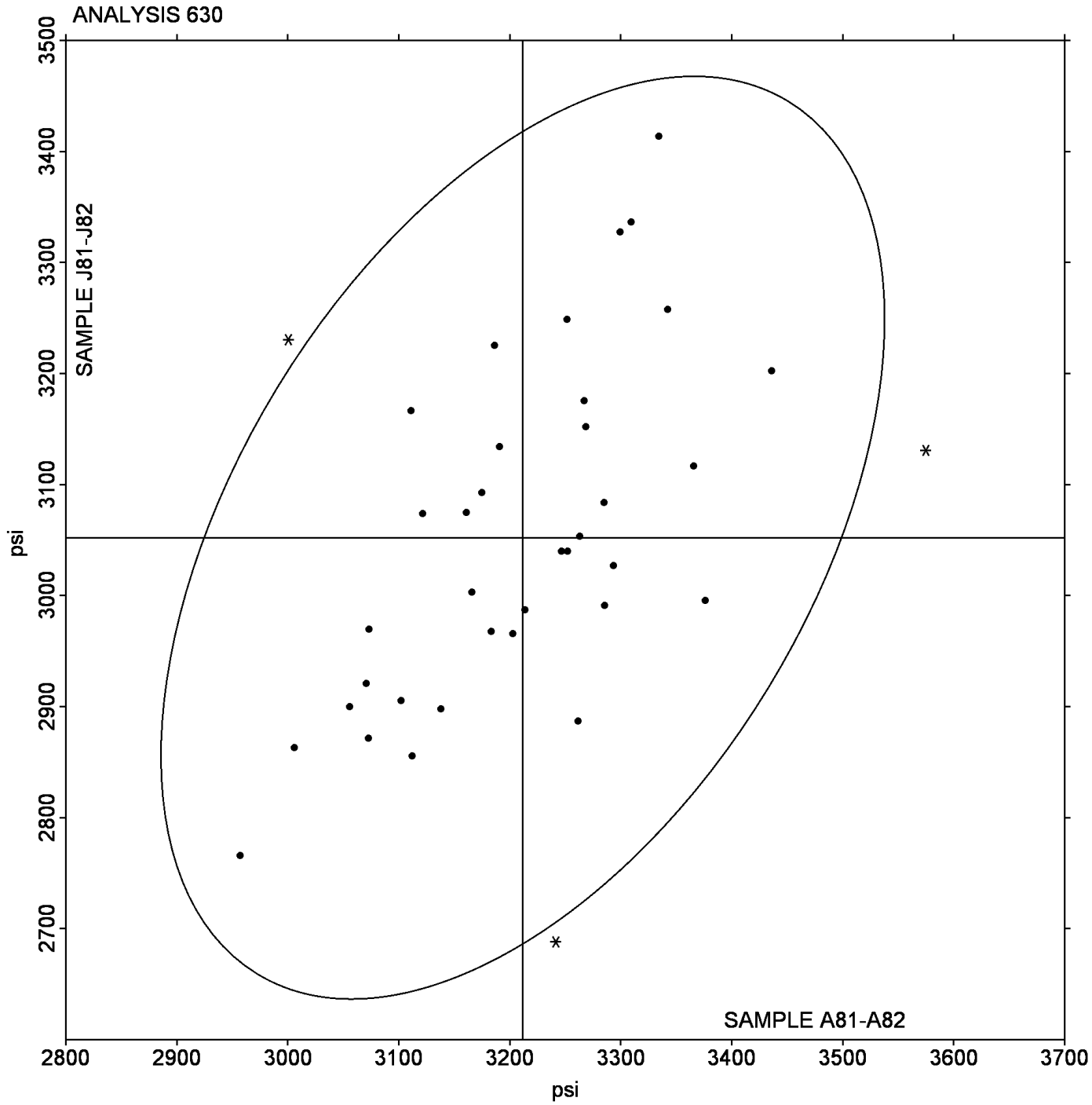
Rubber Interlaboratory Testing Program

Analysis 630

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

Grand Mean Sample **A81-A82** = 3,211.72 psi

Grand Mean Sample **J81-J82** = 3,052.14 psi



Rubber Interlaboratory Testing Program

Analysis 631

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

		Sample A81-A82			Sample J81-J82			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1DY599		559.5	15.7	0.79	567.5	23.7	1.17	ZZ
1NCD1G		565.5	21.7	1.10	558.0	14.2	0.70	ZZ
22UELE		528.0	-15.8	-0.80	535.0	-8.8	-0.43	ZZ
2FL6L8		550.5	6.7	0.34	549.5	5.7	0.28	ZZ
2HKMGR		527.5	-16.3	-0.82	538.0	-5.8	-0.29	ZZ
5TAEC5		585.0	41.2	2.08	559.0	15.2	0.75	ZZ
73XSBT	X	565.5	21.7	1.10	612.5	68.7	3.38	ZZ
8HEZ5X	*	529.9	-13.9	-0.70	500.2	-43.6	-2.15	ZZ
A9H9S7		517.5	-26.3	-1.33	512.5	-31.3	-1.54	ZZ
B11LB7		520.8	-23.0	-1.16	542.9	-0.9	-0.04	ZZ
B5BQQL		554.5	10.7	0.54	541.0	-2.8	-0.14	ZZ
B6CDTJ		555.0	11.2	0.57	583.5	39.7	1.95	ZZ
CS7BD3		547.0	3.2	0.16	543.5	-0.3	-0.02	ZZ
CWXEY6		553.0	9.2	0.47	531.5	-12.3	-0.61	ZZ
DDZ53G		546.0	2.2	0.11	544.5	0.7	0.03	ZZ
ESH87R		558.0	14.2	0.72	555.5	11.7	0.58	ZZ
FSNCF7		532.0	-11.8	-0.60	539.5	-4.3	-0.21	ZZ
H71DHG		543.5	-0.3	-0.01	539.0	-4.8	-0.24	ZZ
HDHWP		568.0	24.2	1.22	573.5	29.7	1.46	ZZ
J52KW3		533.5	-10.3	-0.52	554.0	10.2	0.50	ZZ
JMGZW		504.0	-39.8	-2.01	522.5	-21.3	-1.05	ZZ
K6PJLK		543.0	-0.8	-0.04	558.0	14.2	0.70	ZZ
KQ92Z7		525.0	-18.8	-0.95	517.5	-26.3	-1.30	ZZ
KQTPR1		537.0	-6.8	-0.34	531.0	-12.8	-0.63	ZZ
MKTHP2		527.5	-16.3	-0.82	509.0	-34.8	-1.72	ZZ
QNMBG		556.5	12.7	0.64	566.5	22.7	1.12	ZZ
S555MQ		567.3	23.5	1.19	562.5	18.6	0.92	ZZ
SA712W		541.5	-2.3	-0.12	542.0	-1.8	-0.09	ZZ
SC3NS7		548.5	4.7	0.24	542.5	-1.3	-0.07	ZZ
SE5V6C	X	617.9	74.1	3.74	624.5	80.7	3.97	ZZ
SXU63Y		566.2	22.4	1.13	556.9	13.0	0.64	ZZ
T2XZAU		581.5	37.7	1.91	586.0	42.2	2.08	ZZ
UB4F25		571.0	27.2	1.38	563.0	19.2	0.94	ZZ
WDWGJ		551.0	7.2	0.36	557.5	13.7	0.67	ZZ
WPA1XV		512.3	-31.5	-1.59	523.7	-20.1	-0.99	ZZ

Rubber Interlaboratory Testing Program

Analysis 631

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

WebCode	Data Flag	Sample A81-A82 Lab Mean	Sample A81-A82 Diff from Grand Mean	Sample A81-A82 CPV	Sample J81-J82 Lab Mean	Sample J81-J82 Diff from Grand Mean	Sample J81-J82 CPV	Instr Code
XB611A		553.5	9.7	0.49	549.0	5.2	0.26	ZZ
Y1AMYX		533.0	-10.8	-0.54	538.0	-5.8	-0.29	ZZ
YU6SVQ		505.0	-38.8	-1.96	510.5	-33.3	-1.64	ZZ
ZLMHGP		538.0	-5.8	-0.29	543.0	-0.8	-0.04	ZZ
ZN6MYS		527.0	-16.8	-0.85	518.0	-25.8	-1.27	ZZ

Summary Statistics

	Sample A81-A82	Sample J81-J82
Grand Means	543.78 percent	543.82 percent
Stnd Dev Btwn Labs	19.79 percent	20.30 percent

Statistics based on 38 of 40 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #631

73XSBT (X) - Data for Sample set J81-J82 are high.

SE5V6C (X) - Data for all Samples are high.

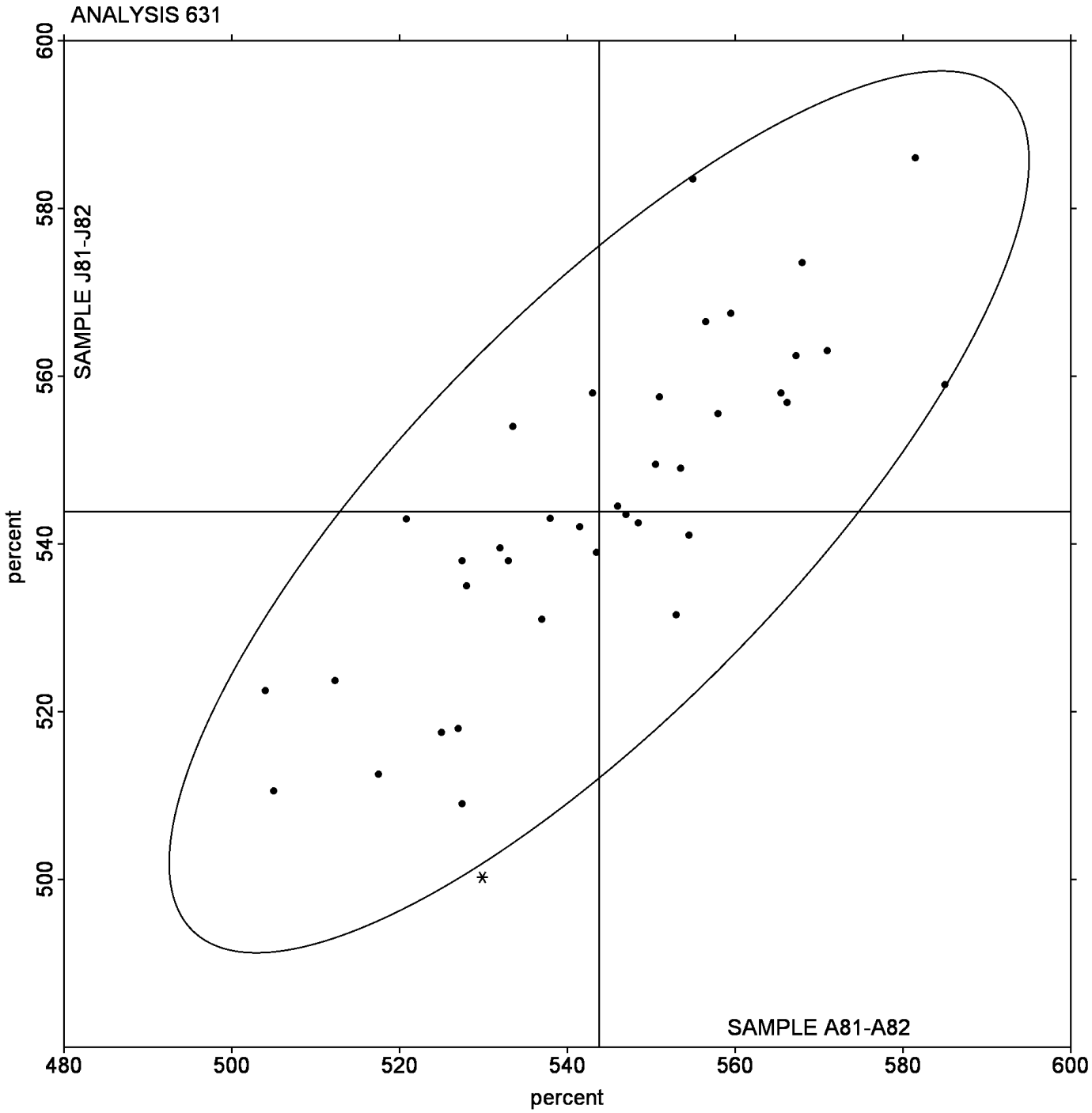
Rubber Interlaboratory Testing Program

Analysis 631

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

Grand Mean Sample **A81-A82** = 543.78 percent

Grand Mean Sample **J81-J82** = 543.82 percent



Rubber Interlaboratory Testing Program

Analysis 632

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

		Sample A81-A82			Sample J81-J82			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1AW6SM		1,339.5	65.1	0.73	1,190.5	21.4	0.18	ZZ
2CQPVG		1,079.8	-194.6	-2.19	1,008.4	-160.7	-1.37	ZZ
2G9KVS		1,377.0	102.6	1.15	1,287.5	118.4	1.01	ZZ
2HHTMZ		1,275.5	1.1	0.01	1,175.0	5.9	0.05	ZZ
3BRLFG	*	1,247.0	-27.4	-0.31	881.5	-287.6	-2.45	ZZ
67H8GV		1,290.5	16.1	0.18	1,165.5	-3.6	-0.03	ZZ
749MV2	*	1,183.5	-90.9	-1.02	844.5	-324.6	-2.77	ZZ
7D6VWQ		1,406.5	132.1	1.49	1,276.0	106.9	0.91	ZZ
8EEP9Y		1,348.4	73.9	0.83	1,343.4	174.3	1.49	ZZ
8S39RS		1,241.5	-32.9	-0.37	1,183.5	14.4	0.12	ZZ
9G17WW		1,062.0	-212.4	-2.39	998.0	-171.1	-1.46	ZZ
9P7U2U		1,149.0	-125.4	-1.41	1,047.0	-122.1	-1.04	ZZ
APEJEC		1,456.3	181.9	2.05	1,238.3	69.2	0.59	ZZ
C189WP		1,117.0	-157.4	-1.77	1,068.0	-101.1	-0.86	ZZ
C1MZK9		1,274.5	0.1	0.00	1,216.0	46.9	0.40	ZZ
C44654		1,218.5	-55.9	-0.63	1,139.0	-30.1	-0.26	ZZ
CESW2F		1,276.5	2.1	0.02	1,141.0	-28.1	-0.24	ZZ
DE9B25	X	3,072.4	1,798.0	20.23	1,082.9	-86.2	-0.73	ZZ
DJLFGJ		1,226.5	-47.9	-0.54	1,247.5	78.4	0.67	ZZ
GW34K6		1,222.5	-51.9	-0.58	1,134.0	-35.1	-0.30	ZZ
JJWY2Z		1,233.0	-41.4	-0.47	1,136.5	-32.6	-0.28	ZZ
KGGTNE		1,246.0	-28.4	-0.32	1,128.0	-41.1	-0.35	ZZ
KLAR47		1,350.0	75.6	0.85	1,332.5	163.4	1.39	ZZ
L9EZYU		1,221.5	-52.9	-0.60	1,045.5	-123.6	-1.05	ZZ
M53KBU		1,275.5	1.1	0.01	1,210.5	41.4	0.35	ZZ
NY66HW		1,264.0	-10.4	-0.12	1,323.0	153.9	1.31	ZZ
P12RFG		1,262.5	-11.9	-0.13	1,091.5	-77.6	-0.66	ZZ
QN57CV		1,349.5	75.1	0.84	1,378.5	209.4	1.79	ZZ
RBCLHR		1,256.5	-17.9	-0.20	1,229.0	59.9	0.51	ZZ
SWMTW		1,276.0	1.6	0.02	1,241.5	72.4	0.62	ZZ
TMQC9X		1,334.7	60.3	0.68	1,139.2	-30.0	-0.26	ZZ
TU1H6C		1,397.0	122.6	1.38	1,237.8	68.7	0.59	ZZ
UE82UB		1,290.8	16.4	0.18	1,087.8	-81.3	-0.69	ZZ
UFUFU1		1,271.0	-3.4	-0.04	1,228.5	59.4	0.51	ZZ
UPFTKJ		1,260.5	-13.9	-0.16	1,249.0	79.9	0.68	ZZ

Rubber Interlaboratory Testing Program

Analysis 632

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

WebCode	Data Flag	Sample A81-A82 Lab Mean	Sample A81-A82 Diff from Grand Mean	Sample A81-A82 CPV	Sample J81-J82 Lab Mean	Sample J81-J82 Diff from Grand Mean	Sample J81-J82 CPV	Instr Code
UYMFRY		1,470.7	196.3	2.21	1,243.4	74.3	0.63	ZZ
VLHGUD		1,300.5	26.1	0.29	1,170.0	0.9	0.01	ZZ
X31AYD		1,202.5	-71.9	-0.81	1,050.5	-118.6	-1.01	ZZ
XQJGLT		1,295.5	21.1	0.24	1,255.0	85.9	0.73	ZZ
ZKBGVQ		1,353.2	78.8	0.89	1,232.8	63.7	0.54	ZZ

Summary Statistics

	A81-A82	J81-J82
Grand Means	1,274.44 psi	1,169.10 psi
Stnd Dev Btwn Labs	88.88 psi	117.31 psi

Statistics based on 39 of 40 reporting participants

Summary Statistics in SI Units

	A81-A82	J81-J82
Grand Means	8.7869 MPa	8.06 MPa
Stnd Dev Btwn Labs	0.6128 MPa	0.81 MPa

Statistics based on 39 of 40 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #632

DE9B25 (X) - Data for Sample set A81-A82 are high.

