Collaborative Testing Services, Inc.

Wine Industry Interlaboratory Program

Summary Report #056 - Summary 2017

Introduction to the Wine Program

Explanation of Tables and Definitions of Terms

About the Wine Industry Interlaboratory Program

This interlaboratory survey was administered by Collaborative Testing Services, Inc. (CTS) through an agreement with The American Society for Enology and Viticulture (ASEV) with technical assistance provided by the Laboratory Proficiency Ad Hoc Committee. The purpose of the survey was to evaluate laboratory performance and assess the performance of the industry with respect to quality assurance testing conducted on commercially produced wine through an on-going interlaboratory testing program. Two bottles of differing wines were supplied to participant laboratories. The samples for each type of wine were chosen consecutively from a single production run, to minimize variation between bottles. Participating laboratories were asked to analyze the samples' ten properties in accordance with their normal laboratory procedures and return the results and methodology information to CTS.

About CTS

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

For further information concerning this report contact:

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

Lab Mean The average of the test results obtained by the participant.

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

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

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

Comparative An indication of how well a laboratory's results agree with the other
Performance Value 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.

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 one sample.

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

Common Problems Highlighted in Footnotes

1. *Extreme data* - The laboratory's results for one or both samples are so inconsistent with those of the other participants that the lab mean(s) fall outside the plot. The participant is advised to immediately review his data and/or testing procedure.

2. *Systematic bias* - The laboratory's results are either consistently high or low for both samples when compared to the other participants (the plotted point falls near the top or bottom of the ellipse). This indicates that the participant is performing the test with a constant bias. Causes of systematic errors include improper calibration, the particular make/model of equipment or a modification to the testing procedure.

3. *Inconsistency in testing between samples/sample sets* - The laboratory's results indicate that there are differences in the way the two samples tested (the plotted point falls to the side of the ellipse). This type of error may be attributed to the analyst deviating from the procedure when testing one of the samples or a material interaction occurrence with the instrument or room conditions. The inconsistency is reflected in the CPVs for the two samples, such as a +1.5 CPV for sample A and a -2.2 CPV for sample B. CTS also will specify if the laboratory's data for one sample are high/low compared to the other participants. If this inconsistency is slight, the lab's plotted point will be an * that falls on the edge of the ellipse.

4. *Inconsistency in testing within a sample* - The laboratory's within-lab standard deviation for a specified sample is high when compared to the other participants, often causing the lab's plotted point to fall outside of the ellipse.

Labs flagged with an * are not typically included in the footnotes of a data table. These labs may locate their position in the control ellipse and use the definitions above to help identify the type of testing error. An * should serve as a caution flag, a "yellow light", to a lab. If this error is repeated in future rounds, a lab may need to stop and review its testing procedures. The initial data flag is not cause for alarm. Interlaboratory tests conducted at regular intervals permit a lab to recognize trends in testing.

		Sample SA11			Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		13.82	0.01	0.08	13.63	0.01	0.10
2B3GRJ	X	13.70	-0.11	-1.72	13.80	0.18	2.93
2LLVUL		13.87	0.06	0.86	13.69	0.07	1.09
2T9BM3		13.74	-0.07	-1.09	13.58	-0.04	-0.74
2VXG8Y		13.80	-0.01	-0.23	13.60	-0.02	-0.40
34MP3A		13.81	0.00	0.00	13.65	0.03	0.43
3TKAGC	X	13.45	-0.36	-5.61	13.10	-0.52	-8.73
4BRQEH		13.80	-0.01	-0.23	13.61	-0.01	-0.24
4BZX7W		13.80	-0.01	-0.16	13.62	-0.01	-0.15
4EZ9ZB		13.90	0.09	1.40	13.73	0.11	1.76
64JMRV		13.80	-0.01	-0.16	13.57	-0.06	-0.99
68DJDF		13.86	0.05	0.78	13.68	0.06	0.93
68EKWT		13.83	0.02	0.23	13.60	-0.02	-0.40
6DHHN7	X	14.27	0.46	7.17	13.79	0.17	2.76
6GJN6W		13.82	0.01	0.16	13.64	0.02	0.26
6J4389		13.79	-0.02	-0.31	13.57	-0.05	-0.90
6R4RDW		13.83	0.02	0.23	13.60	-0.02	-0.40
6ZW8ZF		13.80	-0.01	-0.23	13.61	-0.02	-0.32
7EDH4W		13.95	0.14	2.11	13.77	0.15	2.43
7PTAR7		13.84	0.03	0.39	13.66	0.04	0.59
8MLEK9		13.81	0.00	-0.08	13.58	-0.04	-0.74
8NDAA3		13.84	0.03	0.39	13.66	0.03	0.51
8PAMUA		13.85	0.04	0.62	13.64	0.01	0.18
8PBK66		13.76	-0.05	-0.86	13.56	-0.06	-1.07
9QTU7D		13.89	0.08	1.17	13.71	0.08	1.34
ANNWW9		13.83	0.02	0.23	13.64	0.01	0.18
AZK3P8	*	13.67	-0.14	-2.18	13.53	-0.09	-1.57
B692JT		13.67	-0.14	-2.26	13.51	-0.11	-1.90
CAK7VT	*	13.75	-0.06	-0.94	13.51	-0.11	-1.90
CB4T44	X	14.10	0.29	4.52	14.05	0.43	7.09
CJ9Z8P		13.90	0.09	1.40	13.70	0.08	1.26
CKGCNQ		13.80	-0.01	-0.16	13.60	-0.02	-0.40
CMA9BZ	X	13.17	-0.64	-9.98	13.20	-0.43	-7.15
DT7MA7		13.74	-0.07	-1.17	13.54	-0.08	-1.40
DVVUU3		13.79	-0.02	-0.39	13.60	-0.02	-0.40

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
E2F9XZ		13.87	0.06	0.94	13.65	0.03	0.43
E9RZ2Z	*	13.70	-0.11	-1.72	13.58	-0.05	-0.82
EZKTL4		13.84	0.03	0.39	13.67	0.04	0.68
F2UVAM		13.86	0.05	0.70	13.68	0.05	0.84
FEJUZP	*	13.65	-0.16	-2.50	13.50	-0.12	-2.07
FGMMUN		13.78	-0.03	-0.47	13.60	-0.02	-0.40
FHKZFV		13.90	0.09	1.40	13.72	0.09	1.51
FM8FH6		13.87	0.06	0.94	13.69	0.07	1.09
G3D2H7		13.89	0.08	1.17	13.71	0.09	1.43
GHFZRZ		13.75	-0.06	-0.94	13.58	-0.05	-0.82
H4QMTW	X	14.44	0.63	9.82	13.92	0.30	4.92
HNZFXJ		13.85	0.04	0.55	13.67	0.04	0.68
HRJFDY		13.87	0.06	0.86	13.68	0.05	0.84
HTEVQW	X	13.72	-0.09	-1.40	13.65	0.02	0.35
J7BR2T		13.88	0.07	1.01	13.68	0.05	0.84
J8TJEK		13.78	-0.03	-0.47	13.59	-0.03	-0.57
J9ZXLQ		13.84	0.03	0.54	13.62	0.00	-0.07
JJEQN3		13.85	0.04	0.62	13.67	0.05	0.76
JJHFGH		13.80	-0.01	-0.23	13.65	0.02	0.35
KP4W8Y		13.87	0.06	0.94	13.70	0.07	1.18
KPL48P		13.78	-0.03	-0.55	13.61	-0.02	-0.32
KRAHVY		13.84	0.03	0.39	13.66	0.03	0.51
KVU8JH		13.79	-0.02	-0.39	13.58	-0.04	-0.74
L4KAYY		13.83	0.02	0.31	13.64	0.01	0.18
L89JLY	X	13.70	-0.11	-1.72	13.40	-0.22	-3.73
LN4CTX		13.76	-0.05	-0.78	13.56	-0.06	-1.07
LXDLKX	X	13.49	-0.32	-5.07	13.47	-0.16	-2.65
MCT4TR		13.69	-0.12	-1.87	13.56	-0.07	-1.15
NBTHEQ		13.87	0.06	0.94	13.68	0.06	0.93
NLEPCV		13.70	-0.11	-1.72	13.50	-0.12	-2.07
PWT26J		13.79	-0.02	-0.31	13.64	0.02	0.26
Q84VWM	X	14.00	0.19	2.96	13.90	0.28	4.59
RRXUBT		13.83	0.02	0.31	13.63	0.01	0.10
T4XAXF		13.82	0.01	0.16	13.65	0.03	0.43
TJBHYJ		13.92	0.11	1.72	13.73	0.11	1.76

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TZYVCC		13.81	0.00	0.00	13.64	0.01	0.18
U27D9L	X	14.14	0.33	5.07	13.90	0.28	4.59
UBXTXQ		13.78	-0.03	-0.47	13.60	-0.02	-0.40
UF7CWJ		13.79	-0.02	-0.39	13.61	-0.02	-0.32
V8QTCJ		13.94	0.13	1.95	13.71	0.08	1.34
V8QV3N		13.75	-0.06	-1.01	13.56	-0.06	-1.07
VYFTH9	X	5.98	-7.83	-122.11	6.35	-7.28	-121.22
W6HX98	X	13.63	-0.18	-2.88	13.82	0.20	3.26
WA8AJQ		13.84	0.03	0.39	13.66	0.03	0.51
WAQKL9	X	13.71	-0.10	-1.64	13.85	0.22	3.68
X7N4LJ	X	13.50	-0.31	-4.83	13.70	0.08	1.26
X86XPE		13.82	0.01	0.16	13.64	0.01	0.18
ZBVACA		13.68	-0.13	-2.11	13.52	-0.11	-1.82
ZE7VYJ	X	13.74	-0.07	-1.09	13.48	-0.15	-2.49
ZTDB8C		13.81	0.00	-0.08	13.60	-0.02	-0.40
ZX3QWJ	X	13.87	0.06	0.86	13.54	-0.08	-1.40

Summary Statistics

Grand Means
13.810 percent   13.624 percent

Stnd Dev Btwn Labs
0.064 percent   0.060 percent

Statistics based on 69 of 86 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #901

WAQKL9 (X) - Inconsistent in testing between samples, data for Sample SA12 are high.

W6HX98 (X) - Data for sample SA11 are low and data for sample SA12 are high. Inconsistent within the determinations of sample SA11. Data may be switched between replicates.

VYFTH9 (X) - Extreme data.

ZE7VYJ (X) - Inconsistent in testing between samples.

X7N4LJ (X) - Inconsistent in testing between samples, data for Sample SA11 are low.

LXDLKX (X) - Inconsistent in testing between samples, data for Sample SA11 are low. Inconsistent within the determinations of both samples.

2B3GRJ (X) - Inconsistent in testing between samples, data for Sample SA12 are high.

ZX3QWJ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA12.

6DHHN7 (X) - Data for both samples are high. Inconsistent within the determinations of sample SA11.

L89JLY (X) - Inconsistent in testing between samples, data for Sample SA12 are low. Inconsistent within the determinations of sample SA11.

CMA9BZ (X) - Data for both samples are low. Inconsistent within the determinations of sample SA12.

H4QMTW (X) - Data for both samples are high.

U27D9L (X) - Data for both samples are high. Possible Systematic Error.

HTEVQW (X) - Inconsistent in testing between samples.

Q84VWM (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample SA11.

3TKAGC (X) - Data for both samples are low. Possible Systematic Error.

CB4T44 (X) - Data for both samples are high. Possible Systematic Error.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 *Cabernet Sauvignon*			Sample SA12 *Red Blend*			
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl / Rpt
Please specify method used							0/1
Ebulliometer Method	13.720	0.099	-0.09	13.535	0.049	-0.09	2/6
Gas Chromatography Method	13.820	0.028	0.01	13.632	0.010	0.01	3/5
Near Infrared Method	13.826	0.049	0.02	13.638	0.051	0.01	47/52
Dist. / Density Method	13.752	0.086	-0.06	13.570	0.076	-0.05	9/10
FTIR	13.797	0.073	-0.01	13.624	0.059	0.00	8/11
Other _____							0/1
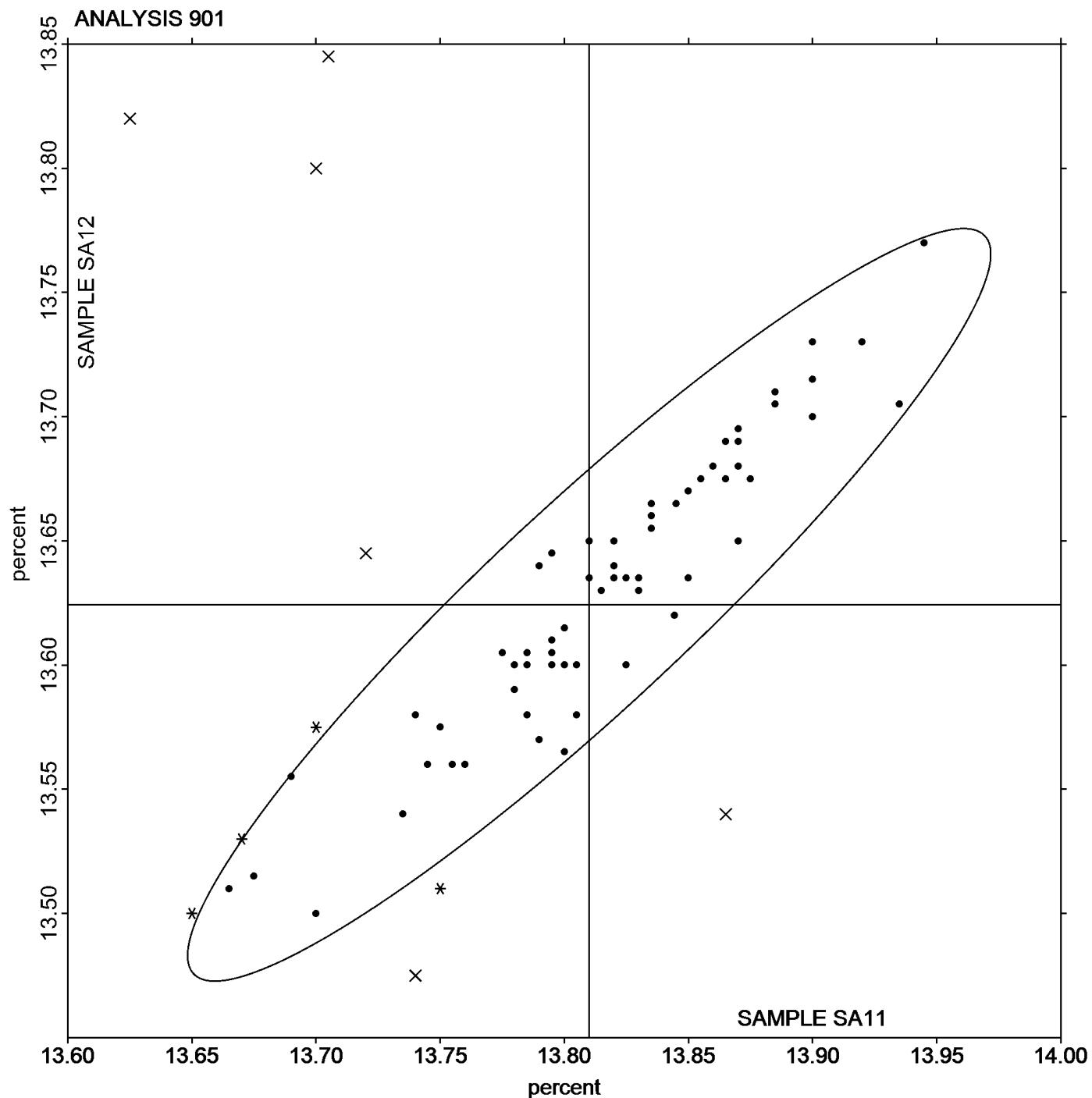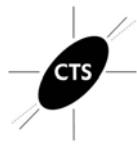
WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		40.50	-5.58	-0.79	46.00	-4.32	-0.62
2B3GRJ		43.50	-2.58	-0.36	47.50	-2.82	-0.40
2LLVUL		40.00	-6.08	-0.86	46.50	-3.82	-0.55
2T9BM3		45.60	-0.48	-0.07	53.60	3.28	0.47
2VXG8Y		42.50	-3.58	-0.51	46.50	-3.82	-0.55
34MP3A		42.00	-4.08	-0.58	46.00	-4.32	-0.62
3TKAGC		49.90	3.82	0.54	49.90	-0.42	-0.06
4BRQEH		40.00	-6.08	-0.86	44.50	-5.82	-0.83
4BZX7W		53.00	6.92	0.98	53.50	3.18	0.46
4EZ9ZB		49.00	2.92	0.41	54.00	3.68	0.53
64JMRV	X	71.50	25.42	3.60	65.00	14.68	2.10
68DJDF		40.00	-6.08	-0.86	46.00	-4.32	-0.62
68EKWT		39.00	-7.08	-1.00	41.50	-8.82	-1.26
6GJN6W		35.50	-10.58	-1.50	41.00	-9.32	-1.33
6J4389		40.50	-5.58	-0.79	44.50	-5.82	-0.83
6R4RDW		46.74	0.66	0.09	50.22	-0.10	-0.01
6ZW8ZF		57.50	11.42	1.62	60.50	10.18	1.46
7PTAR7		46.00	-0.08	-0.01	46.00	-4.32	-0.62
8MLEK9		42.00	-4.08	-0.58	48.00	-2.32	-0.33
8NDAA3		51.50	5.42	0.77	55.00	4.68	0.67
8PAMUA		36.80	-9.28	-1.31	38.40	-11.92	-1.70
8PBK66		60.00	13.92	1.97	66.00	15.68	2.24
9QTU7D		55.00	8.92	1.26	52.50	2.18	0.31
ANNWW9		40.68	-5.40	-0.76	45.38	-4.94	-0.71
AZK3P8		43.87	-2.21	-0.31	49.22	-1.10	-0.16
B692JT		44.45	-1.63	-0.23	53.75	3.43	0.49
CAK7VT		44.50	-1.58	-0.22	46.00	-4.32	-0.62
CJ9Z8P		45.50	-0.58	-0.08	48.00	-2.32	-0.33
CKGCNQ		43.00	-3.08	-0.44	48.00	-2.32	-0.33
DT7MA7		43.00	-3.08	-0.44	45.50	-4.82	-0.69
DVVUU3		52.00	5.92	0.84	58.50	8.18	1.17
E2F9XZ		44.00	-2.08	-0.29	46.00	-4.32	-0.62
E9RZ2Z		41.90	-4.18	-0.59	46.65	-3.67	-0.52
EZKTL4		44.00	-2.08	-0.29	54.00	3.68	0.53
F2UVAM		45.00	-1.08	-0.15	50.50	0.18	0.03