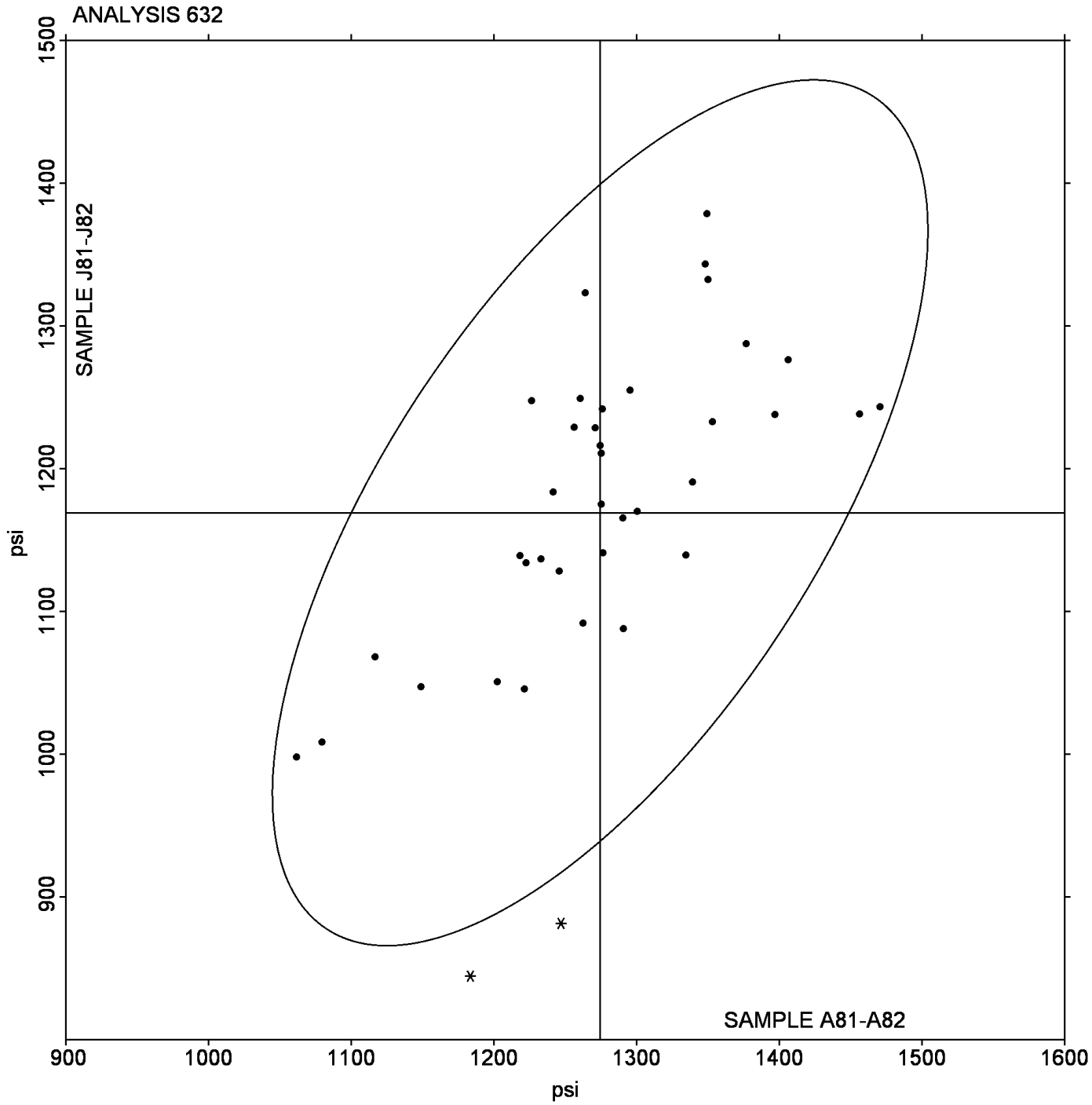
Rubber Interlaboratory Testing Program

Analysis 632

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

Grand Mean Sample **A81-A82** = 1,274.44 psi

Grand Mean Sample **J81-J82** = 1,169.10 psi



Rubber Interlaboratory Testing Program

Analysis 633

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

		Sample A81-A82			Sample J81-J82			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1P8UGH		286.5	-3.6	-0.22	295.5	25.0	0.84	ZZ
2EH3E5		314.1	24.1	1.52	315.9	45.3	1.52	ZZ
46B8YG		302.0	11.9	0.75	319.0	48.5	1.63	ZZ
4JWTE6	*	275.5	-14.6	-0.92	181.0	-89.5	-3.01	ZZ
4NYP6L		316.9	26.8	1.69	281.4	10.9	0.37	ZZ
4QHTNP		286.5	-3.6	-0.22	262.0	-8.5	-0.29	ZZ
5AJ8HL		290.5	0.4	0.03	281.5	11.0	0.37	ZZ
5FEY4P		289.0	-1.1	-0.07	287.5	17.0	0.57	ZZ
6GY5TL		306.7	16.6	1.05	268.1	-2.4	-0.08	ZZ
6KWT6P		308.5	18.4	1.16	296.5	26.0	0.87	ZZ
6MDUD8		277.0	-13.1	-0.82	305.5	35.0	1.18	ZZ
78KQFH		312.8	22.8	1.44	292.4	21.9	0.74	ZZ
7A16GB		266.9	-23.1	-1.46	253.8	-16.7	-0.56	ZZ
8FP82M		250.0	-40.1	-2.53	248.0	-22.5	-0.76	ZZ
AHL2RV	X	226.0	-64.1	-4.04	224.5	-46.0	-1.54	ZZ
AJFP1D		299.0	8.9	0.56	277.5	7.0	0.23	ZZ
CX9Y1P		269.5	-20.6	-1.30	270.0	-0.5	-0.02	ZZ
DLC725		307.5	17.4	1.10	307.5	37.0	1.24	ZZ
DT18SM		279.2	-10.9	-0.68	271.2	0.7	0.02	ZZ
E4GCJH		308.5	18.4	1.16	285.0	14.5	0.49	ZZ
F1NMA4	*	281.0	-9.1	-0.57	189.0	-81.5	-2.74	ZZ
FQR5SV		275.0	-15.1	-0.95	238.5	-32.0	-1.07	ZZ
JTMQG3		290.0	-0.1	0.00	272.0	1.5	0.05	ZZ
KBCUA4		277.0	-13.1	-0.82	258.5	-12.0	-0.40	ZZ
PHZNLC		298.0	7.9	0.50	281.5	11.0	0.37	ZZ
PLLVZL		285.5	-4.6	-0.29	266.0	-4.5	-0.15	ZZ
QC7CVU	X	291.4	1.3	0.08	2,920.8	2,650.3	88.99	ZZ
QK5VFV		296.0	5.9	0.37	317.0	46.5	1.56	ZZ
QLE483	*	318.8	28.7	1.81	248.8	-21.7	-0.73	ZZ
R8QTNQ		291.0	0.9	0.06	288.5	18.0	0.60	ZZ
S37QL5		272.5	-17.6	-1.11	264.0	-6.5	-0.22	ZZ
SB98LP		279.5	-10.6	-0.67	259.0	-11.5	-0.39	ZZ
SVBRAJ		288.5	-1.6	-0.10	292.5	22.0	0.74	ZZ
UYCAT2		290.5	0.4	0.03	248.5	-22.0	-0.74	ZZ
VD5QLN		277.5	-12.6	-0.79	247.5	-23.0	-0.77	ZZ

Rubber Interlaboratory Testing Program

Analysis 633

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

WebCode	Data Flag	Sample A81-A82 Lab Mean	Sample A81-A82 Diff from Grand Mean	Sample A81-A82 CPV	Sample J81-J82 Lab Mean	Sample J81-J82 Diff from Grand Mean	Sample J81-J82 CPV	Instr Code
VKQK75		279.5	-10.6	-0.67	255.5	-15.0	-0.50	ZZ
X6B1SJ		274.5	-15.6	-0.98	238.0	-32.5	-1.09	ZZ
XDVG4T		298.5	8.4	0.53	277.0	6.5	0.22	ZZ
YSB2JX		312.3	22.2	1.40	284.1	13.6	0.46	ZZ
ZCKJF6		290.1	0.0	0.00	253.8	-16.7	-0.56	ZZ

Summary Statistics

	A81-A82	J81-J82
Grand Means	290.06 psi	270.50 psi
Stnd Dev Btwn Labs	15.87 psi	29.78 psi

Statistics based on 38 of 40 reporting participants

Summary Statistics in SI Units

	A81-A82	J81-J82
Grand Means	1.9999 MPa	1.87 MPa
Stnd Dev Btwn Labs	0.1094 MPa	0.21 MPa

Statistics based on 38 of 40 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #633

AHL2RV (X) - Data for Sample set A81-A82 are low.

QC7CVU (X) - Extreme data for both Sample sets. Data may be off by a factor of 10.

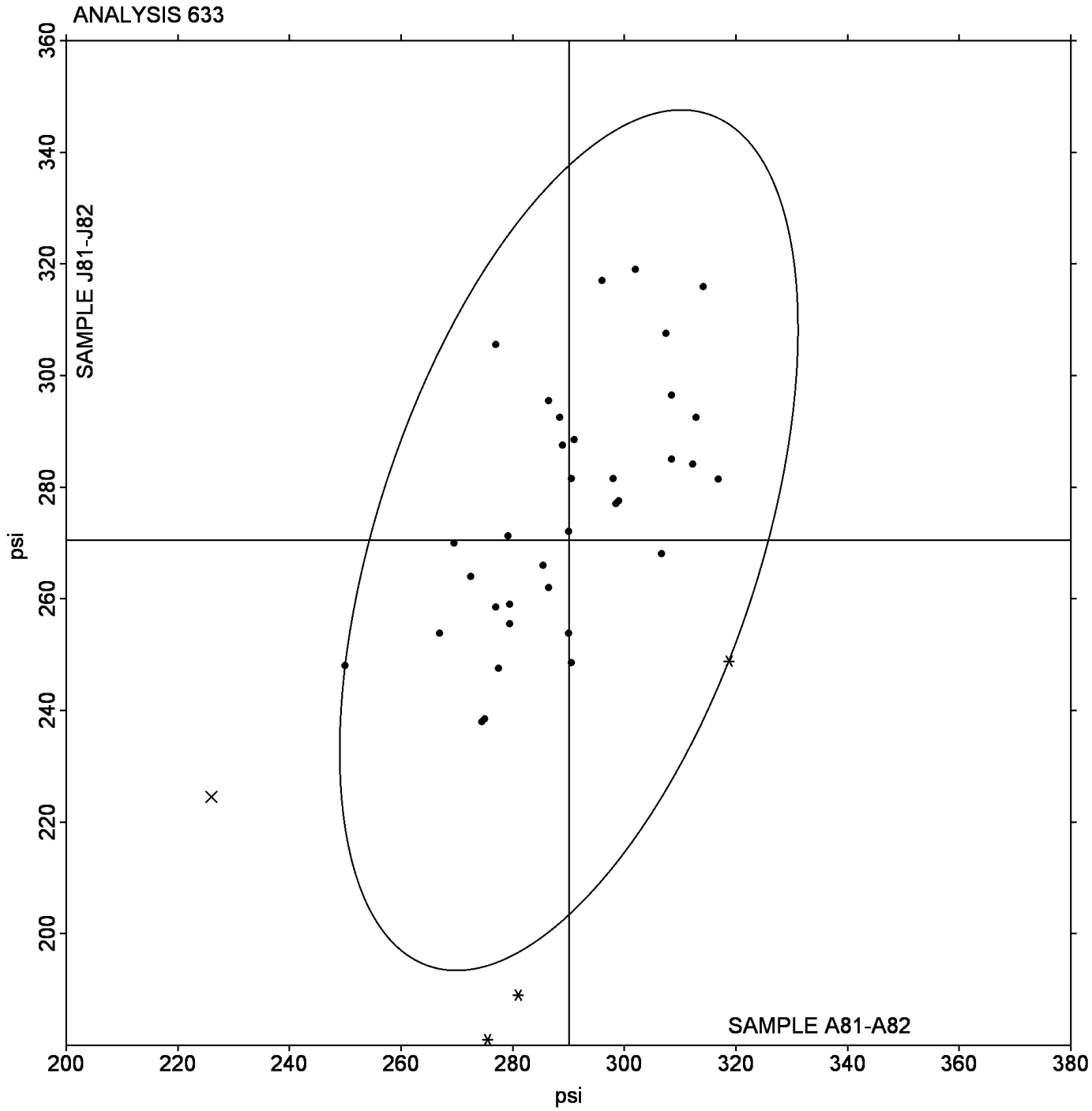
Rubber Interlaboratory Testing Program

Analysis 633

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

Grand Mean Sample **A81-A82** = 290.06 psi

Grand Mean Sample **J81-J82** = 270.50 psi



Rubber Interlaboratory Testing Program

Analysis 660

Mooney Viscosity: 4-minute readings (ML 1 + 4)

		Sample S81-S82			Sample S83-S84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1BG77J		46.85	-0.97	-1.45	45.03	-1.44	-1.53	MP
3JBWZ7		48.57	0.75	1.13	46.97	0.49	0.52	MR
6XCC7W		48.23	0.42	0.63	46.60	0.13	0.14	TV
7129UZ		48.18	0.37	0.55	45.93	-0.54	-0.57	MR
8F48NJ		47.70	-0.12	-0.17	45.97	-0.51	-0.54	MR
8JG4ZE		48.23	0.42	0.63	46.72	0.24	0.26	MR
9432CP		47.13	-0.68	-1.03	46.28	-0.19	-0.20	MZ
AJ27EL		47.83	0.02	0.03	46.35	-0.12	-0.13	MR
BEAMEG		48.50	0.69	1.03	46.43	-0.04	-0.04	XX
CJBFDJ		48.52	0.71	1.06	48.46	1.99	2.11	MM
D97NM4		47.26	-0.56	-0.84	46.33	-0.15	-0.15	MR
DDKWY		48.15	0.33	0.50	47.95	1.48	1.57	MR
DX2BXF		48.08	0.27	0.40	46.55	0.08	0.08	MP
GNF1KK		46.61	-1.21	-1.82	46.21	-0.27	-0.28	MR
H3GFX6		47.85	0.03	0.05	46.38	-0.09	-0.09	MR
JK7CDT		47.63	-0.19	-0.29	46.35	-0.12	-0.13	MR
JN861J		47.83	0.02	0.03	46.55	0.08	0.08	MR
JQT7V5		47.12	-0.70	-1.05	46.57	0.09	0.10	MR
L22WZ6		47.32	-0.50	-0.75	45.60	-0.87	-0.93	MR
LBX3FX		48.32	0.50	0.75	46.92	0.44	0.47	MR
LWDZLG		48.23	0.42	0.63	46.97	0.49	0.52	MR
MQJT1L		48.32	0.50	0.75	47.13	0.66	0.70	MR
MQLETK		47.67	-0.15	-0.22	46.53	0.06	0.06	MR
NMCM4T		47.27	-0.55	-0.83	46.18	-0.29	-0.31	MP
PWGULD	X	50.55	2.73	4.11	46.62	0.14	0.15	TV
QCWUN		47.42	-0.40	-0.60	46.23	-0.24	-0.25	MR
QQUMF		47.54	-0.28	-0.42	46.10	-0.38	-0.40	TV
QRY9LB		47.28	-0.53	-0.80	45.88	-0.59	-0.63	MR
TA4TFW		47.13	-0.68	-1.03	46.03	-0.44	-0.47	MR
UD4M6R		48.52	0.70	1.05	47.03	0.56	0.59	MR
V53YGY		49.00	1.18	1.78	47.60	1.13	1.20	MP
VDPR8N		48.00	0.18	0.28	46.40	-0.07	-0.08	MR
WPAXA	*	49.55	1.73	2.61	48.63	2.16	2.29	MM
X4RNB7	X	45.47	-2.35	-3.53	45.80	-0.67	-0.71	MM
X7K9NU		48.37	0.55	0.83	48.18	1.71	1.81	MR

Rubber Interlaboratory Testing Program

Analysis 660

Mooney Viscosity: 4-minute readings (ML 1 + 4)

WebCode	Data Flag	Sample S81-S82 Lab Mean	Sample S81-S82 Diff from Grand Mean	Sample S81-S82 CPV	Sample S83-S84 Lab Mean	Sample S83-S84 Diff from Grand Mean	Sample S83-S84 CPV	Instr Code
XNLJNU		47.92	0.10	0.15	45.45	-1.02	-1.08	MR
YLM8XC		47.50	-0.32	-0.48	46.52	0.04	0.05	MR
YPBRNX	*	47.18	-0.63	-0.95	44.20	-2.27	-2.41	MR
YXFKFK		46.40	-1.42	-2.13	44.27	-2.21	-2.34	MR

Summary Statistics

	Sample S81-S82	Sample S83-S84
Grand Means	47.816 ML 1 + 4	46.473 ML 1 + 4
Stnd Dev Btwn Labs	0.665 ML 1 + 4	0.943 ML 1 + 4

Statistics based on 37 of 39 reporting participants

Samples S81-S82: SBR & S83-S84: Butyl

Comments on assigned Data Flags for Test #660

PWGULD (X) - Data for Sample set S81-S82 are high.