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FEJUZP		50.00	3.92	0.56	49.50	-0.82	-0.12
FGMMUN		53.00	6.92	0.98	57.00	6.68	0.96
FHKZFV		44.50	-1.58	-0.22	51.00	0.68	0.10
FM8FH6		41.00	-5.08	-0.72	48.00	-2.32	-0.33
G3D2H7		38.50	-7.58	-1.07	49.50	-0.82	-0.12
GHFZRZ		48.00	1.92	0.27	52.00	1.68	0.24
H4QMTW	X	13.83	-32.25	-4.57	5.31	-45.01	-6.44
HNZFXJ		40.00	-6.08	-0.86	48.00	-2.32	-0.33
HRJFDY		41.00	-5.08	-0.72	46.50	-3.82	-0.55
J7BR2T	*	64.00	17.92	2.54	66.50	16.18	2.31
J8TJEK		47.00	0.92	0.13	52.50	2.18	0.31
JJEQN3		52.25	6.17	0.87	57.50	7.18	1.03
JJHFGH		42.50	-3.58	-0.51	47.50	-2.82	-0.40
KP4W8Y		55.50	9.42	1.33	59.50	9.18	1.31
KPL48P		44.00	-2.08	-0.29	46.00	-4.32	-0.62
KRAHVY		38.50	-7.58	-1.07	43.50	-6.82	-0.98
KVU8JH		33.00	-13.08	-1.85	36.00	-14.32	-2.05
L4KAYY		39.00	-7.08	-1.00	43.50	-6.82	-0.98
L89JLY		38.00	-8.08	-1.14	41.00	-9.32	-1.33
LN4CTX		55.00	8.92	1.26	62.00	11.68	1.67
LXDLKX		34.61	-11.47	-1.62	35.94	-14.38	-2.06
MCT4TR		47.90	1.82	0.26	55.90	5.58	0.80
NLEPCV	X	68.50	22.42	3.17	58.50	8.18	1.17
PWT26J		39.50	-6.58	-0.93	43.50	-6.82	-0.98
RRXUBT	X	23.35	-22.73	-3.22	23.00	-27.32	-3.91
T4XAXF		49.50	3.42	0.48	55.00	4.68	0.67
TJBHYJ		55.50	9.42	1.33	63.00	12.68	1.81
TZYVCC		44.50	-1.58	-0.22	53.50	3.18	0.46
U27D9L	*	63.00	16.92	2.40	61.00	10.68	1.53
UBXTXQ	*	62.50	16.42	2.33	69.00	18.68	2.67
UF7CWJ		46.50	0.42	0.06	48.00	-2.32	-0.33
V8QTCJ		44.10	-1.98	-0.28	55.20	4.88	0.70
V8QV3N		45.00	-1.08	-0.15	48.50	-1.82	-0.26
VYFTH9		43.50	-2.58	-0.36	48.00	-2.32	-0.33
W6HX98		60.50	14.42	2.04	65.00	14.68	2.10

ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #056
Summer 2017

Analysis 902
Total Sulfur Dioxide

		Sample SA11				Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV		Lab Mean	Diff from Grand Mean	CPV
WA8AJQ	*	61.50	15.42	2.18		59.00	8.68	1.24
WAQKL9		45.00	-1.08	-0.15		44.50	-5.82	-0.83
X7N4LJ		39.50	-6.58	-0.93		47.00	-3.32	-0.47
X86XPE		43.00	-3.08	-0.44		43.00	-7.32	-1.05
ZBVACA		48.80	2.72	0.39		54.40	4.08	0.58
ZE7VYJ		44.00	-2.08	-0.29		47.50	-2.82	-0.40
ZTDB8C		54.50	8.42	1.19		55.00	4.68	0.67
ZX3QWJ		43.50	-2.58	-0.36		45.50	-4.82	-0.69

Summary Statistics

Grand Means

46.076 mg/L   50.318 mg/L

Stnd Dev Btwn Labs

7.064 mg/L   6.991 mg/L

**Statistics based on 74 of 78 reporting participants**

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #902

64JMRV (X) - Inconsistent in testing between samples, data for Sample SA11 arehigh. Inconsistent within the determinations of both samples.

NLEPCV (X) - Inconsistent in testing between samples, data for Sample SA11 are high.

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

H4QMTW (X) - Extreme data.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 Cabernet Sauvignon			Sample SA12 Red Blend			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	55.000	0.000	8.92	62.000	0.000	11.68	1/1
Ripper Method	49.131	7.068	3.06	53.530	6.832	3.21	27/29
Aeration Oxidation (AO) Method	45.077	5.685	-1.00	48.694	5.255	-1.62	21/22
Segemented Flow Analyzer	43.357	2.926	-2.72	47.571	3.207	-2.75	7/7
Enzymatic Method	49.375	10.965	3.30	53.500	9.600	3.18	4/4
Colormetric Analyzer	43.151	11.774	-2.92	47.609	13.143	-2.71	4/4
FTIR	38.167	4.481	-7.91	42.833	5.923	-7.48	3/3
Flow Injection Analysis	41.903	2.505	-4.17	46.820	2.165	-3.50	7/8

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SAMPLE SA12

mg/L

SAMPLE SA11

mg/L

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		19.00	-0.99	-0.41	19.00	-1.94	-0.73
2B3GRJ		18.00	-1.99	-0.82	17.00	-3.94	-1.48
2LLVUL		17.50	-2.49	-1.03	18.00	-2.94	-1.11
2T9BM3		18.40	-1.59	-0.65	19.20	-1.74	-0.66
2VXG8Y		20.00	0.01	0.00	20.50	-0.44	-0.17
34MP3A		22.00	2.01	0.83	22.00	1.06	0.40
3TKAGC	*	25.60	5.61	2.31	25.60	4.66	1.76
4BRQEH		19.00	-0.99	-0.41	20.00	-0.94	-0.35
4BZX7W		18.50	-1.49	-0.61	18.00	-2.94	-1.11
4EZ9ZB		20.00	0.01	0.00	21.00	0.06	0.02
64JMRV		18.00	-1.99	-0.82	19.00	-1.94	-0.73
68DJDF		18.00	-1.99	-0.82	20.00	-0.94	-0.35
68EKWT		18.45	-1.54	-0.63	19.90	-1.04	-0.39
6DHHN7		16.80	-3.19	-1.31	18.24	-2.70	-1.02
6GJN6W		21.50	1.51	0.62	22.00	1.06	0.40
6J4389		18.50	-1.49	-0.61	19.50	-1.44	-0.54
6R4RDW		16.85	-3.14	-1.29	18.25	-2.69	-1.02
6ZW8ZF		16.50	-3.49	-1.44	18.00	-2.94	-1.11
7PTAR7		20.50	0.51	0.21	21.00	0.06	0.02
8MLEK9		24.00	4.01	1.65	26.50	5.56	2.10
8NDAA3		21.00	1.01	0.42	21.50	0.56	0.21
8PAMUA		16.00	-3.99	-1.64	17.60	-3.34	-1.26
8PBK66		17.00	-2.99	-1.23	18.00	-2.94	-1.11
9QTU7D		20.00	0.01	0.00	20.50	-0.44	-0.17
ANNWW9		16.42	-3.57	-1.47	17.20	-3.74	-1.41
AZK3P8		22.47	2.48	1.02	24.61	3.67	1.38
CAK7VT		22.50	2.51	1.04	23.00	2.06	0.78
CB4T44		18.40	-1.59	-0.65	19.60	-1.34	-0.50
CJ9Z8P		20.50	0.51	0.21	21.00	0.06	0.02
CKGCNQ		20.00	0.01	0.00	21.00	0.06	0.02
DT7MA7		19.00	-0.99	-0.41	21.00	0.06	0.02
DVVUU3		25.50	5.51	2.27	26.50	5.56	2.10
E2F9XZ		20.50	0.51	0.21	21.50	0.56	0.21
E9RZ2Z		19.25	-0.74	-0.30	19.30	-1.64	-0.62
EZKTL4		21.00	1.01	0.42	22.00	1.06	0.40

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
F2UVAM		22.00	2.01	0.83	22.50	1.56	0.59
FEJUZP		22.50	2.51	1.04	24.50	3.56	1.34
FGMMUN		21.50	1.51	0.62	22.00	1.06	0.40
FHKZFV		18.50	-1.49	-0.61	20.00	-0.94	-0.35
FM8FH6		18.00	-1.99	-0.82	19.00	-1.94	-0.73
G3D2H7		17.50	-2.49	-1.03	19.00	-1.94	-0.73
GHFZRZ		22.00	2.01	0.83	23.00	2.06	0.78
H4QMTW	X	1.33	-18.66	-7.69	1.33	-19.61	-7.39
HNZFXJ		21.50	1.51	0.62	23.50	2.56	0.97
HRJFDY		20.00	0.01	0.00	20.50	-0.44	-0.17
HTEVQW		20.97	0.99	0.41	22.17	1.23	0.46
J7BR2T		22.50	2.51	1.04	24.00	3.06	1.15
J8TJEK		20.00	0.01	0.00	21.00	0.06	0.02
JJEQN3		22.11	2.12	0.87	23.95	3.01	1.14
JJHFGH	*	24.00	4.01	1.65	23.00	2.06	0.78
KP4W8Y		19.50	-0.49	-0.20	20.00	-0.94	-0.35
KPL48P		20.00	0.01	0.00	20.00	-0.94	-0.35
KRAHVY		20.00	0.01	0.00	20.00	-0.94	-0.35
KVU8JH		19.00	-0.99	-0.41	19.50	-1.44	-0.54
L4KAYY		17.00	-2.99	-1.23	17.50	-3.44	-1.30
L89JLY		20.00	0.01	0.00	20.50	-0.44	-0.17
LN4CTX		22.50	2.51	1.04	25.00	4.06	1.53
LXDLKX		22.54	2.55	1.05	24.37	3.43	1.29
MCT4TR	*	26.70	6.71	2.77	29.10	8.16	3.08
NBTHEQ		17.50	-2.49	-1.03	19.50	-1.44	-0.54
NLEPCV	X	41.00	21.01	8.66	25.00	4.06	1.53
PWT26J		18.00	-1.99	-0.82	18.00	-2.94	-1.11
Q84VWM		24.00	4.01	1.65	25.50	4.56	1.72
RRXUBT	X	52.50	32.51	13.40	57.50	36.56	13.78
T4XAXF		20.00	0.01	0.00	20.50	-0.44	-0.17
TJBHYJ		21.00	1.01	0.42	21.00	0.06	0.02
TZYVCC		23.50	3.51	1.45	24.00	3.06	1.15
U27D9L		19.50	-0.49	-0.20	21.00	0.06	0.02
UBXTXQ	*	24.00	4.01	1.65	27.00	6.06	2.28
UF7CWJ		19.50	-0.49	-0.20	22.00	1.06	0.40

		Sample SA11			Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
V8QTCJ	*	14.65	-5.34	-2.20	17.20	-3.74	-1.41
V8QV3N		20.00	0.01	0.00	21.00	0.06	0.02
VYFTH9		16.50	-3.49	-1.44	17.50	-3.44	-1.30
W6HX98	X	21.00	1.01	0.42	25.00	4.06	1.53
WA8AJQ		18.50	-1.49	-0.61	18.50	-2.44	-0.92
WAQKL9	*	16.50	-3.49	-1.44	15.50	-5.44	-2.05
X7N4LJ		19.50	-0.49	-0.20	22.00	1.06	0.40
X86XPE		19.00	-0.99	-0.41	20.00	-0.94	-0.35
ZE7VYJ		18.50	-1.49	-0.61	19.00	-1.94	-0.73
ZTDB8C		21.50	1.51	0.62	22.00	1.06	0.40
ZX3QWJ		20.50	0.51	0.21	20.00	-0.94	-0.35

Summary Statistics

Grand Means
19.989 mg/L   20.939 mg/L

Stnd Dev Btwn Labs
2.426 mg/L   2.653 mg/L

Statistics based on 77 of 81 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #903

W6HX98 (X) - Inconsistent in testing between samples.

NLEPCV (X) - Data for sample SA11 are high.

RRXUBT (X) - Extreme data.

H4QMTW (X) - Extreme data.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 Cabernet Sauvignon			Sample SA12 Red Blend			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	22.500	0.000	2.51	25.000	0.000	4.06	1/1
Ripper Method	21.326	2.555	1.34	22.308	3.004	1.37	18/19
Aeration Oxidation (AO) Method	19.491	2.247	-0.50	20.532	2.447	-0.41	35/37
Segmented Flow Analyzer	20.313	2.052	0.32	21.063	2.290	0.12	8/8
Colormetric Analyzer	21.408	2.636	1.42	22.073	2.427	1.13	5/5
Flow Injection Analysis	17.574	1.030	-2.41	18.463	1.012	-2.48	7/8
FTIR	19.333	0.577	-0.66	19.667	0.764	-1.27	3/3