X4RNB7 (X) - Data for Sample set S81-S82 are low.

Instrument Code Listing

660 Mooney Viscosity: 4-minute readings (ML 1 + 4)

Instruments:

(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

(MZ) Rebuilt Monsanto Mooney Viscometer

(SF) Scott STI (any model)

(TV) Tech Pro Visc Tech (any model)

(XA) Special In-House Instrument

(XX) Instrument make/model not specified by lab

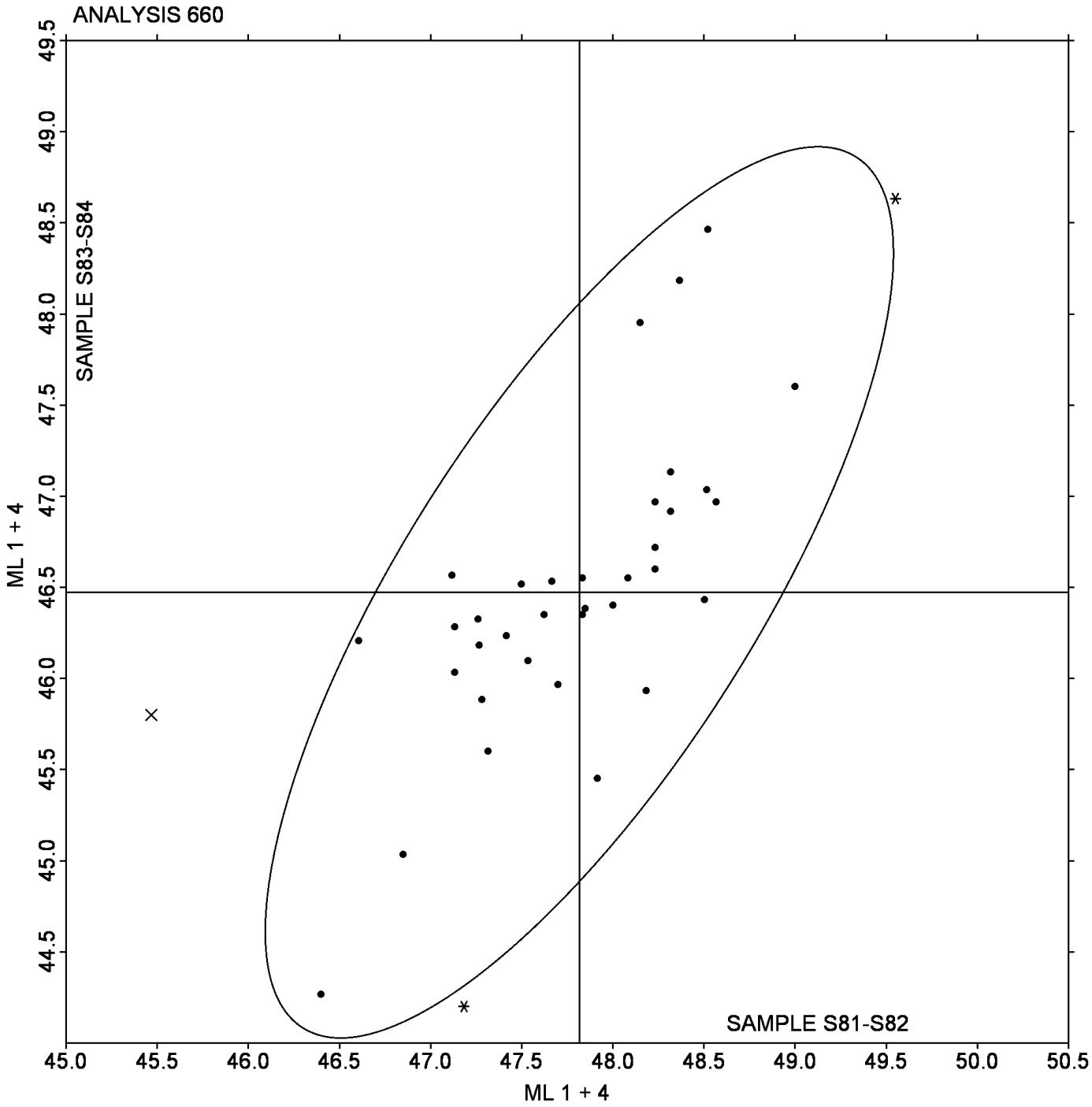
Rubber Interlaboratory Testing Program

Analysis 660

Mooney Viscosity: 4-minute readings (ML 1 + 4)

Grand Mean Sample **S81-S82** = 47.816 ML 1 + 4

Grand Mean Sample **S83-S84** = 46.473 ML 1 + 4



Rubber Interlaboratory Testing Program

Analysis 661

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

		Sample S81-S82			Sample S83-S84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
115P17		48.18	0.45	0.59	44.07	-0.66	-0.67	MR
24VAHE		47.32	-0.41	-0.54	43.75	-0.97	-0.99	MR
3ESN91		47.54	-0.20	-0.25	44.24	-0.49	-0.50	TV
4SGRK4		47.67	-0.06	-0.08	45.20	0.48	0.49	MR
4WBPS8		47.63	-0.11	-0.14	44.83	0.11	0.11	MR
5TVT79		47.42	-0.31	-0.41	44.82	0.09	0.10	MR
6ELTHB		47.26	-0.47	-0.61	44.83	0.10	0.11	MR
736LAV		46.61	-1.13	-1.47	42.82	-1.90	-1.94	MR
9YYMW	X	48.52	0.79	1.03	51.33	6.60	6.73	MM
BC91XJ		49.00	1.27	1.65	45.30	0.58	0.59	MP
CHKNUD		48.15	0.42	0.55	46.02	1.29	1.32	MR
DD4BB9		48.23	0.50	0.65	45.03	0.31	0.32	MR
DURL4E		47.92	0.19	0.24	44.13	-0.59	-0.60	MR
F6ZWXL		47.28	-0.45	-0.58	44.12	-0.61	-0.62	MR
FCSVR8		47.85	0.12	0.16	44.78	0.06	0.06	MR
FZAV74		46.40	-1.33	-1.73	42.43	-2.29	-2.33	MR
HD5M62		48.00	0.27	0.35	44.75	0.03	0.03	MR
HHXAA		47.13	-0.60	-0.78	44.32	-0.41	-0.41	MZ
JDCVB8		48.37	0.64	0.83	46.60	1.88	1.92	MR
JPH597		47.12	-0.61	-0.80	44.37	-0.36	-0.36	MR
KFYSKZ		48.32	0.59	0.76	45.30	0.58	0.59	MR
LFHYB5		47.13	-0.60	-0.78	44.58	-0.14	-0.14	MR
LH22T8		48.08	0.35	0.46	44.45	-0.27	-0.28	MP
LL43VQ		47.50	-0.23	-0.30	45.25	0.53	0.54	MR
MSWRK	*	45.47	-2.26	-2.95	43.32	-1.41	-1.43	MM
ND644P		48.52	0.79	1.02	45.40	0.68	0.69	MR
NL2LGU		47.27	-0.46	-0.60	43.90	-0.82	-0.84	MM
PQ3KEB		48.57	0.84	1.09	45.27	0.54	0.56	MR
R9YJE1		47.70	-0.03	-0.04	44.27	-0.46	-0.46	MR
RARKBB	X	50.55	2.82	3.67	44.17	-0.56	-0.57	TV
RPE5T5		47.18	-0.55	-0.71	45.82	1.09	1.12	MR
RT52CG		48.32	0.59	0.76	45.28	0.56	0.57	MR
T14EZA		47.83	0.10	0.13	44.65	-0.07	-0.07	MR
TV5YW8		48.23	0.50	0.65	46.82	2.09	2.14	TV
XCDE9D		49.55	1.82	2.37	46.72	1.99	2.03	MM

Rubber Interlaboratory Testing Program

Analysis 661

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

WebCode	Data Flag	Sample S81-S82 Lab Mean	Sample S81-S82 Diff from Grand Mean	Sample S81-S82 CPV	Sample S83-S84 Lab Mean	Sample S83-S84 Diff from Grand Mean	Sample S83-S84 CPV	Instr Code
XMSQSB		46.85	-0.88	-1.15	43.30	-1.42	-1.45	MP
YDWHW		48.23	0.50	0.65	44.50	-0.22	-0.23	MR
ZAFRNT		48.50	0.77	1.01	44.79	0.07	0.07	XX

Summary Statistics

	S81-S82	S83-S84
Grand Means	47.731 ML 1 + 8	44.722 ML 1 + 8
Stnd Dev Btwn Labs	0.768 ML 1 + 8	0.980 ML 1 + 8

Statistics based on 36 of 38 reporting participants

Please refer to the sample information provided for Analysis 660.

Comments on assigned Data Flags for Test #661

9YYMWM (X) - Data for Sample set S83-S84 are high. Also inconsistent in testing within both sample sets.

RARKBB (X) - Data for Sample set S81-S82 are high.

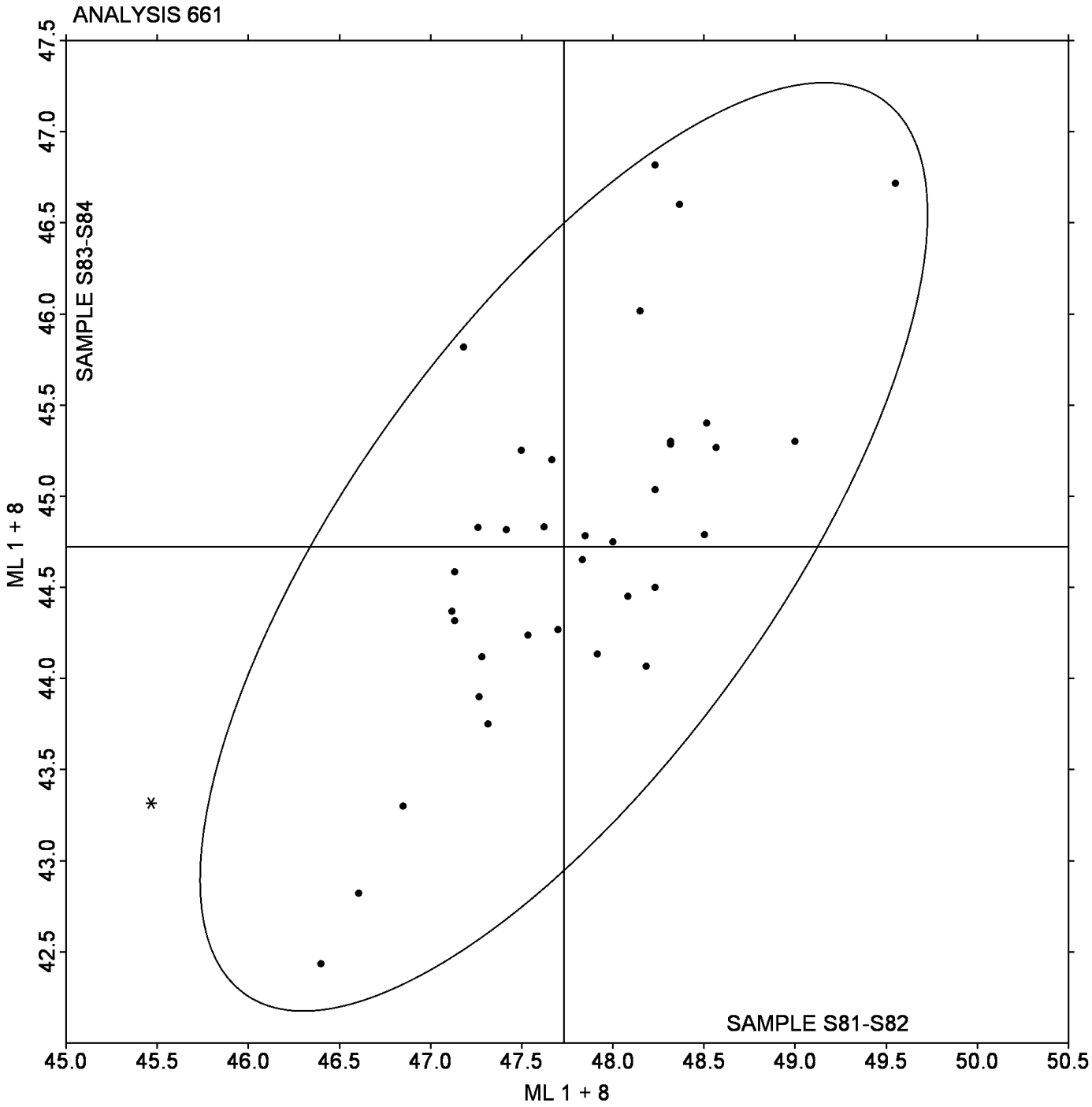
Rubber Interlaboratory Testing Program

Analysis 661

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

Grand Mean Sample **S81-S82** = 47.731 ML 1 + 8

Grand Mean Sample **S83-S84** = 44.722 ML 1 + 8



Rubber Interlaboratory Testing Program

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample W81-W82 Lab Mean	Sample W81-W82 Diff from Grand Mean	Sample W81-W82 CPV	Sample W83-W84 Lab Mean	Sample W83-W84 Diff from Grand Mean	Sample W83-W84 CPV	Instr Code
23K8WF		1.923	0.054	0.33	2.172	0.063	0.26	ZZ
2TYYV2	*	1.787	-0.083	-0.51	1.542	-0.567	-2.37	ZZ
38PL51		1.942	0.072	0.45	2.302	0.193	0.81	ZZ
3JWD96		1.957	0.087	0.54	2.198	0.090	0.38	ZZ
91RXXA	X	10.950	9.081	56.38	6.928	4.820	20.17	ZZ
AXZAMS		1.708	-0.161	-1.00	1.952	-0.157	-0.66	ZZ
C681D7		2.298	0.429	2.66	2.667	0.558	2.34	ZZ
CZHH7K		1.780	-0.089	-0.55	2.103	-0.006	-0.03	ZZ
DUMWB		1.900	0.031	0.19	2.118	0.010	0.04	ZZ
DW1JL1		1.777	-0.093	-0.58	2.055	-0.053	-0.22	ZZ
F6GR2N		1.673	-0.196	-1.22	1.957	-0.152	-0.64	ZZ
FD7G3V		1.773	-0.096	-0.60	2.043	-0.065	-0.27	ZZ
J4JUBY		1.762	-0.108	-0.67	1.892	-0.217	-0.91	ZZ
JSDGMA		1.800	-0.069	-0.43	2.155	0.047	0.19	ZZ
RLV4YJ		2.045	0.176	1.09	2.328	0.220	0.92	ZZ
SQNWKF		1.992	0.122	0.76	2.248	0.140	0.59	ZZ
WDNXJG		1.993	0.124	0.77	2.222	0.113	0.47	ZZ
YB45XD		1.670	-0.199	-1.24	1.892	-0.217	-0.91	ZZ

Summary Statistics

	Sample W81-W82	Sample W83-W84
Grand Means	1.8694 minutes	2.1085 minutes
Stnd Dev Btwn Labs	0.1611 minutes	0.2390 minutes

Statistics based on 17 of 18 reporting participants

Samples W81-W82: EPDM compound #1 & W83-W84: EPDM compound #2

Comments on assigned Data Flags for Test #669

91RXXA (X) - Data for all Samples are high.