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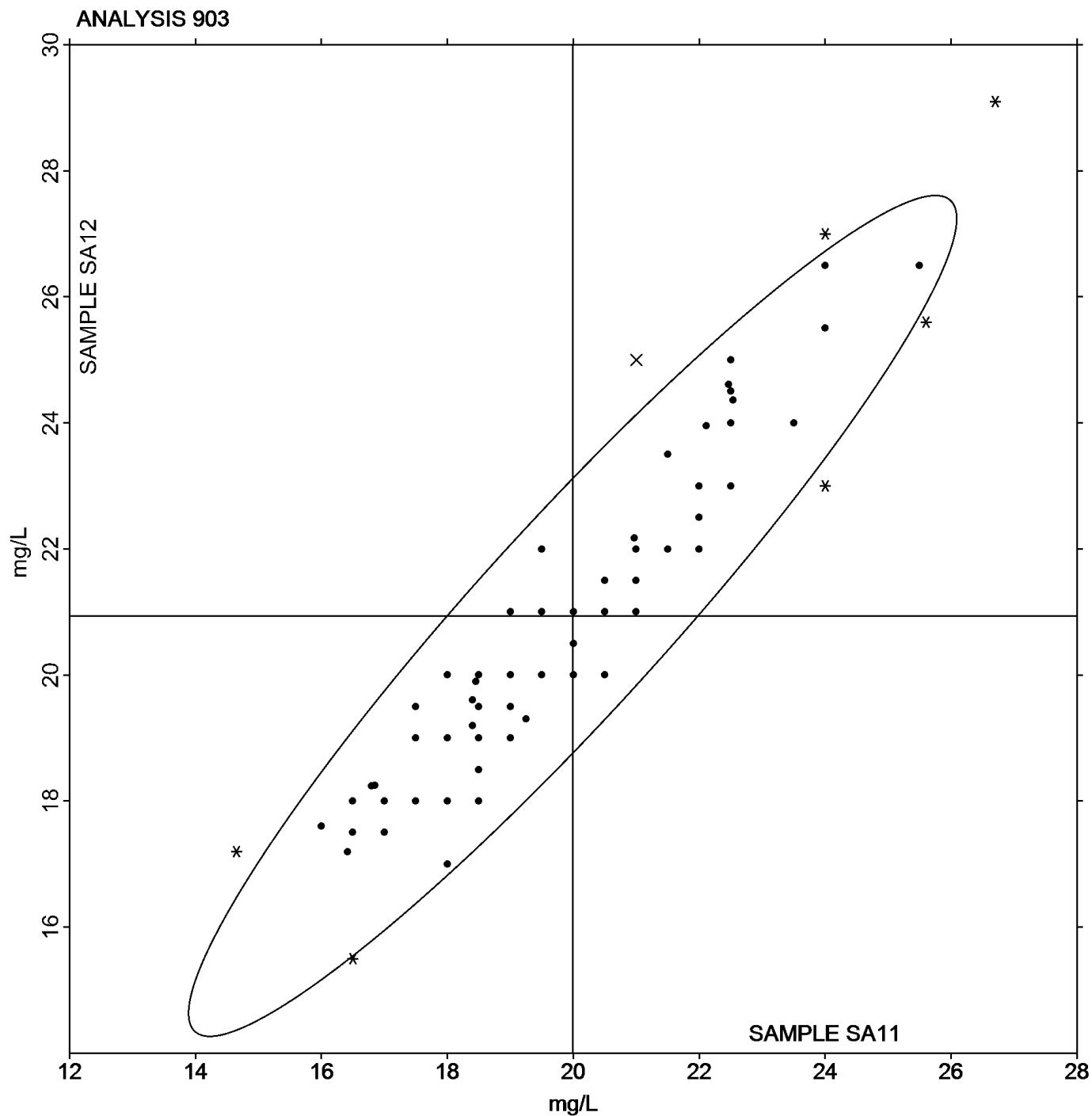
		Sample SA11			Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		5.750	-0.167	-0.88	5.985	-0.169	-1.18
2B3GRJ		6.100	0.183	0.97	6.300	0.146	1.02
2LLVUL		5.700	-0.217	-1.15	6.050	-0.104	-0.72
2T9BM3		5.800	-0.117	-0.62	6.100	-0.054	-0.37
2VXG8Y		5.890	-0.027	-0.14	6.080	-0.074	-0.51
34MP3A	*	6.350	0.433	2.29	6.300	0.146	1.02
3TKAGC		6.005	0.088	0.47	6.415	0.261	1.82
4BRQEH		5.950	0.033	0.18	6.300	0.146	1.02
4BZX7W		5.765	-0.152	-0.80	6.195	0.041	0.29
4EZ9ZB		6.000	0.083	0.44	6.155	0.001	0.01
64JMRV		5.823	-0.094	-0.50	6.125	-0.029	-0.20
68DJDF		6.000	0.083	0.44	6.300	0.146	1.02
68EKWT		5.888	-0.029	-0.15	5.925	-0.229	-1.60
6DHHN7		6.250	0.333	1.76	6.450	0.296	2.07
6GJN6W		5.815	-0.102	-0.54	6.110	-0.044	-0.30
6J4389		5.875	-0.042	-0.22	6.100	-0.054	-0.37
6R4RDW		6.000	0.083	0.44	6.300	0.146	1.02
6ZW8ZF		5.875	-0.042	-0.22	6.220	0.066	0.46
7EDH4W		5.800	-0.117	-0.62	6.100	-0.054	-0.37
7PTAR7		5.900	-0.017	-0.09	6.200	0.046	0.32
8MLEK9		6.100	0.183	0.97	6.200	0.046	0.32
8NDAA3		5.700	-0.217	-1.15	6.000	-0.154	-1.07
8PAMUA		5.800	-0.117	-0.62	5.900	-0.254	-1.77
8PBK66		5.820	-0.097	-0.51	6.075	-0.079	-0.55
9QTU7D		5.900	-0.017	-0.09	6.200	0.046	0.32
ANNWW9		5.655	-0.262	-1.38	6.020	-0.134	-0.93
AZK3P8		6.300	0.383	2.03	6.380	0.226	1.58
B692JT		6.200	0.283	1.50	6.384	0.230	1.61
CAK7VT		5.855	-0.062	-0.33	6.105	-0.049	-0.34
CB4T44		6.180	0.263	1.39	6.405	0.251	1.75
CJ9Z8P		5.900	-0.017	-0.09	6.200	0.046	0.32
CKGCNQ	*	5.450	-0.467	-2.47	5.800	-0.354	-2.47
CMA9BZ	X	5.350	-0.567	-3.00	5.550	-0.604	-4.21
DT7MA7		5.735	-0.182	-0.96	6.150	-0.004	-0.03
DVVUU3		6.135	0.218	1.15	6.230	0.076	0.53

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
E2F9XZ		5.750	-0.167	-0.88	5.850	-0.304	-2.12
E9RZ2Z		6.050	0.133	0.70	6.200	0.046	0.32
EZKTL4		5.750	-0.167	-0.88	6.100	-0.054	-0.37
F2UVAM		5.800	-0.117	-0.62	6.125	-0.029	-0.20
FEJUZP		5.950	0.033	0.18	6.040	-0.114	-0.79
FGMMUN		6.050	0.133	0.70	6.170	0.016	0.11
FHKZFV		5.935	0.018	0.10	6.155	0.001	0.01
FM8FH6		5.625	-0.292	-1.54	6.010	-0.144	-1.00
G3D2H7		6.100	0.183	0.97	6.300	0.146	1.02
GHFZRZ		5.830	-0.087	-0.46	6.080	-0.074	-0.51
H4QMTW		6.000	0.083	0.44	6.250	0.096	0.67
HNZFXJ		5.715	-0.202	-1.07	6.150	-0.004	-0.03
HRJFDY	X	5.325	-0.592	-3.13	5.600	-0.554	-3.86
HTEVQW		5.960	0.043	0.23	6.075	-0.079	-0.55
J7BR2T		6.049	0.132	0.70	6.204	0.050	0.35
J8TJEK		5.850	-0.067	-0.35	6.155	0.001	0.01
JJEQN3		5.970	0.053	0.28	6.215	0.061	0.43
JJHFGH		5.900	-0.017	-0.09	6.100	-0.054	-0.37
KP4W8Y		6.100	0.183	0.97	6.200	0.046	0.32
KPL48P		5.760	-0.157	-0.83	6.020	-0.134	-0.93
KRAHVY		5.950	0.033	0.18	6.250	0.096	0.67
KVU8JH		5.950	0.033	0.18	6.165	0.011	0.08
L4KAYY		6.000	0.083	0.44	6.200	0.046	0.32
L89JLY	*	6.300	0.383	2.03	6.230	0.076	0.53
MCT4TR	X	5.295	-0.622	-3.29	5.470	-0.684	-4.77
NBTHEQ		6.000	0.083	0.44	6.100	-0.054	-0.37
NLEPCV	X	5.250	-0.667	-3.53	5.475	-0.679	-4.73
PWT26J		5.700	-0.217	-1.15	6.050	-0.104	-0.72
Q84VWM		6.250	0.333	1.76	6.400	0.246	1.72
RRXUBT		5.830	-0.087	-0.46	6.045	-0.109	-0.76
T4XAXF	X	5.140	-0.777	-4.11	6.060	-0.094	-0.65
TJBHYJ		5.900	-0.017	-0.09	6.200	0.046	0.32
TZYVCC		6.250	0.333	1.76	6.300	0.146	1.02
U27D9L	X	6.265	0.348	1.84	6.645	0.491	3.43
UBXTXQ		5.700	-0.217	-1.15	6.000	-0.154	-1.07

		Sample SA11				Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV		Lab Mean	Diff from Grand Mean	CPV
UF7CWJ		5.900	-0.017	-0.09		6.300	0.146	1.02
V8QTCJ		5.630	-0.287	-1.52		5.965	-0.189	-1.32
V8QV3N	*	5.475	-0.442	-2.34		5.715	-0.439	-3.06
VYFTH9		5.980	0.063	0.33		6.345	0.191	1.33
W6HX98		5.685	-0.232	-1.23		6.105	-0.049	-0.34
WA8AJQ		6.000	0.083	0.44		6.300	0.146	1.02
WAQKL9	X	5.895	-0.022	-0.12		5.650	-0.504	-3.51
X7N4LJ		5.715	-0.202	-1.07		6.000	-0.154	-1.07
X86XPE	X	5.140	-0.777	-4.11		5.420	-0.734	-5.12
ZBVACA		5.966	0.049	0.26		6.194	0.040	0.28
ZE7VYJ	*	6.150	0.233	1.23		6.100	-0.054	-0.37
ZTDB8C	X	6.500	0.583	3.09		6.850	0.696	4.86
ZX3QWJ		6.100	0.183	0.97		6.250	0.096	0.67

Summary Statistics
Grand Means
5.9168 g/L as tartaric acid   6.1537 g/L as tartaric acid
Stnd Dev Btwn Labs
0.1890 g/L as tartaric acid   0.1434 g/L as tartaric acid
Statistics based on 74 of 83 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #904

T4XAXF (X) - Data for sample SA11 are low.

WAQKL9 (X) - Data for sample SA12 are low.

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

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

ZTDB8C (X) - Data for both samples are high.

X86XPE (X) - Data for both samples are low.

CMA9BZ (X) - Data for both samples are low.

U27D9L (X) - Data for sample SA12 are high.

MCT4TR (X) - Data for both samples are low.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 Cabernet Sauvignon			Sample SA12 Red Blend			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Autotitration	5.913	0.175	-0.004	6.150	0.128	-0.003	47/52
Manual Titration	5.952	0.196	0.035	6.168	0.167	0.014	19/22
FTIR	5.914	0.208	-0.002	6.186	0.134	0.033	7/8
Segmented Flow Analyzer	5.450	0.000	-0.467	5.800	0.000	-0.354	1/1
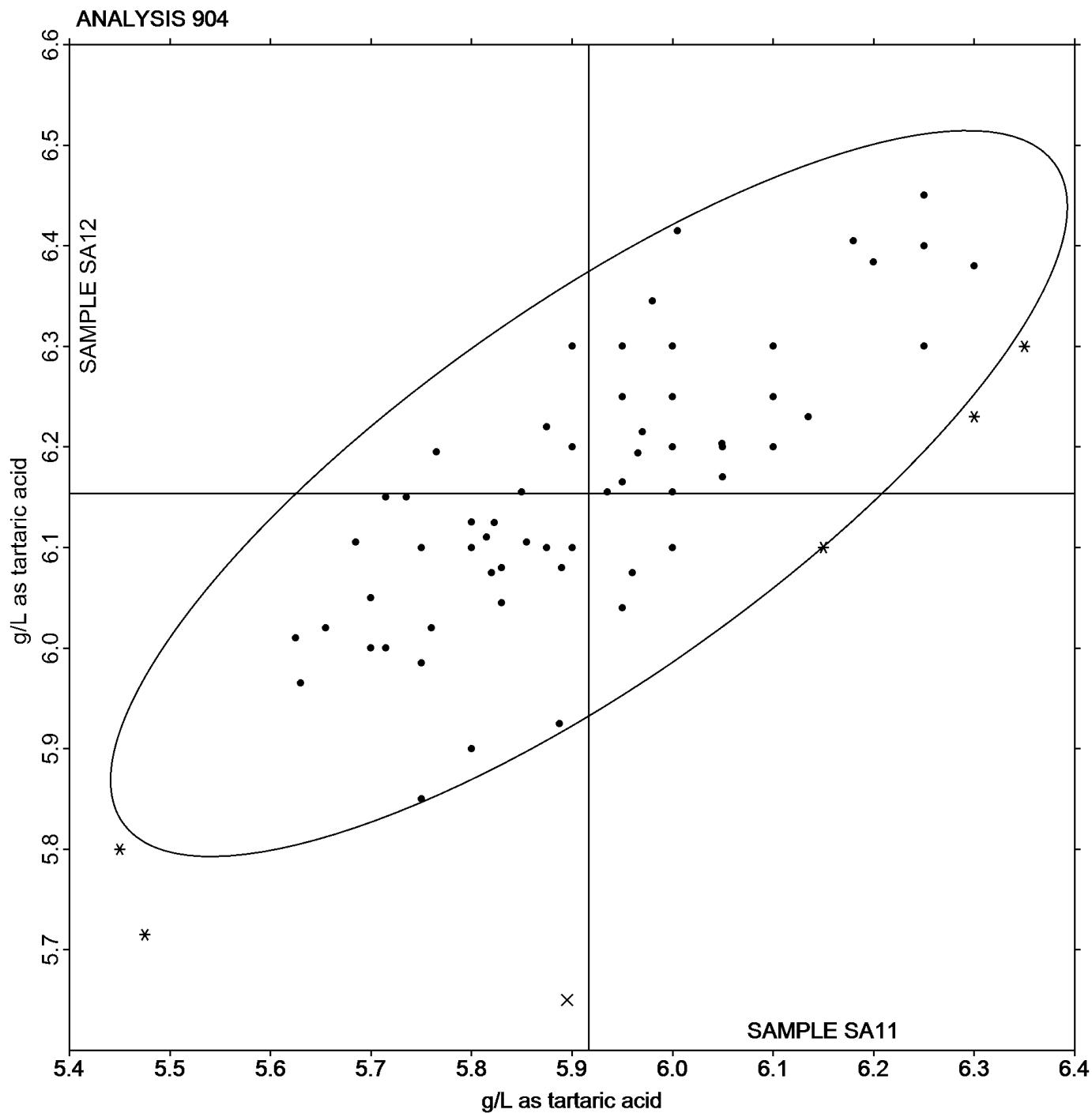
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SAMPLE SA12