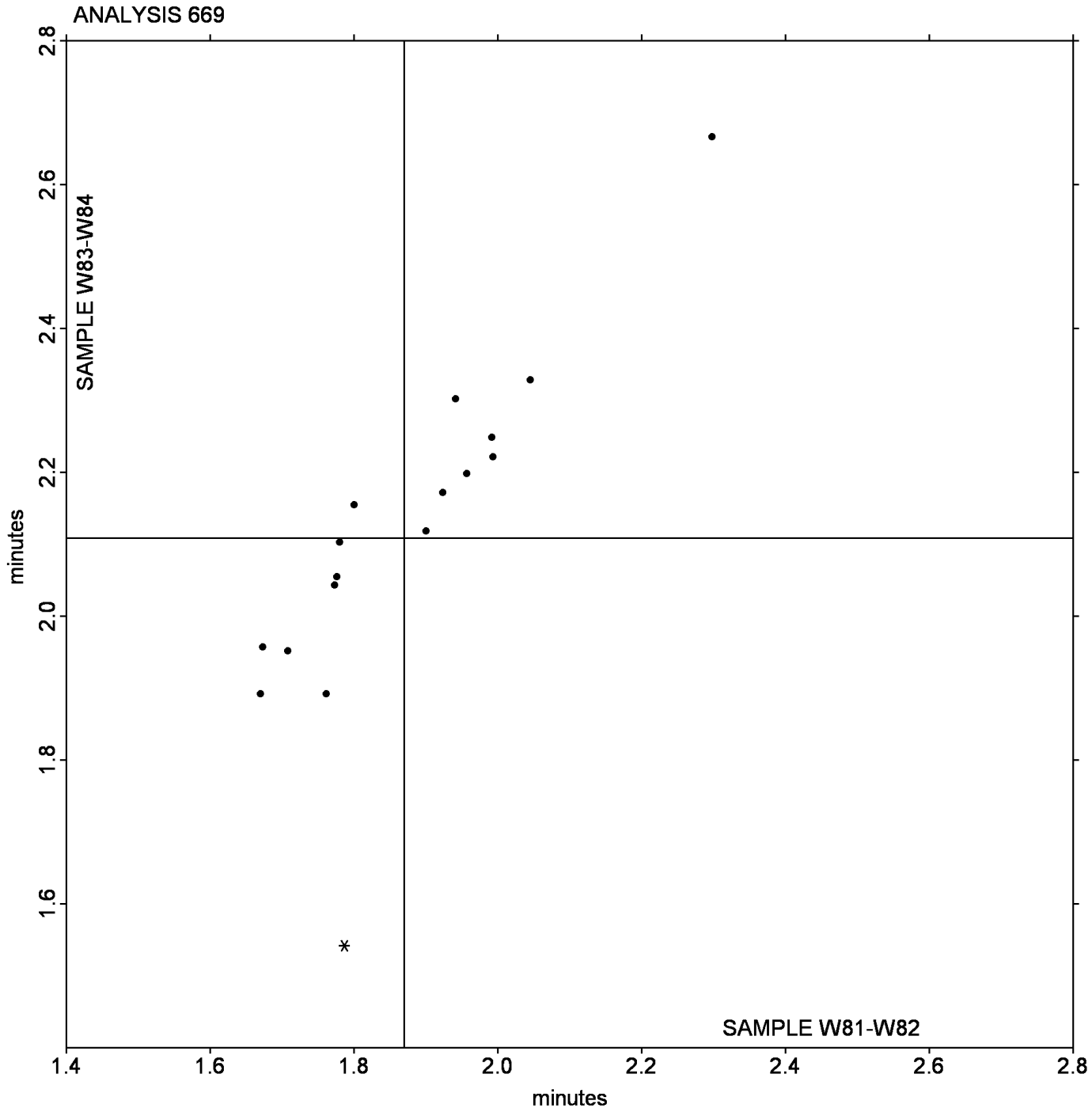
Rubber Interlaboratory Testing Program

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample **W81-W82** = 1.8694 minutes

Grand Mean Sample **W83-W84** = 2.1085 minutes



Rubber Interlaboratory Testing Program

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample W81-W82 Lab Mean	Diff from Grand Mean	CPV	Sample W83-W84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
41MVAZ		1.368	0.011	0.08	1.568	0.000	0.00	ZZ
667G7C		1.182	-0.176	-1.29	1.300	-0.268	-1.45	ZZ
6ZZ4YT		1.363	0.006	0.04	1.520	-0.048	-0.26	ZZ
7FVL1X		1.055	-0.303	-2.22	1.128	-0.440	-2.37	ZZ
BHDGBR		1.273	-0.084	-0.62	1.572	0.004	0.02	ZZ
DQNBGJ	*	1.337	-0.021	-0.15	1.755	0.187	1.01	ZZ
GCU1UR		1.592	0.234	1.71	1.805	0.237	1.28	ZZ
HDM6W3		1.270	-0.088	-0.64	1.368	-0.200	-1.08	ZZ
LA6ZW5		1.487	0.129	0.94	1.737	0.169	0.91	ZZ
MLF3CS		1.200	-0.158	-1.15	1.433	-0.135	-0.73	ZZ
MW867G		1.523	0.166	1.21	1.802	0.234	1.26	ZZ
NCF2B7		1.435	0.077	0.57	1.633	0.065	0.35	ZZ
NXQX8K		1.452	0.094	0.69	1.572	0.004	0.02	ZZ
QZJRR5		1.590	0.232	1.70	1.942	0.374	2.01	ZZ
R4ZDBN		1.475	0.117	0.86	1.663	0.095	0.51	ZZ
RFF9LL		1.310	-0.048	-0.35	1.490	-0.078	-0.42	ZZ
SDU1JK		1.207	-0.151	-1.11	1.360	-0.208	-1.12	ZZ
T2DTY4		1.272	-0.086	-0.63	1.556	-0.012	-0.06	ZZ
VLMAV		1.430	0.072	0.53	1.660	0.092	0.50	ZZ
XHXM7H		1.300	-0.058	-0.42	1.510	-0.058	-0.31	ZZ
XNM78C		1.430	0.072	0.53	1.625	0.057	0.31	ZZ
ZAPWTJ		1.320	-0.038	-0.28	1.500	-0.068	-0.37	ZZ

Summary Statistics

	Sample W81-W82	Sample W83-W84
Grand Means	1.3578 minutes	1.5682 minutes
Stnd Dev Btwn Labs	0.1366 minutes	0.1854 minutes

Statistics based on 22 of 22 reporting participants

Samples W81-W82: EPDM compound #1 & W83-W84: EPDM compound #2

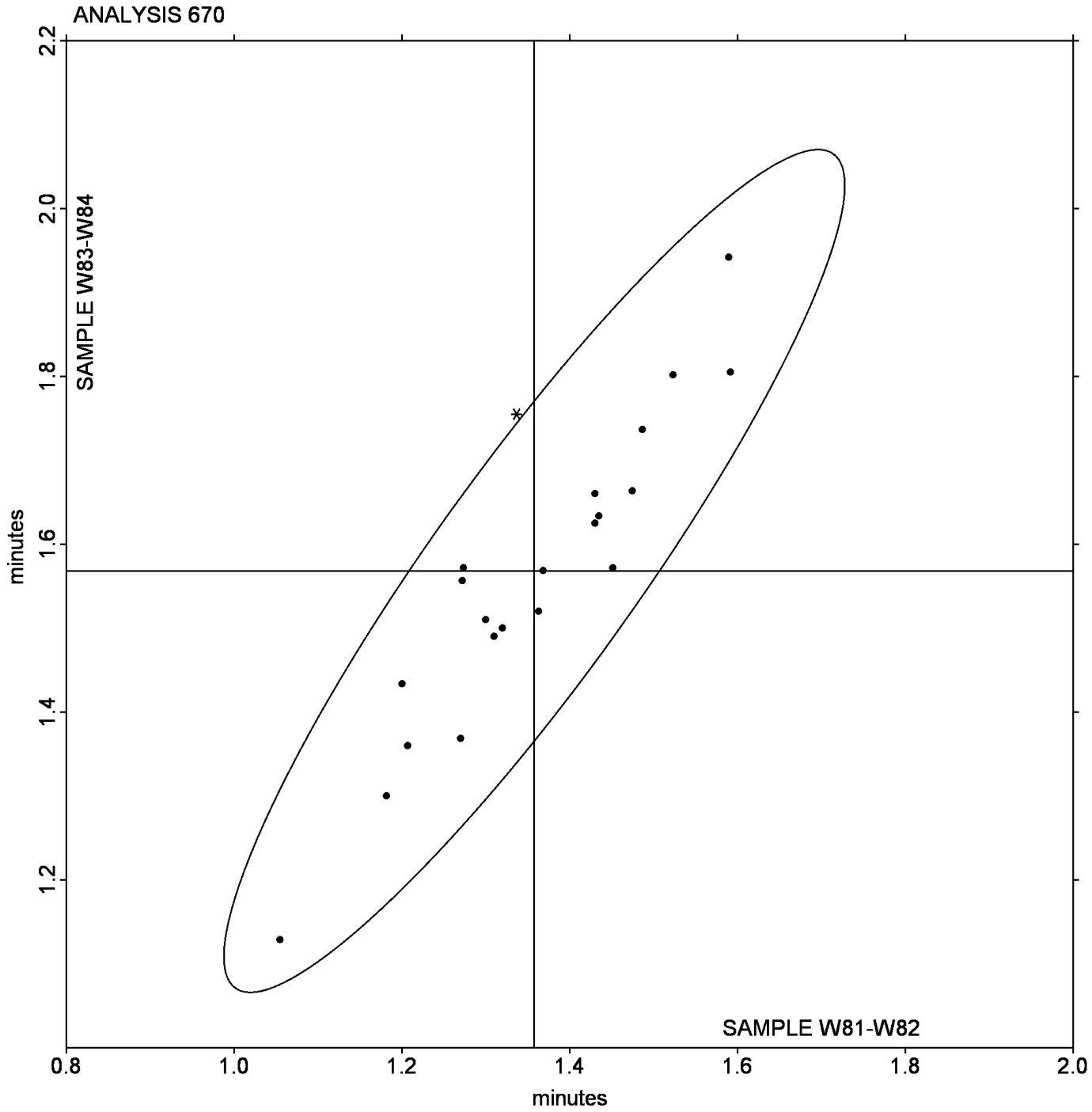
Rubber Interlaboratory Testing Program

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **W81-W82** = 1.3578 minutes

Grand Mean Sample **W83-W84** = 1.5682 minutes



Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample W81-W82 Lab Mean	Sample W81-W82 Diff from Grand Mean	Sample W81-W82 CPV	Sample W83-W84 Lab Mean	Sample W83-W84 Diff from Grand Mean	Sample W83-W84 CPV	Instr Code
21B9NT		3.402	-0.075	-0.27	3.922	-0.068	-0.23	ZZ
4ZGMLU		3.593	0.117	0.42	4.030	0.040	0.13	ZZ
58JW2D	*	3.987	0.510	1.85	4.095	0.105	0.35	ZZ
67PT7Q		3.847	0.370	1.34	4.397	0.407	1.36	ZZ
6WPS2D	*	4.240	0.764	2.77	4.847	0.857	2.86	ZZ
7NLB26		3.373	-0.103	-0.37	4.097	0.107	0.36	ZZ
93HJWY		3.352	-0.125	-0.45	3.797	-0.193	-0.64	ZZ
9H85QY		3.425	-0.051	-0.19	3.895	-0.095	-0.32	ZZ
A11CEG		3.522	0.045	0.16	4.348	0.358	1.19	ZZ
G28WHH		3.513	0.037	0.13	4.073	0.083	0.28	ZZ
GMZQN		3.143	-0.333	-1.21	3.700	-0.290	-0.97	ZZ
LFQ8WU		3.267	-0.210	-0.76	3.835	-0.155	-0.52	ZZ
LZHV5J		3.372	-0.105	-0.38	3.915	-0.075	-0.25	ZZ
MG9E7Y		3.200	-0.276	-1.00	3.513	-0.477	-1.59	ZZ
N9HJBS		3.308	-0.168	-0.61	3.808	-0.182	-0.61	ZZ
RCJZXL		3.113	-0.363	-1.32	3.610	-0.380	-1.27	ZZ
V1GV33		3.305	-0.171	-0.62	3.900	-0.090	-0.30	ZZ
V7MLNJ		3.768	0.292	1.06	4.253	0.263	0.88	ZZ
V94E59		3.410	-0.066	-0.24	4.145	0.155	0.52	ZZ
VLH1EE		3.808	0.332	1.21	4.165	0.175	0.58	ZZ
VNS1M3		3.380	-0.096	-0.35	3.858	-0.132	-0.44	ZZ
XEQLWL		3.222	-0.255	-0.92	3.455	-0.535	-1.78	ZZ
Y2SPVY		3.393	-0.083	-0.30	4.045	0.055	0.18	ZZ
YFPUVX		3.490	0.014	0.05	4.055	0.065	0.22	ZZ

Summary Statistics

	Sample W81-W82	Sample W83-W84
Grand Means	3.4764 minutes	3.9899 minutes
Stnd Dev Btwn Labs	0.2754 minutes	0.3001 minutes

Statistics based on 24 of 24 reporting participants

Samples W81-W82: EPDM compound #1 & W83-W84: EPDM compound #2

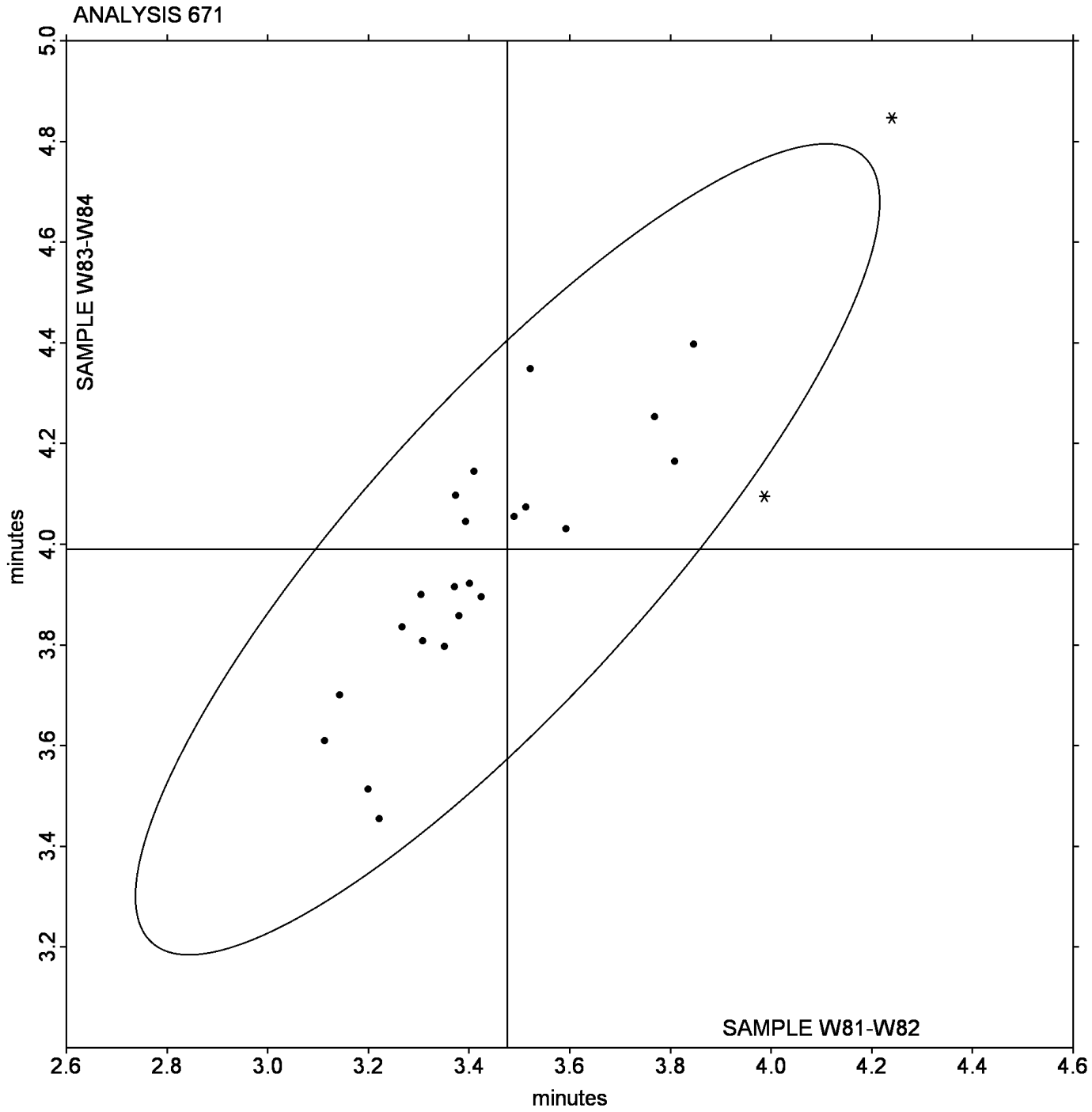
Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample **W81-W82** = 3.4764 minutes