g/L as tartaric acid

SAMPLE SA11

g/L as tartaric acid

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		0.5870	0.0776	1.40	0.5695	0.0614	1.14
2B3GRJ		0.6000	0.0906	1.63	0.6000	0.0919	1.71
2LLVUL	X	0.6050	0.0956	1.72	0.6650	0.1569	2.92
2T9BM3		0.4590	-0.0504	-0.91	0.4620	-0.0461	-0.86
2VXG8Y		0.5050	-0.0044	-0.08	0.4750	-0.0331	-0.62
34MP3A		0.4900	-0.0194	-0.35	0.4800	-0.0281	-0.52
4BRQEH		0.5250	0.0156	0.28	0.5250	0.0169	0.31
4BZX7W		0.5465	0.0371	0.67	0.5180	0.0099	0.18
4EZ9ZB		0.4950	-0.0144	-0.26	0.5050	-0.0031	-0.06
64JMRV		0.4620	-0.0474	-0.85	0.4840	-0.0241	-0.45
68DJDF		0.5900	0.0806	1.45	0.5700	0.0619	1.15
68EKWT		0.4255	-0.0839	-1.51	0.4493	-0.0589	-1.10
6DHHN7		0.5050	-0.0044	-0.08	0.4650	-0.0431	-0.80
6GJN6W		0.5550	0.0456	0.82	0.5450	0.0369	0.69
6J4389		0.4200	-0.0894	-1.61	0.4300	-0.0781	-1.45
6R4RDW		0.5050	-0.0044	-0.08	0.5100	0.0019	0.03
6ZW8ZF		0.4900	-0.0194	-0.35	0.4850	-0.0231	-0.43
7EDH4W	*	0.6250	0.1156	2.08	0.6450	0.1369	2.55
7PTAR7		0.6350	0.1256	2.26	0.6350	0.1269	2.36
8MLEK9		0.5100	0.0006	0.01	0.5100	0.0019	0.03
8NDAA3		0.4950	-0.0144	-0.26	0.4900	-0.0181	-0.34
8PBK66		0.5200	0.0106	0.19	0.5100	0.0019	0.03
9QTU7D	X	0.7800	0.2706	4.87	0.7800	0.2719	5.06
AZK3P8		0.5040	-0.0054	-0.10	0.5220	0.0139	0.26
B692JT	X	1.0000	0.4906	8.83	1.0000	0.4919	9.15
CAK7VT		0.5350	0.0256	0.46	0.5550	0.0469	0.87
CB4T44		0.4800	-0.0294	-0.53	0.4900	-0.0181	-0.34
CJ9Z8P		0.4900	-0.0194	-0.35	0.4750	-0.0331	-0.62
CKGCNQ		0.4900	-0.0194	-0.35	0.4900	-0.0181	-0.34
CMA9BZ		0.6400	0.1306	2.35	0.6100	0.1019	1.89
DT7MA7		0.5050	-0.0044	-0.08	0.5250	0.0169	0.31
DVVUU3		0.5000	-0.0094	-0.17	0.5000	-0.0081	-0.15
E2F9XZ	*	0.5600	0.0506	0.91	0.6100	0.1019	1.89
E9RZ2Z		0.5250	0.0156	0.28	0.5350	0.0269	0.50
EZKTL4		0.5250	0.0156	0.28	0.5200	0.0119	0.22

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
F2UVAM		0.5465	0.0371	0.67	0.5410	0.0329	0.61
FEJUZP		0.5250	0.0156	0.28	0.5100	0.0019	0.03
FGMMUN		0.4600	-0.0494	-0.89	0.4350	-0.0731	-1.36
FHKZFV		0.4450	-0.0644	-1.16	0.4750	-0.0331	-0.62
FM8FH6		0.4750	-0.0344	-0.62	0.4700	-0.0381	-0.71
G3D2H7		0.5150	0.0056	0.10	0.5200	0.0119	0.22
GHFZRZ		0.5300	0.0206	0.37	0.5250	0.0169	0.31
H4QMTW		0.5300	0.0206	0.37	0.5300	0.0219	0.41
HNZFXJ	X	0.4250	-0.0844	-1.52	0.2300	-0.2781	-5.17
HRJFDY		0.5450	0.0356	0.64	0.5600	0.0519	0.96
J7BR2T		0.4600	-0.0494	-0.89	0.4400	-0.0681	-1.27
J8TJEK		0.4900	-0.0194	-0.35	0.4800	-0.0281	-0.52
JJEQN3		0.4750	-0.0344	-0.62	0.4650	-0.0431	-0.80
JJHFGH		0.5600	0.0506	0.91	0.5550	0.0469	0.87
KPL48P	*	0.5550	0.0456	0.82	0.4950	-0.0131	-0.24
KRAHVY	*	0.6150	0.1056	1.90	0.5650	0.0569	1.06
KVU8JH		0.5650	0.0556	1.00	0.5350	0.0269	0.50
L4KAYY		0.4700	-0.0394	-0.71	0.4800	-0.0281	-0.52
L89JLY		0.4400	-0.0694	-1.25	0.4600	-0.0481	-0.90
LN4CTX		0.5400	0.0306	0.55	0.5400	0.0319	0.59
MCT4TR		0.4310	-0.0784	-1.41	0.4630	-0.0451	-0.84
NBTHEQ		0.4850	-0.0244	-0.44	0.5150	0.0069	0.13
NLEPCV		0.5200	0.0106	0.19	0.5100	0.0019	0.03
PWT26J		0.5250	0.0156	0.28	0.5200	0.0119	0.22
Q84VWM		0.4150	-0.0944	-1.70	0.4500	-0.0581	-1.08
RRXUBT		0.5300	0.0206	0.37	0.5300	0.0219	0.41
T4XAXF		0.3950	-0.1144	-2.06	0.4000	-0.1081	-2.01
TJBHYJ		0.5050	-0.0044	-0.08	0.4800	-0.0281	-0.52
TZYVCC		0.4800	-0.0294	-0.53	0.4750	-0.0331	-0.62
U27D9L	X	0.7600	0.2506	4.51	0.8700	0.3619	6.73
UBXTXQ		0.5750	0.0656	1.18	0.5900	0.0819	1.52
UF7CWJ		0.4700	-0.0394	-0.71	0.4450	-0.0631	-1.17
V8QTCJ		0.5450	0.0356	0.64	0.5600	0.0519	0.96
V8QV3N	X	0.8250	0.3156	5.68	0.8400	0.3319	6.17
VYFTH9	X	0.5100	0.0006	0.01	0.6150	0.1069	1.99

| | | Sample SA11 | | | Sample SA12 | | |
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
W6HX98	X	0.3600	-0.1494	-2.69	0.4200	-0.0881	-1.64
WA8AJQ		0.4550	-0.0544	-0.98	0.4950	-0.0131	-0.24
WAQKL9		0.5700	0.0606	1.09	0.5925	0.0844	1.57
X7N4LJ		0.4050	-0.1044	-1.88	0.3950	-0.1131	-2.11
X86XPE		0.4000	-0.1094	-1.97	0.4000	-0.1081	-2.01
ZE7VYJ		0.5450	0.0356	0.64	0.5300	0.0219	0.41
ZTDB8C		0.4565	-0.0529	-0.95	0.4360	-0.0721	-1.34
ZX3QWJ	X	0.3230	-0.1864	-3.35	0.3230	-0.1851	-3.44

Summary Statistics

Grand Means

 0.50939 g/L as acetic acid   0.50815 g/L as acetic acid

Stnd Dev Btwn Labs

 0.05558 g/L as acetic acid   0.05375 g/L as acetic acid

Statistics based on 69 of 78 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #905

HNZFXJ (X) - Inconsistent in testing between samples, data for Sample SA12 are low.

W6HX98 (X) - Inconsistent in testing between samples.

VYFTH9 (X) - Inconsistent in testing between samples.

B692JT (X) - Data for both samples are high.

2LLVUL (X) - Inconsistent in testing between samples, data for sample SA12 are high. Inconsistent within the determinations of both samples.

V8QV3N (X) - Data for both samples are high. Possible Systematic Error.

ZX3QWJ (X) - Data for both samples are low. Possible Systematic Error.

9QTU7D (X) - Data for both samples are high. Possible Systematic Error.