Grand Mean Sample **W83-W84** = 3.9899 minutes



Rubber Interlaboratory Testing Program

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample W81-W82 Lab Mean	Diff from Grand Mean	CPV	Sample W83-W84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
1D8EH7		11.55	-1.82	-1.28	6.893	-1.293	-1.29	ZZ
2HHD9K		14.97	1.61	1.13	9.892	1.706	1.70	ZZ
2HLJMD		12.95	-0.41	-0.29	7.500	-0.686	-0.68	ZZ
2NNKXH		12.21	-1.15	-0.81	7.067	-1.119	-1.11	ZZ
5ZDAC6		16.28	2.92	2.06	9.633	1.447	1.44	ZZ
6XERMP		14.28	0.91	0.64	8.753	0.567	0.56	ZZ
834UXQ		13.31	-0.05	-0.04	6.765	-1.421	-1.41	ZZ
8DB9G5		13.73	0.36	0.26	9.573	1.387	1.38	ZZ
AFWQU		10.95	-2.41	-1.70	6.928	-1.258	-1.25	ZZ
BE7JMK		13.38	0.02	0.01	7.447	-0.739	-0.73	ZZ
CVUWC3		12.98	-0.38	-0.27	8.192	0.006	0.01	ZZ
D9YCFD		13.74	0.37	0.26	9.590	1.404	1.40	ZZ
EMVWB		12.94	-0.42	-0.30	7.615	-0.571	-0.57	ZZ
F3MZLH		13.40	0.03	0.02	9.122	0.936	0.93	ZZ
FHURXG		15.95	2.59	1.83	9.835	1.649	1.64	ZZ
FNB5GN		12.33	-1.04	-0.73	8.322	0.136	0.13	ZZ
KKGX9P		13.06	-0.30	-0.21	7.603	-0.583	-0.58	ZZ
LVSQWU		14.10	0.73	0.52	8.755	0.569	0.57	ZZ
U5GJ75		12.87	-0.49	-0.35	8.310	0.124	0.12	ZZ
VF679H		12.24	-1.13	-0.79	6.983	-1.203	-1.20	ZZ
XCX2XL		15.63	2.26	1.60	7.970	-0.216	-0.21	ZZ
ZCQNG5		10.60	-2.77	-1.95	7.850	-0.336	-0.33	ZZ
ZRD8YY		13.90	0.54	0.38	8.219	0.033	0.03	ZZ
ZV479Z		13.39	0.02	0.02	7.648	-0.538	-0.53	ZZ

Summary Statistics

	Sample W81-W82	Sample W83-W84
Grand Means	13.364 minutes	8.1861 minutes
Stnd Dev Btwn Labs	1.416 minutes	1.0060 minutes

Statistics based on 24 of 24 reporting participants

Samples W81-W82: EPDM compound #1 & W83-W84: EPDM compound #2

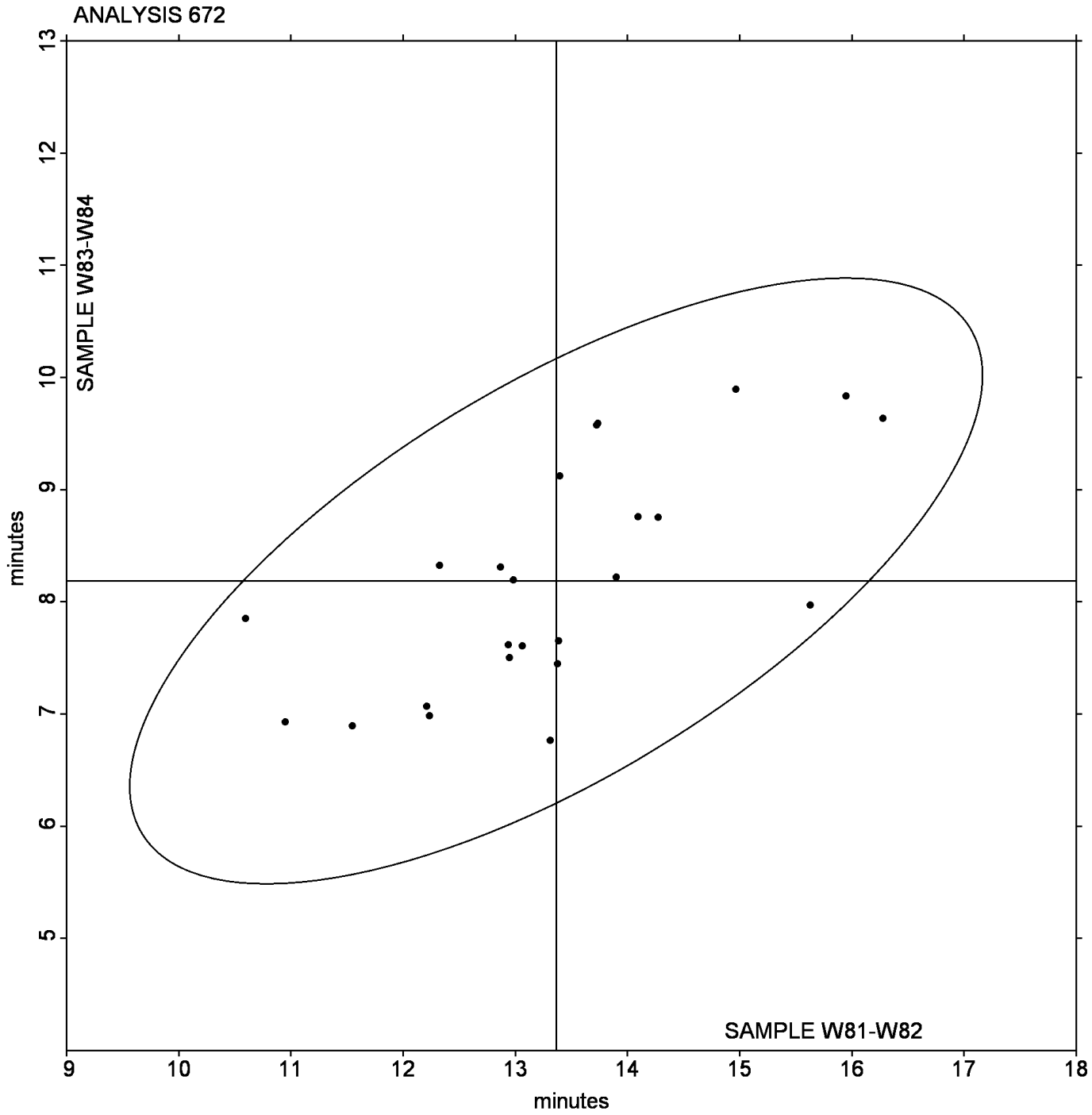
Rubber Interlaboratory Testing Program

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample **W81-W82** = 13.364 minutes

Grand Mean Sample **W83-W84** = 8.1861 minutes



Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

		Sample W81-W82			Sample W83-W84			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1SNZQ9		6.953	-0.254	-0.11	8.78	-2.66	-0.80	ZZ
27LL68		6.377	-0.831	-0.35	9.23	-2.22	-0.67	ZZ
32F7EP		7.047	-0.161	-0.07	13.91	2.47	0.75	ZZ
55ZV7R		7.240	0.033	0.01	9.06	-2.39	-0.72	ZZ
57Z41H		5.763	-1.444	-0.60	10.05	-1.40	-0.42	ZZ
8F7TGB		10.618	3.411	1.42	15.71	4.27	1.29	ZZ
8TRACV		5.860	-1.347	-0.56	12.43	0.98	0.30	ZZ
931JP3		11.092	3.884	1.62	15.39	3.95	1.19	ZZ
A7CRNL		6.167	-1.041	-0.43	11.75	0.31	0.09	ZZ
BM98H2		5.647	-1.561	-0.65	7.50	-3.95	-1.19	ZZ
BVGTL6		5.768	-1.439	-0.60	8.56	-2.89	-0.87	ZZ
BZVLF5		6.889	-0.319	-0.13	14.74	3.29	0.99	ZZ
CRVKEK		5.987	-1.221	-0.51	7.79	-3.65	-1.10	ZZ
DZ7VT3		7.203	-0.004	0.00	10.86	-0.59	-0.18	ZZ
EDFAP7		6.337	-0.871	-0.36	10.24	-1.20	-0.36	ZZ
GP17AF		5.915	-1.292	-0.54	14.22	2.78	0.84	ZZ
JGM37V		6.000	-1.207	-0.50	7.96	-3.49	-1.05	ZZ
MD7HFH		4.838	-2.369	-0.99	6.56	-4.88	-1.47	ZZ
MPEDAD		6.178	-1.029	-0.43	11.52	0.07	0.02	ZZ
NRV4XB		6.163	-1.044	-0.43	11.96	0.52	0.16	ZZ
NZ97NB		6.515	-0.692	-0.29	13.20	1.76	0.53	ZZ
X492QP	*	14.688	7.481	3.12	19.87	8.42	2.54	ZZ
XAD13Z		12.053	4.846	2.02	15.14	3.69	1.12	ZZ
YZ4WC2		5.678	-1.529	-0.64	8.25	-3.19	-0.96	ZZ

Summary Statistics

	Sample W81-W82	Sample W83-W84
Grand Means	7.2074 lbf.in	11.444 lbf.in
Stnd Dev Btwn Labs	2.4001 lbf.in	3.312 lbf.in

Statistics based on 24 of 24 reporting participants

Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

Summary Statistics in SI Units

Grand Means				
	8.1432	dN.m	12.930	dN.m
Stnd Dev Btwn Labs				
	2.7118	dN.m	3.742	dN.m

Statistics based on 24 of 24 reporting participants

Samples W81-W82: EPDM compound #1 & W83-W84: EPDM compound #2

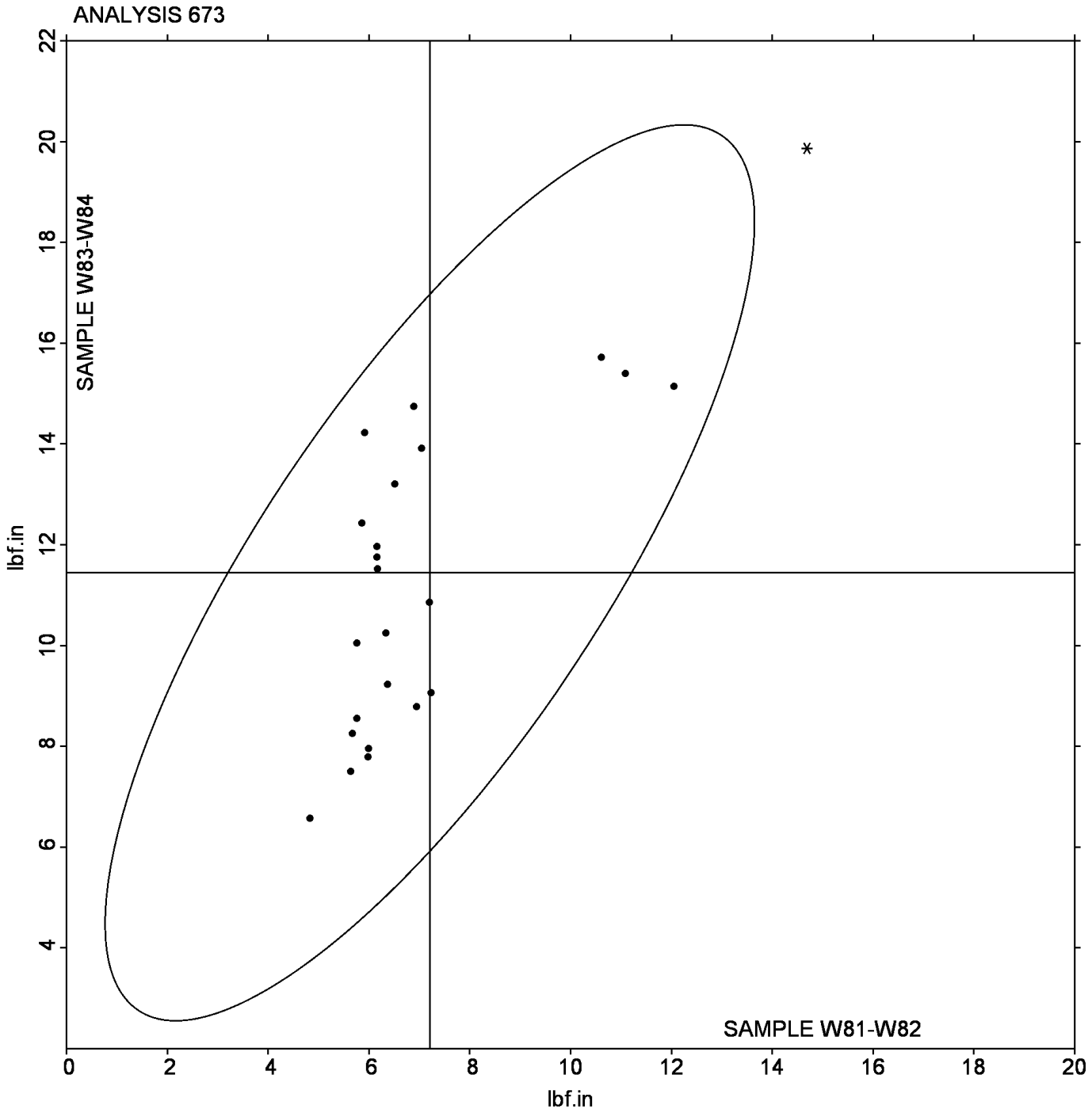
Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample **W81-W82** = 7.2074 lbf.in

Grand Mean Sample **W83-W84** = 11.444 lbf.in



Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample W81-W82 Lab Mean	Sample W81-W82 Diff from Grand Mean	Sample W81-W82 CPV	Sample W83-W84 Lab Mean	Sample W83-W84 Diff from Grand Mean	Sample W83-W84 CPV	Instr Code
1FQ3GD		37.79	-6.38	-0.41	33.81	-6.93	-0.49	ZZ
293VDY		38.85	-5.31	-0.34	35.25	-5.48	-0.39	ZZ
6KXQCB		38.69	-5.48	-0.35	35.46	-5.27	-0.37	ZZ
8AVFLD		36.52	-7.65	-0.49	32.29	-8.44	-0.60	ZZ
8CMSMQ		38.84	-5.32	-0.34	35.63	-5.10	-0.36	ZZ
9273JD	*	86.00	41.83	2.66	77.50	36.76	2.61	ZZ
BM2744		39.35	-4.82	-0.31	35.05	-5.69	-0.40	ZZ
CSQ3MM		36.12	-8.04	-0.51	35.05	-5.68	-0.40	ZZ
F8TKH2		37.29	-6.87	-0.44	36.24	-4.49	-0.32	ZZ
FA8WJ7		35.66	-8.51	-0.54	33.01	-7.72	-0.55	ZZ
FW98TK		42.65	-1.52	-0.10	41.45	0.72	0.05	ZZ
G5AXMN		29.21	-14.95	-0.95	28.11	-12.62	-0.90	ZZ
HVZ2WL		36.42	-7.74	-0.49	34.05	-6.69	-0.48	ZZ
J6SNNR		36.86	-7.30	-0.46	34.27	-6.46	-0.46	ZZ
JMHTRD		36.84	-7.32	-0.47	33.64	-7.10	-0.50	ZZ
MSMFM		36.23	-7.93	-0.50	34.38	-6.36	-0.45	ZZ
MYY1RA		37.77	-6.40	-0.41	34.27	-6.47	-0.46	ZZ
P3FMBS		39.14	-5.02	-0.32	36.07	-4.66	-0.33	ZZ
P9ZVSB		38.52	-5.65	-0.36	35.52	-5.22	-0.37	ZZ
PKTU39		74.46	30.29	1.93	69.83	29.10	2.07	ZZ
PMCVX		77.00	32.84	2.09	68.45	27.72	1.97	ZZ
UC631Y		37.77	-6.39	-0.41	36.72	-4.02	-0.29	ZZ
W3GDNF		74.20	30.04	1.91	67.92	27.19	1.93	ZZ
YWNPTB		37.74	-6.42	-0.41	33.61	-7.13	-0.51	ZZ

Summary Statistics

	Sample W81-W82	Sample W83-W84
Grand Means	44.162 lbf.in	40.732 lbf.in
Stnd Dev Btwn Labs	15.711 lbf.in	14.062 lbf.in

Statistics based on 24 of 24 reporting participants

Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

Summary Statistics in SI Units

Grand Means				
	49.896	dN.m	46.021	dN.m
Stnd Dev Btwn Labs				
	17.751	dN.m	15.888	dN.m

Statistics based on 24 of 24 reporting participants

Samples W81-W82: EPDM compound #1 & W83-W84: EPDM compound #2

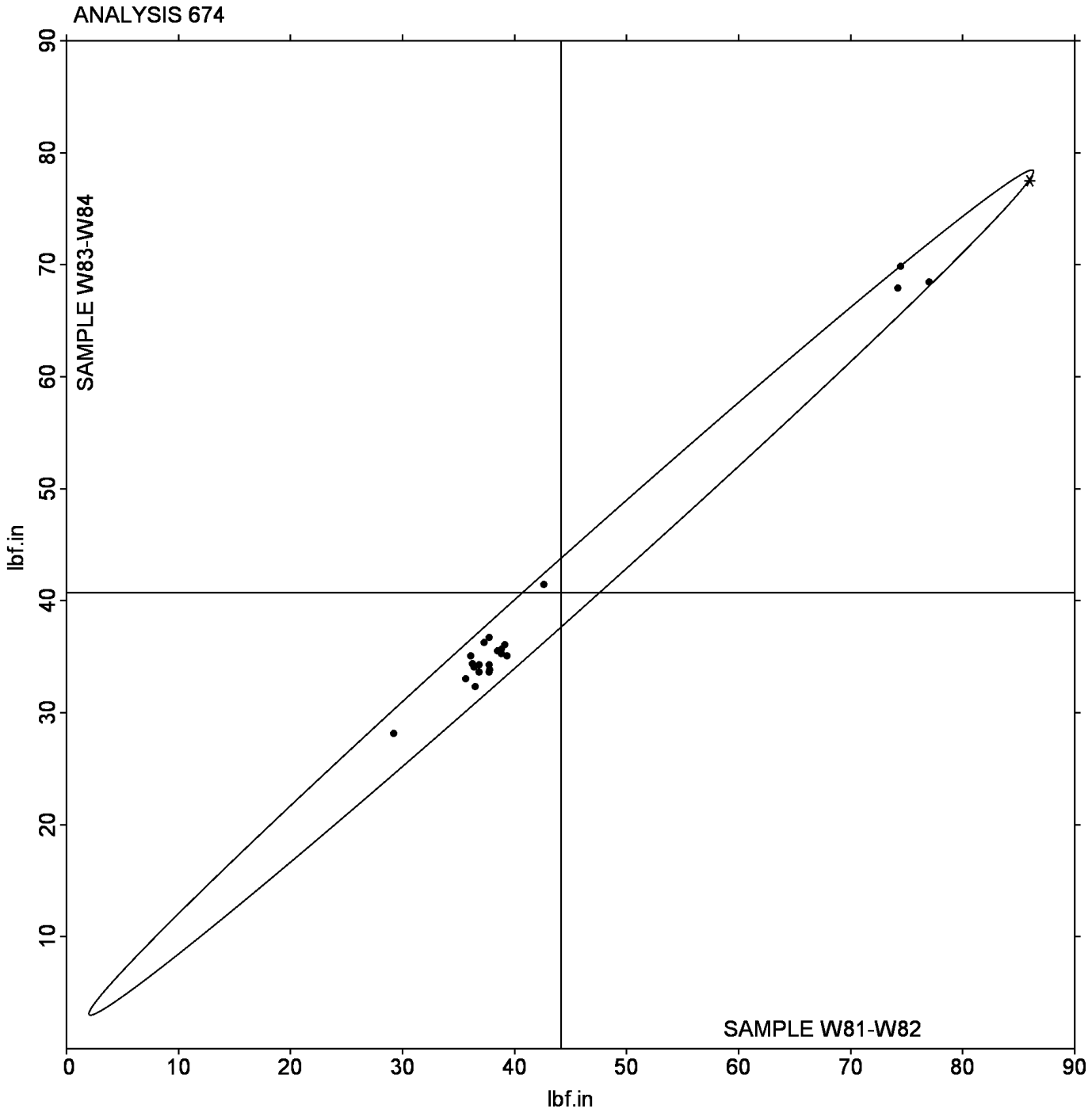
Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample **W81-W82** = 44.162 lbf.in

Grand Mean Sample **W83-W84** = 40.732 lbf.in



Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample W85-W86 Lab Mean	Diff from Grand Mean	CPV	Sample W87-W88 Lab Mean	Diff from Grand Mean	CPV	Instr Code
2ZLFZK		1.388	-0.057	-0.66	1.818	-0.034	-0.49	MC
3R6PY6		1.442	-0.003	-0.04	1.853	0.001	0.01	MD
43FY8W		1.355	-0.090	-1.05	1.818	-0.034	-0.49	MC
4XM2J5		1.278	-0.167	-1.94	1.742	-0.111	-1.58	MC
6CBBAK		1.467	0.022	0.25	1.880	0.028	0.39	TP
6LM5FU		1.353	-0.092	-1.07	1.738	-0.114	-1.62	MC
772ULB		1.444	-0.001	-0.01	1.831	-0.022	-0.31	MC
9CV9XF		1.548	0.103	1.20	1.947	0.094	1.34	MC
AZ1BB4		1.487	0.042	0.48	1.913	0.061	0.87	MC
E5PUAM		1.595	0.150	1.74	1.970	0.118	1.67	MC
EC1F3S		1.468	0.023	0.27	1.863	0.011	0.15	MC
EDVLGK		1.505	0.060	0.70	1.885	0.033	0.46	MC
GKP3V2		1.378	-0.067	-0.78	1.863	0.011	0.15	MC
JP16YU		1.353	-0.092	-1.07	1.817	-0.036	-0.51	TP
LX61JS		1.475	0.030	0.35	1.863	0.011	0.15	MC
NPUJ6B		1.552	0.107	1.24	1.882	0.029	0.42	MC
NQWRL		1.313	-0.132	-1.53	1.772	-0.081	-1.15	MC
PBY8XR		1.553	0.108	1.26	1.948	0.096	1.36	MC
PEVG3D		1.462	0.017	0.19	1.860	0.008	0.11	XX
PF4TF8		1.550	0.105	1.22	1.938	0.086	1.22	MC
QD2TBV		1.383	-0.062	-0.72	1.810	-0.042	-0.60	MP
QDZ8H3		1.303	-0.142	-1.65	1.722	-0.131	-1.86	MC
S8JP5D	*	1.400	-0.045	-0.52	1.725	-0.127	-1.81	TP
VVFD7M		1.585	0.140	1.63	1.963	0.111	1.58	MC
W8AV4T		1.472	0.027	0.32	1.883	0.031	0.44	MC
W8UPRP	X	1.422	-0.023	-0.27	1.985	0.133	1.89	MD
WHSQV		1.445	0.000	0.00	1.875	0.023	0.32	MC
XJRX6L		1.475	0.030	0.35	1.878	0.026	0.37	TP
ZG8QVN		1.432	-0.013	-0.16	1.810	-0.042	-0.60	XX

Summary Statistics

	Sample W85-W86	Sample W87-W88
Grand Means	1.4451 minutes	1.8525 minutes
Stnd Dev Btwn Labs	0.0860 minutes	0.0703 minutes

Statistics based on 28 of 29 reporting participants

Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Samples W85-W86: EPDM compound, batch #1 & W87-W88: EPDM compound, batch #2

Comments on assigned Data Flags for Test #684

W8UPRP (X) - Inconsistency in testing between Sample sets. Also inconsistent in testing within both sample sets.

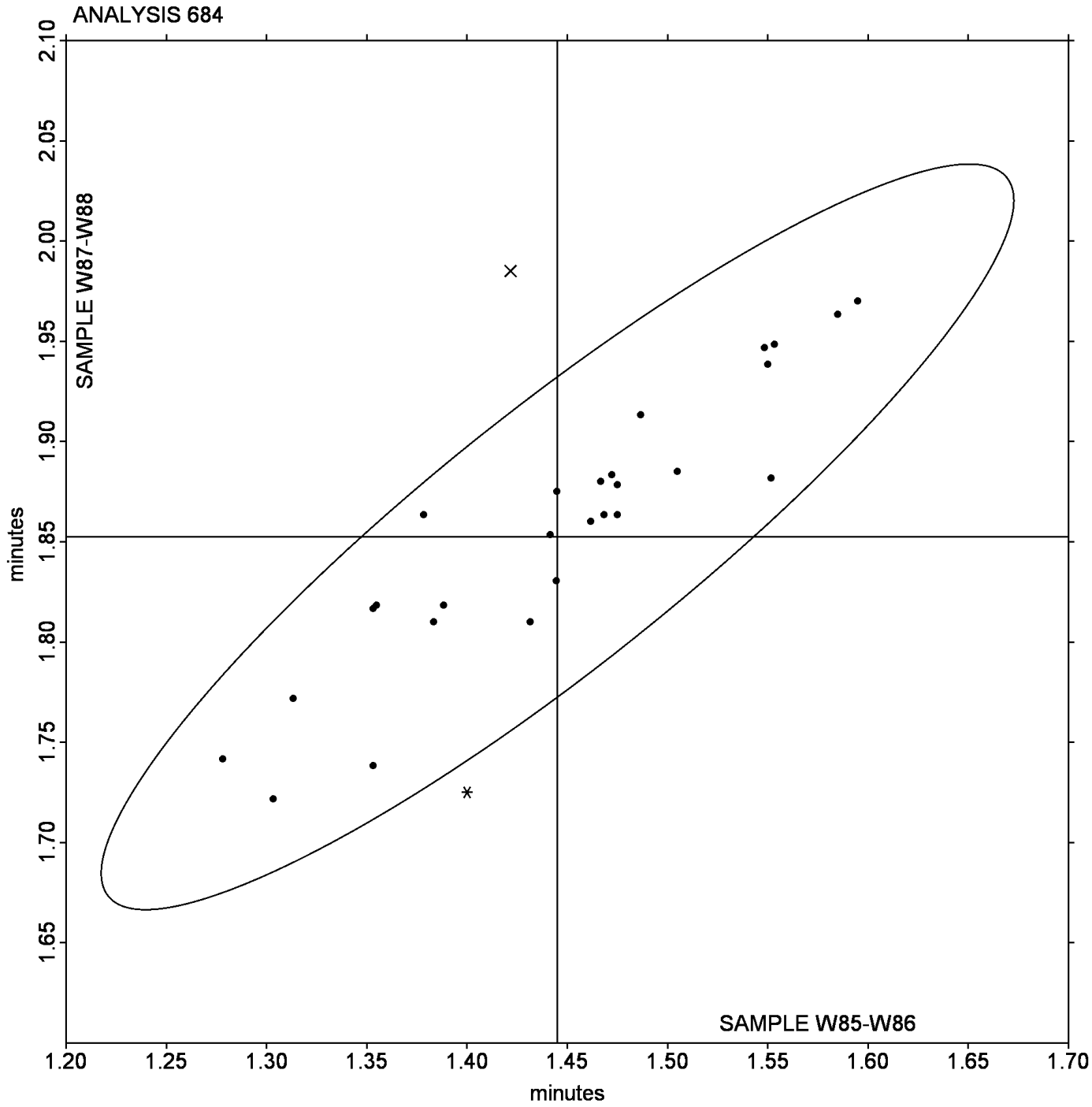
Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample **W85-W86** = 1.4451 minutes

Grand Mean Sample **W87-W88** = 1.8525 minutes



Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

		Sample W85-W86			Sample W87-W88			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
3EU84U		1.390	0.073	0.96	1.872	0.109	1.12	MC
3G2ERF		1.395	0.078	1.03	1.823	0.061	0.62	TP
4H5ADA		1.398	0.081	1.07	1.827	0.064	0.66	MC
6VTSM8		1.235	-0.082	-1.08	1.682	-0.081	-0.82	XX
8EQRMY		1.327	0.010	0.13	1.690	-0.072	-0.74	TP
8X3ADT		1.323	0.006	0.08	1.773	0.011	0.11	XX
9J16M9		1.352	0.035	0.46	1.760	-0.002	-0.02	MC
9VPC9A		1.300	-0.017	-0.22	1.848	0.086	0.88	MC
AGG6KY		1.313	-0.004	-0.05	1.770	0.008	0.08	MD
C956VC		1.339	0.022	0.29	1.736	-0.026	-0.27	MC
DAZJ8C		1.303	-0.014	-0.18	1.823	0.061	0.62	MC
DN48ZF		1.227	-0.090	-1.19	1.610	-0.152	-1.55	MC
HFVXZH		1.222	-0.095	-1.25	1.598	-0.164	-1.67	MC
J8RWY9		1.240	-0.077	-1.01	1.718	-0.044	-0.45	MC
J8UGS2		1.152	-0.165	-2.18	1.547	-0.216	-2.20	MP
KWVYX		1.330	0.013	0.17	1.763	0.001	0.01	MC
LNBA7X		1.288	-0.029	-0.38	1.765	0.003	0.03	MC
LXUZH		1.242	-0.075	-0.99	1.645	-0.117	-1.19	MC
MUGTE4		1.167	-0.150	-1.98	1.630	-0.132	-1.35	MC
MV1BXF		1.325	0.008	0.11	1.697	-0.066	-0.67	MC
NPT281		1.363	0.046	0.61	1.855	0.093	0.95	MC
NQEQPN		1.214	-0.103	-1.36	1.689	-0.073	-0.75	MC
PETRU9		1.298	-0.019	-0.25	1.680	-0.082	-0.84	MC
PG8EL9	*	1.522	0.205	2.69	2.045	0.283	2.88	MD
PLE4QA		1.365	0.048	0.63	1.775	0.013	0.13	MC
SVKWC		1.340	0.023	0.30	1.803	0.041	0.42	MC
TJ4XYZ		1.360	0.043	0.57	1.822	0.059	0.61	TP
TKFSH6		1.350	0.033	0.43	1.710	-0.052	-0.53	MC
VCVDUR		1.322	0.005	0.06	1.820	0.058	0.59	MD
VDVRUB		1.330	0.013	0.17	1.765	0.003	0.03	MC
VL5BMM		1.398	0.081	1.07	1.838	0.076	0.78	MC
VZPU6S		1.398	0.081	1.07	1.898	0.136	1.39	MC
W317FC		1.240	-0.077	-1.01	1.778	0.016	0.16	MC
WANVLS		1.425	0.108	1.42	1.897	0.134	1.37	MC
YFXN8P		1.350	0.033	0.43	1.785	0.023	0.23	XX

Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample W85-W86 Lab Mean	Sample W85-W86 Diff from Grand Mean	Sample W85-W86 CPV	Sample W87-W88 Lab Mean	Sample W87-W88 Diff from Grand Mean	Sample W87-W88 CPV	Instr Code
Z759SJ		1.269	-0.048	-0.63	1.700	-0.062	-0.63	MC

Summary Statistics

	Sample W85-W86	Sample W87-W88
Grand Means	1.3170 minutes	1.7622 minutes
Stnd Dev Btwn Labs	0.0760 minutes	0.0981 minutes

Statistics based on 36 of 36 reporting participants

Samples W85-W86: EPDM compound, batch #1 & W87-W88: EPDM compound, batch #2

Instrument Code Listing

685 MDR Vulcanization-Scorch Time, Ts1 (minutes)

Instruments:

(MC) Alpha Technologies [Monsanto] MDR 2000 or 2000E

(MD) Alpha Tech. Rubber Process Analyzer (RPA 2000)

(MP) Alpha Technologies [Monsanto] MDR 2000P

(TP) Tech Pro MDR model MDPT

(XX) Instrument model not specified by lab

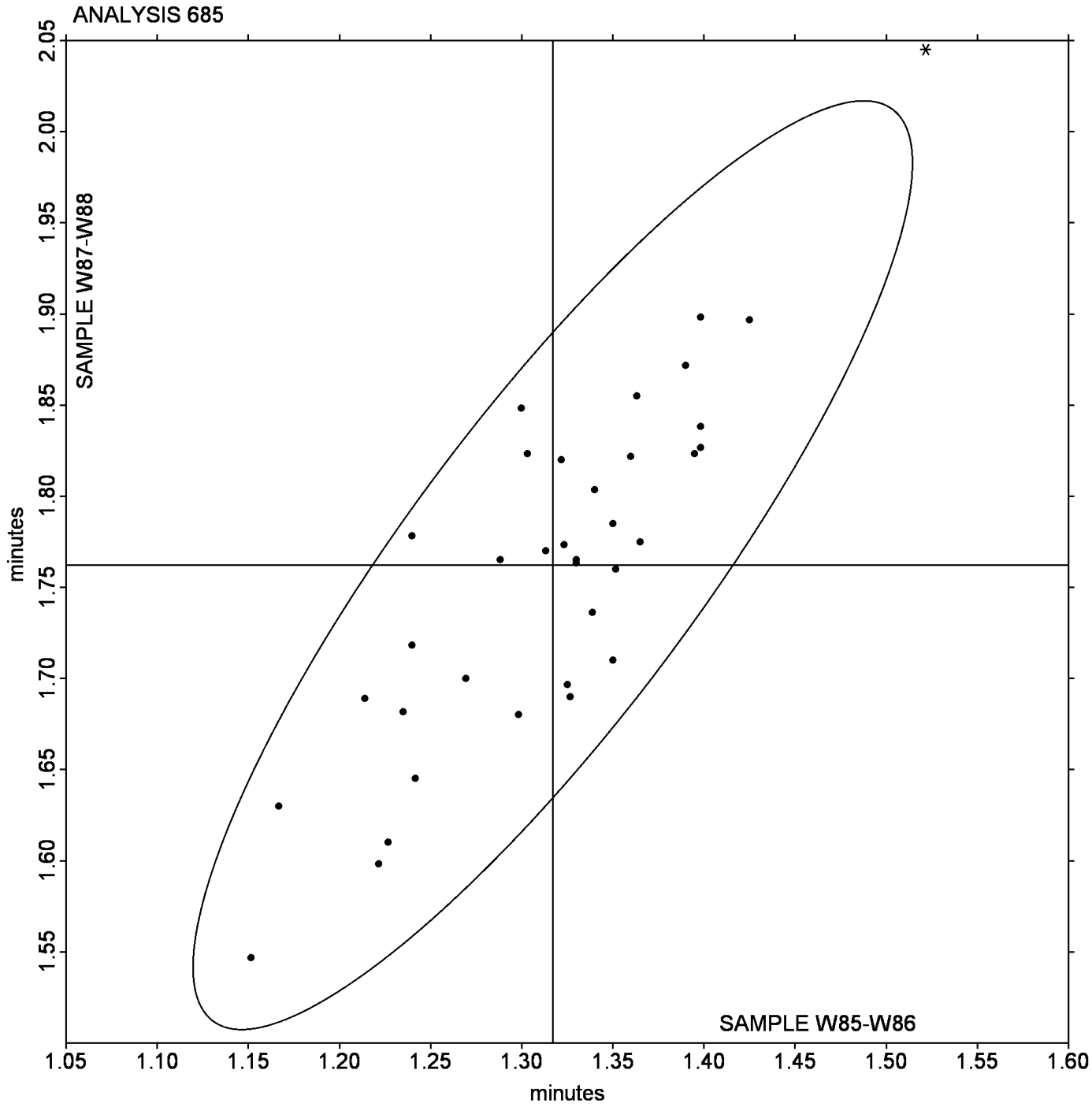
Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **W85-W86** = 1.3170 minutes

Grand Mean Sample **W87-W88** = 1.7622 minutes



Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

		Sample W85-W86			Sample W87-W88			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1RDUKJ	X	3.913	0.035	0.15	4.635	-0.615	-2.54	TP
3M5ZHC		4.117	0.238	1.01	5.462	0.212	0.88	MC
4KKVKK	X	3.620	-0.258	-1.09	4.462	-0.788	-3.26	XX
6DF941		3.933	0.055	0.23	5.420	0.170	0.70	MC
6DM3GF		3.808	-0.070	-0.30	5.127	-0.123	-0.51	MP
6EJHNN		3.518	-0.360	-1.52	4.995	-0.255	-1.05	MC
759YY3		3.408	-0.470	-1.99	4.937	-0.313	-1.29	MC
7KPHGQ		3.788	-0.090	-0.38	4.917	-0.333	-1.38	TP
7TBLGC		4.017	0.138	0.59	5.228	-0.021	-0.09	MC
7WMVZF		3.600	-0.278	-1.18	4.898	-0.351	-1.45	MC
898PZY		4.065	0.187	0.79	5.298	0.049	0.20	MC
BS5X3H		3.853	-0.025	-0.11	5.287	0.037	0.15	MC
DCH942		3.937	0.058	0.25	5.312	0.062	0.26	MC
EQ8C7K		4.067	0.188	0.80	5.325	0.075	0.31	MC
H3YGQ2		3.817	-0.062	-0.26	5.262	0.012	0.05	MC
H6NTNK		3.908	0.030	0.13	5.222	-0.028	-0.12	XX
J8A2U7		3.572	-0.307	-1.30	4.948	-0.301	-1.25	MC
JANHFJ		4.222	0.343	1.45	5.482	0.232	0.96	MC
JLZDB4		3.993	0.115	0.49	5.377	0.127	0.53	MC
LH8L6Y		3.981	0.102	0.43	5.445	0.195	0.81	MC
MFJ2V5		3.947	0.068	0.29	5.325	0.075	0.31	TP
MR776W		3.647	-0.232	-0.98	4.893	-0.356	-1.47	MC
P7M2BX		3.552	-0.327	-1.38	5.077	-0.173	-0.72	MD
P9PP42		4.083	0.205	0.87	5.447	0.198	0.82	MC
RM7FJM		3.983	0.105	0.44	5.328	0.079	0.33	MC
SPY42M		4.008	0.130	0.55	5.452	0.202	0.84	MC
SS7Z2J	*	3.182	-0.697	-2.95	4.482	-0.768	-3.18	MC
SYDPQK		3.989	0.110	0.47	5.431	0.181	0.75	MC
UJRLB6		4.090	0.212	0.90	5.445	0.195	0.81	MC
V548F3		4.130	0.252	1.06	5.520	0.270	1.12	MC
VMZVEP		4.170	0.292	1.23	5.275	0.025	0.10	MC
W286H2	*	3.835	-0.043	-0.18	5.520	0.270	1.12	MD
XGY1JC		3.948	0.070	0.30	5.305	0.055	0.23	MD
XTCQ63		3.697	-0.182	-0.77	5.107	-0.143	-0.59	MC
XXDKGR		3.928	0.050	0.21	5.313	0.064	0.26	MC

Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample W85-W86 Lab Mean	Sample W85-W86 Diff from Grand Mean	Sample W85-W86 CPV	Sample W87-W88 Lab Mean	Sample W87-W88 Diff from Grand Mean	Sample W87-W88 CPV	Instr Code
ZS7XJE		4.075	0.197	0.83	5.630	0.380	1.57	TP

Summary Statistics

	Sample W85-W86	Sample W87-W88
Grand Means	3.8785 minutes	5.2497 minutes
Stnd Dev Btwn Labs	0.2362 minutes	0.2417 minutes

Statistics based on 34 of 36 reporting participants

Samples W85-W86: EPDM compound, batch #1 & W87-W88: EPDM compound, batch #2

Comments on assigned Data Flags for Test #686

1RDUKJ (X) - Inconsistency in testing between Sample sets.

4KKVKK (X) - Data for Sample set W87-W88 are low. Also inconsistent in testing within Sample set W85-W86.

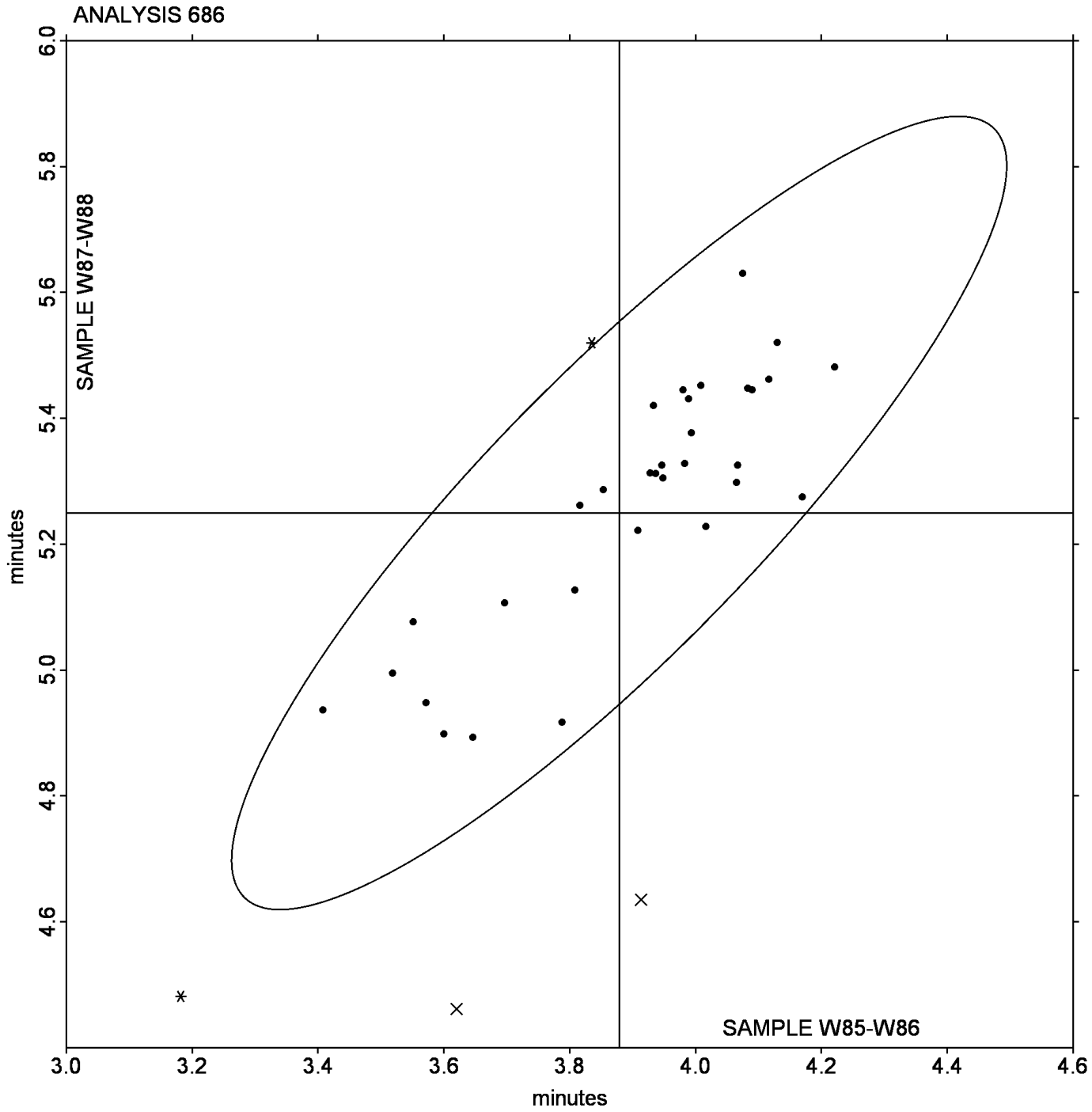
Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample **W85-W86** = 3.8785 minutes

Grand Mean Sample **W87-W88** = 5.2497 minutes



Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

		Sample W85-W86			Sample W87-W88			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
14P347		6.207	-0.161	-0.51	8.398	0.020	0.06	MC
22VBS2		6.872	0.504	1.60	8.707	0.328	1.07	MC
3E49XG		6.647	0.279	0.89	8.492	0.113	0.37	MC
3K3WW		6.453	0.085	0.27	8.447	0.069	0.22	MC
4MFSL7		5.940	-0.428	-1.36	7.858	-0.520	-1.70	MC
6W32AZ		6.578	0.211	0.67	8.582	0.203	0.66	MC
A8DMM		6.473	0.106	0.34	8.570	0.191	0.62	MC
ATMGH		6.057	-0.311	-0.99	7.938	-0.440	-1.44	TP
BCEMZB		5.865	-0.503	-1.60	7.860	-0.519	-1.69	MD
BG2HEW		6.520	0.152	0.48	8.685	0.306	1.00	MC
C9VDNC		6.510	0.142	0.45	8.485	0.106	0.35	MC
D55D6P		6.214	-0.154	-0.49	8.072	-0.306	-1.00	MC
EYWGTZ		6.770	0.402	1.28	8.600	0.221	0.72	MC
GFM7SY		6.702	0.334	1.06	8.765	0.386	1.26	MC
GQZ2E6		6.367	-0.001	0.00	8.278	-0.100	-0.33	MC
H6L4EG		6.832	0.464	1.48	8.682	0.303	0.99	MC
HMS5EB		6.518	0.151	0.48	8.657	0.278	0.91	MC
J5AQY7		6.072	-0.296	-0.94	8.265	-0.114	-0.37	MC
LNHUEF		6.003	-0.364	-1.16	8.157	-0.222	-0.72	MC
MCE47D		5.873	-0.494	-1.57	8.180	-0.199	-0.65	MC
MXQR1Y		6.647	0.279	0.89	8.457	0.078	0.25	MC
N2UM3Q		6.575	0.207	0.66	8.633	0.255	0.83	MC
N4YA8E		6.563	0.196	0.62	8.645	0.266	0.87	XX
Q33SLS		6.033	-0.334	-1.06	8.313	-0.065	-0.21	MC
QMC6EK		6.303	-0.064	-0.20	8.240	-0.139	-0.45	MD
ST3259		6.475	0.107	0.34	8.580	0.201	0.66	MC
T7QZTV	*	6.115	-0.253	-0.80	7.705	-0.674	-2.20	XX
TDBXFX		6.692	0.324	1.03	8.631	0.252	0.82	MC
TRG8RR		6.157	-0.211	-0.67	8.063	-0.315	-1.03	TP
UBKLB5		6.220	-0.148	-0.47	8.465	0.086	0.28	MD
VF1ANC		6.905	0.537	1.71	8.872	0.493	1.61	MC
WP3K4W		6.175	-0.193	-0.61	8.057	-0.322	-1.05	TP
XCNHAR		5.937	-0.431	-1.37	8.152	-0.227	-0.74	MC
XMR1ZT		6.713	0.346	1.10	8.513	0.135	0.44	MC
XP9D9W		5.822	-0.546	-1.74	7.905	-0.474	-1.54	MC

Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample W85-W86 Lab Mean	Sample W85-W86 Diff from Grand Mean	Sample W85-W86 CPV	Sample W87-W88 Lab Mean	Sample W87-W88 Diff from Grand Mean	Sample W87-W88 CPV	Instr Code
XQB2UE		6.168	-0.199	-0.63	8.207	-0.172	-0.56	MP
ZLL47F		6.635	0.267	0.85	8.900	0.521	1.70	TP

Summary Statistics

	Sample W85-W86	Sample W87-W88
Grand Means	6.3678 minutes	8.3788 minutes
Stnd Dev Btwn Labs	0.3144 minutes	0.3067 minutes

Statistics based on 37 of 37 reporting participants

Samples W85-W86: EPDM compound, batch #1 & W87-W88: EPDM compound, batch #2

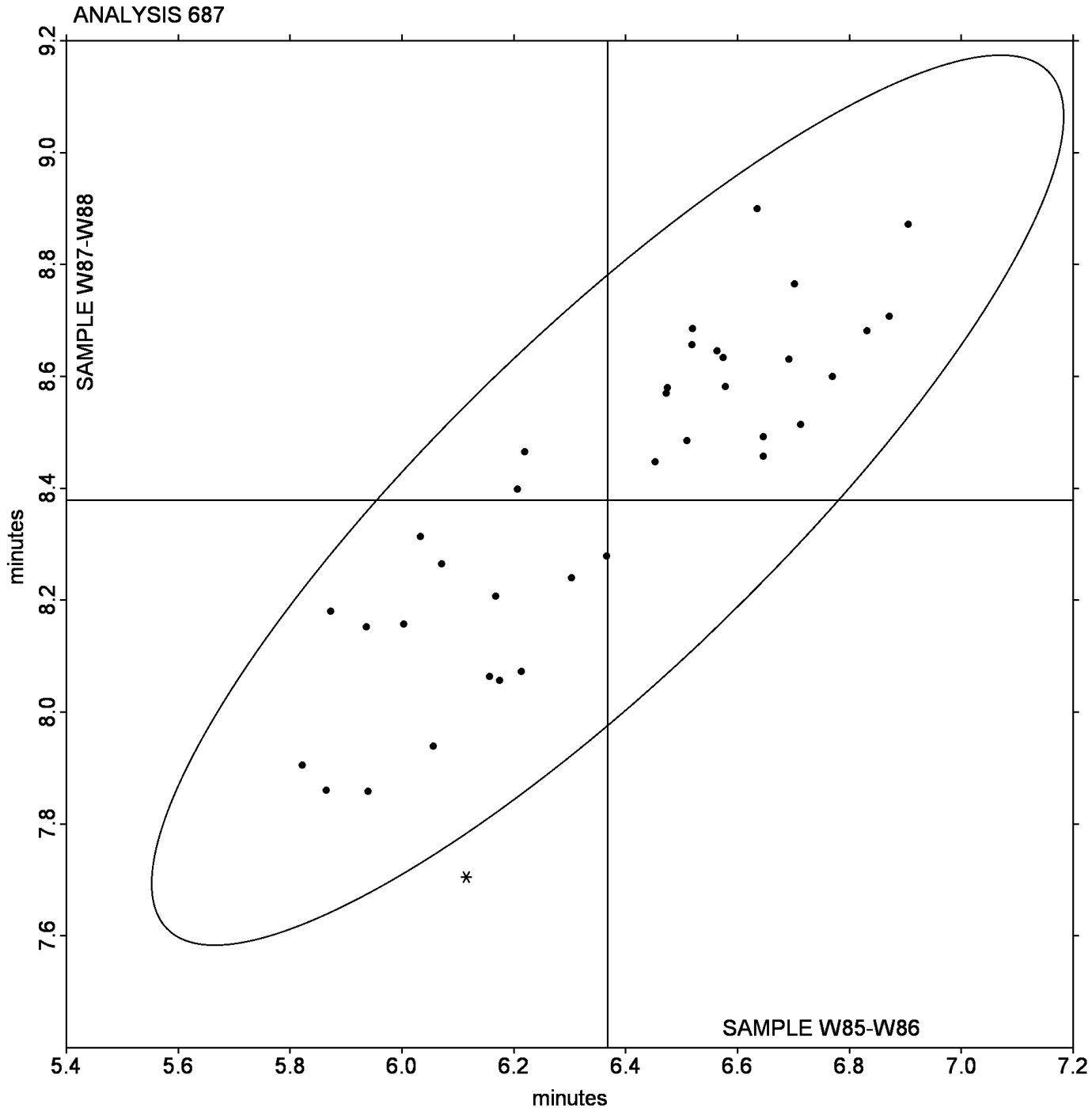
Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample **W85-W86** = 6.3678 minutes

Grand Mean Sample **W87-W88** = 8.3788 minutes



Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

		Sample W85-W86			Sample W87-W88			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
158MP7		2.597	-0.005	-0.01	2.275	-0.043	-0.10	MC
1ZPS87		3.372	0.771	1.24	2.792	0.475	1.10	MC
2MD3QR		2.570	-0.031	-0.05	2.365	0.047	0.11	TP
3SQR7M		2.100	-0.501	-0.80	1.965	-0.353	-0.82	MC
3XDK46		1.957	-0.645	-1.03	1.892	-0.426	-0.99	MC
45G4LG		2.295	-0.306	-0.49	2.182	-0.136	-0.32	MC
4TKR3Q		2.817	0.216	0.35	2.465	0.147	0.34	MC
5ATSWH	*	2.517	-0.085	-0.14	2.452	0.135	0.31	MD
699U3B		3.323	0.722	1.16	2.670	0.352	0.82	MC
7VBJ8J		2.207	-0.395	-0.63	2.095	-0.223	-0.52	MC
94RCAQ		1.990	-0.612	-0.98	1.882	-0.435	-1.01	MD
9JH6TK		3.260	0.659	1.06	2.713	0.396	0.92	MC
9KKTD3		2.431	-0.170	-0.27	2.168	-0.149	-0.35	MP
9KS972	*	4.057	1.455	2.33	3.452	1.134	2.63	MC
ABYB2E		2.049	-0.553	-0.89	1.938	-0.379	-0.88	MC
C454AR		2.127	-0.474	-0.76	1.981	-0.336	-0.78	MC
C5D45E		3.407	0.805	1.29	2.840	0.522	1.21	MC
E3KK56		1.878	-0.723	-1.16	1.777	-0.541	-1.26	TP
EY2Z5R		3.410	0.809	1.30	2.953	0.636	1.48	TP
F78SYY		2.317	-0.285	-0.46	2.128	-0.189	-0.44	MC
FESV61		2.065	-0.536	-0.86	1.942	-0.376	-0.87	MC
K2HP4W		2.430	-0.171	-0.27	2.187	-0.131	-0.30	MC
LBME5Z		2.740	0.139	0.22	2.328	0.011	0.03	MC
LC55Q4		2.287	-0.315	-0.50	2.080	-0.238	-0.55	XX
LDAR2H		2.288	-0.313	-0.50	2.072	-0.246	-0.57	XX
LZY1F3		2.100	-0.501	-0.80	1.963	-0.354	-0.82	MC
MBM392		3.676	1.074	1.72	3.147	0.829	1.93	MD
MQ4YPY		2.037	-0.565	-0.91	1.938	-0.379	-0.88	MC
N442LC		3.828	1.227	1.97	3.120	0.802	1.86	MC
NFUPMD		2.126	-0.476	-0.76	1.972	-0.345	-0.80	MC
NR7LBW		2.210	-0.391	-0.63	2.040	-0.278	-0.64	MC
P2SK6D		3.322	0.720	1.16	2.753	0.435	1.01	MC
Q7X1X8		2.207	-0.395	-0.63	2.110	-0.208	-0.48	TP
T2VNYD		2.205	-0.396	-0.64	2.020	-0.298	-0.69	MC
VWM1G		2.258	-0.343	-0.55	2.075	-0.243	-0.56	MC

Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample W85-W86 Lab Mean	Sample W85-W86 Diff from Grand Mean	Sample W85-W86 CPV	Sample W87-W88 Lab Mean	Sample W87-W88 Diff from Grand Mean	Sample W87-W88 CPV	Instr Code
W1PX77		2.105	-0.496	-0.80	2.025	-0.293	-0.68	MC
ZX2QZP		3.692	1.090	1.75	2.990	0.672	1.56	MC

Summary Statistics

	W85-W86	W87-W88
Grand Means	2.6015 lbf.in	2.3175 lbf.in
Stnd Dev Btwn Labs	0.6237 lbf.in	0.4306 lbf.in

Statistics based on 37 of 37 reporting participants

Summary Statistics in SI Units

	W85-W86	W87-W88
Grand Means	2.9393 dN.m	2.6184 dN.m
Stnd Dev Btwn Labs	0.7047 dN.m	0.4865 dN.m

Statistics based on 37 of 37 reporting participants

Samples W85-W86: EPDM compound, batch #1 & W87-W88: EPDM compound, batch #2

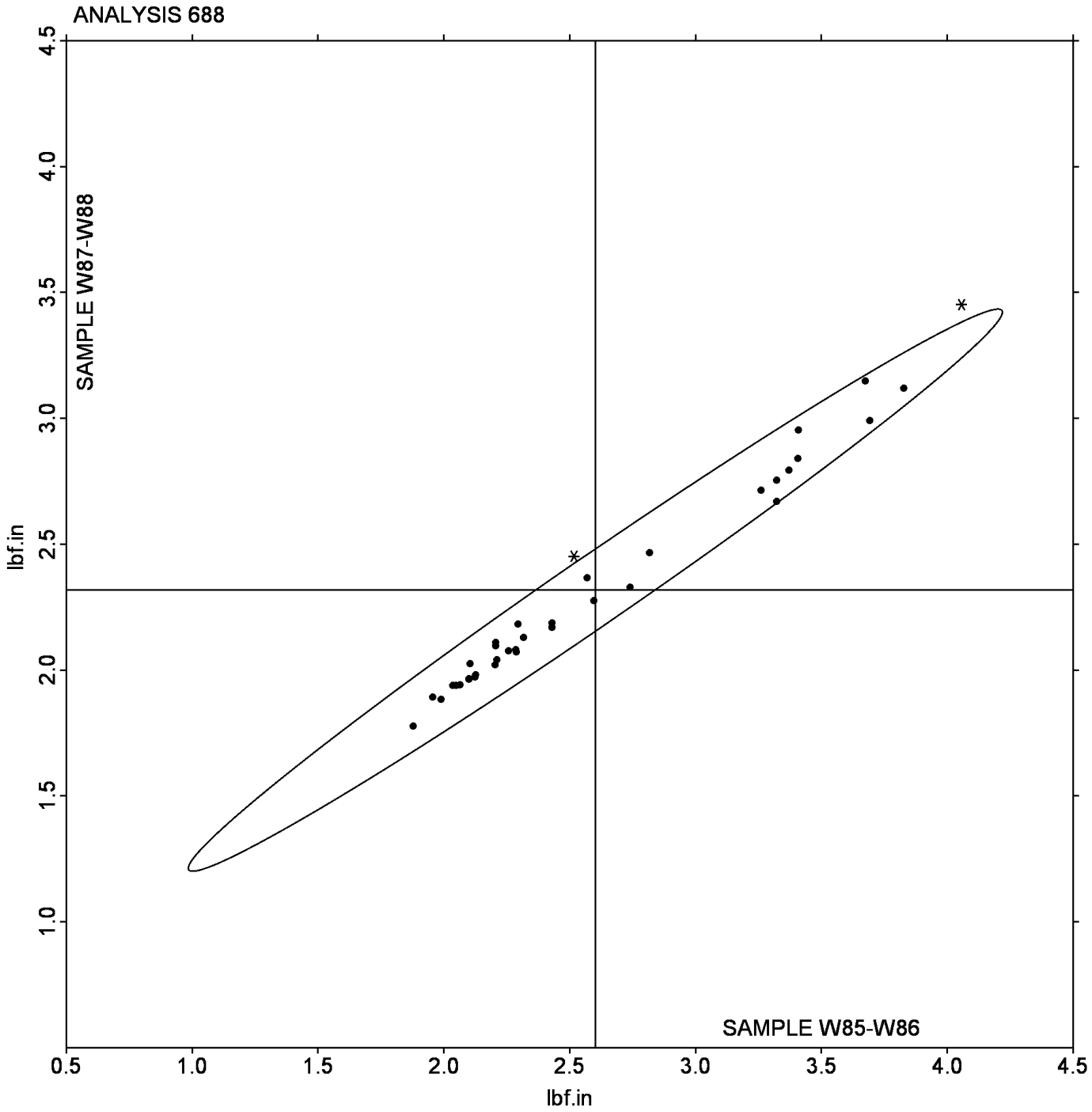
Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample **W85-W86** = 2.6015 lbf.in

Grand Mean Sample **W87-W88** = 2.3175 lbf.in



Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

		Sample W85-W86			Sample W87-W88			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1XKZHF		14.56	0.42	0.85	13.01	0.22	0.58	MC
23LRVK		14.09	-0.06	-0.11	12.73	-0.05	-0.14	MC
2QFK4S		14.32	0.18	0.36	12.85	0.06	0.17	MC
3LDUAZ		14.04	-0.10	-0.20	12.74	-0.05	-0.13	MC
3U84D3	*	15.26	1.12	2.29	13.82	1.04	2.70	TP
41NXBK		13.58	-0.56	-1.15	12.30	-0.48	-1.26	MC
45GQWG		14.53	0.39	0.79	12.79	0.00	0.00	MC
56YGXK		13.94	-0.20	-0.41	12.47	-0.32	-0.83	MC
5T3X3F		14.22	0.08	0.16	12.95	0.17	0.43	MC
61YTGB		13.73	-0.41	-0.84	12.16	-0.63	-1.64	MC
7U4P15		14.31	0.17	0.34	12.83	0.05	0.12	MC
893EP2		14.71	0.56	1.15	13.25	0.47	1.22	MC
8J6Z29		13.84	-0.31	-0.63	12.39	-0.40	-1.04	MC
8NRENG		14.24	0.10	0.21	12.93	0.15	0.38	MD
8SY21T		13.43	-0.72	-1.46	12.16	-0.63	-1.64	MC
8VXQRV		14.32	0.17	0.35	13.02	0.23	0.60	MC
9SEWFE		13.52	-0.63	-1.28	12.32	-0.46	-1.20	MC
CL3GAU		14.30	0.15	0.31	12.99	0.21	0.54	MC
EEBA5B		15.02	0.88	1.79	13.46	0.68	1.76	MC
EHDA58	X	13.96	-0.18	-0.38	14.01	1.22	3.19	MD
EHUNDF		14.25	0.10	0.21	12.79	0.00	0.00	MC
EHVBZX		14.49	0.34	0.70	13.26	0.48	1.25	MP
FWR36K		13.67	-0.47	-0.96	12.53	-0.25	-0.66	MD
GGNXJG		13.22	-0.92	-1.89	12.37	-0.41	-1.07	TP
GZ2DJM		14.15	0.01	0.02	12.77	-0.02	-0.05	XX
J4U4YX		14.22	0.08	0.16	12.62	-0.17	-0.44	MC
LQ4B49		14.76	0.62	1.26	13.48	0.70	1.82	MC
MK4DX		14.42	0.28	0.57	12.95	0.17	0.44	MC
N1WCW2		14.18	0.04	0.07	12.67	-0.12	-0.30	MC
N2B5Y4		14.12	-0.02	-0.04	12.76	-0.02	-0.06	MC
R9GJHN		14.27	0.13	0.26	12.92	0.14	0.36	MC
SC21M9		14.46	0.32	0.64	12.86	0.08	0.20	MC
TAMRKE		14.48	0.34	0.69	13.01	0.22	0.57	MC
UZS6EE		14.33	0.18	0.37	12.81	0.02	0.05	MC
WEDW8		13.48	-0.67	-1.36	12.29	-0.49	-1.29	XX

Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample W85-W86 Lab Mean	Sample W85-W86 Diff from Grand Mean	Sample W85-W86 CPV	Sample W87-W88 Lab Mean	Sample W87-W88 Diff from Grand Mean	Sample W87-W88 CPV	Instr Code
YR457M	*	12.88	-1.26	-2.57	12.20	-0.59	-1.54	TP
ZWQHJU		13.83	-0.32	-0.65	12.83	0.04	0.10	TP

Summary Statistics

	Sample W85-W86	Sample W87-W88
Grand Means	14.143 lbf.in	12.785 lbf.in
Stnd Dev Btwn Labs	0.490 lbf.in	0.383 lbf.in

Statistics based on 36 of 37 reporting participants

Summary Statistics in SI Units

	Sample W85-W86	Sample W87-W88
Grand Means	15.979 dN.m	14.445 dN.m
Stnd Dev Btwn Labs	0.554 dN.m	0.433 dN.m

Statistics based on 36 of 37 reporting participants

Samples W85-W86: EPDM compound, batch #1 & W87-W88: EPDM compound, batch #2

Comments on assigned Data Flags for Test #689

EHDA58 (X) - Data for Sample set W87-W88 are high. Also inconsistent in testing within both sample sets.

Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample **W85-W86** = 14.143 lbf.in

Grand Mean Sample **W87-W88** = 12.785 lbf.in