U27D9L (X) - Data for both samples are high. Possible Systematic Error.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 Cabernet Sauvignon			Sample SA12 Red Blend			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Cash Still method	0.525	0.061	0.0152	0.524	0.061	0.0157	20/23
Enzymatic method	0.501	0.055	-0.0082	0.497	0.054	-0.0107	35/37
HPLC							0/1
GC	0.504	0.000	-0.0054	0.522	0.000	0.0139	1/2
Seg. Flow / Colorimetric Analyzer	0.506	0.028	-0.0033	0.505	0.027	-0.0030	6/6
FTIR	0.510	0.065	0.0010	0.518	0.046	0.0094	7/9
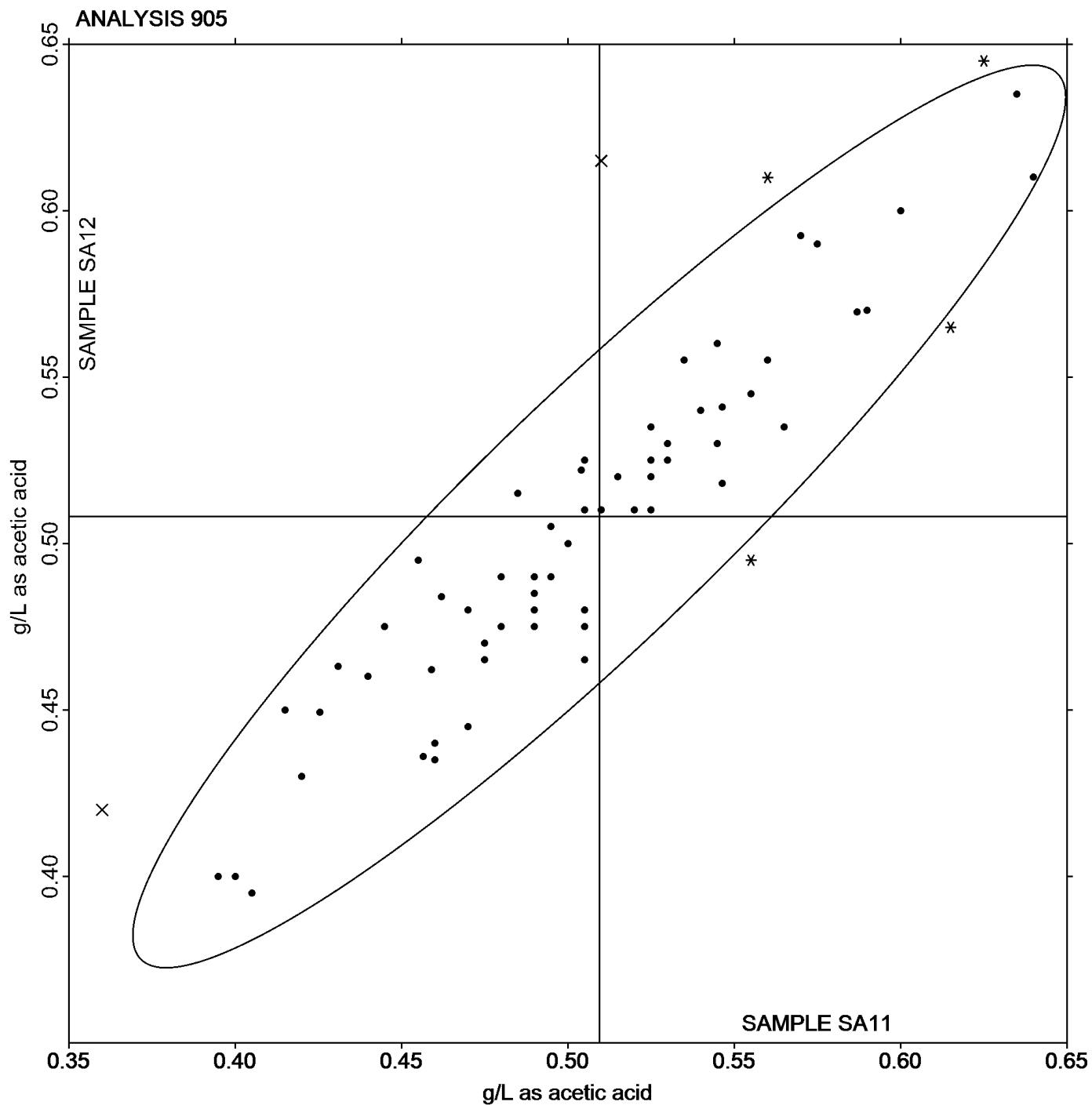
ANALYSIS 905

SAMPLE SA12

g/L as acetic acid

SAMPLE SA11

g/L as acetic acid

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC	X	1.0005	0.0037	8.57	1.0027	0.0037	9.28
2B3GRJ		0.9967	-0.0001	-0.16	0.9991	0.0001	0.25
2LLVUL		0.9968	0.0000	0.05	0.9989	0.0000	-0.02
2T9BM3		0.9969	0.0001	0.30	0.9991	0.0001	0.37
2VXG8Y		0.9969	0.0001	0.19	0.9990	0.0000	0.12
34MP3A		0.9964	-0.0004	-0.86	0.9987	-0.0003	-0.63
3TKAGC	X	0.9940	-0.0027	-6.36	0.9963	-0.0027	-6.68
4BRQEH		0.9969	0.0002	0.40	0.9991	0.0001	0.37
4BZX7W		0.9969	0.0001	0.25	0.9991	0.0001	0.28
4EZ9ZB		0.9965	-0.0003	-0.63	0.9986	-0.0004	-0.88
64JMRV	*	0.9957	-0.0011	-2.49	0.9979	-0.0011	-2.64
68DJDF		0.9961	-0.0007	-1.63	0.9984	-0.0006	-1.43
68EKWT		0.9968	0.0000	0.07	0.9990	0.0000	0.02
6GJN6W		0.9968	0.0000	0.07	0.9990	0.0000	0.12
6J4389	X	0.9960	-0.0008	-1.91	0.9976	-0.0014	-3.39
6ZW8ZF	*	0.9971	0.0003	0.65	0.9990	0.0000	0.12
7EDH4W		0.9968	0.0001	0.18	0.9990	0.0000	0.07
7PTAR7		0.9974	0.0006	1.35	0.9995	0.0005	1.25
8NDAA3		0.9961	-0.0007	-1.56	0.9984	-0.0006	-1.38
8PAMUA		0.9967	-0.0001	-0.16	0.9989	-0.0001	-0.13
9QTU7D	X	0.9950	-0.0018	-4.24	0.9971	-0.0019	-4.77
ANNWW9		0.9969	0.0001	0.19	0.9990	0.0000	0.12
AZK3P8	X	0.9550	-0.0418	-97.27	0.9750	-0.0240	-60.08
B692JT		0.9968	0.0001	0.16	0.9990	0.0000	0.07
CAK7VT		0.9968	0.0000	0.06	0.9991	0.0001	0.36
CJ9Z8P		0.9967	0.0000	-0.10	0.9989	0.0000	-0.12
CKGCNQ		0.9968	0.0000	0.07	0.9990	0.0000	0.12
CMA9BZ	X	0.9928	-0.0040	-9.27	0.9953	-0.0037	-9.19
DT7MA7	*	0.9968	0.0001	0.13	0.9992	0.0003	0.72
E2F9XZ	*	0.9968	0.0000	0.07	0.9992	0.0002	0.62
E9RZ2Z	X	0.9000	-0.0968	-225.35	0.3500	-0.6490	-1,627.80
EZKTL4		0.9968	0.0000	0.08	0.9990	0.0000	0.03
F2UVAM		0.9968	0.0001	0.14	0.9990	0.0000	0.03
FGMMUN		0.9968	0.0000	0.07	0.9989	-0.0001	-0.13
FHKZFV		0.9969	0.0001	0.29	0.9991	0.0001	0.25

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FM8FH6		0.9968	0.0000	0.08	0.9990	0.0000	0.02
G3D2H7		0.9970	0.0002	0.54	0.9990	0.0000	0.12
GHFZRZ	X	0.9963	-0.0005	-1.21	0.9990	0.0000	0.12
HNZFXJ		0.9969	0.0001	0.31	0.9990	0.0001	0.22
HRJFDY		0.9966	-0.0002	-0.42	0.9989	-0.0001	-0.26
HTEVQW	X	1.0035	0.0067	15.56	1.0056	0.0066	16.68
J7BR2T	X	0.9952	-0.0016	-3.77	0.9973	-0.0017	-4.27
J8TJEK		0.9977	0.0009	2.05	0.9998	0.0008	2.13
JJEQN3		0.9972	0.0004	0.89	0.9994	0.0004	1.12
JJHFGH		0.9969	0.0001	0.19	0.9990	0.0000	0.12
KP4W8Y	X	0.9940	-0.0028	-6.45	0.9962	-0.0028	-6.90
KPL48P		0.9968	0.0000	0.07	0.9990	0.0000	0.12
KRAHVY	*	0.9956	-0.0012	-2.84	0.9979	-0.0011	-2.64
L4KAYY		0.9969	0.0001	0.27	0.9990	0.0001	0.22
L89JLY	*	0.9981	0.0013	3.10	1.0002	0.0012	3.13
LN4CTX		0.9969	0.0001	0.28	0.9990	0.0001	0.15
MCT4TR	*	0.9957	-0.0011	-2.49	0.9979	-0.0011	-2.64
PWT26J		0.9968	0.0000	0.11	0.9990	0.0000	0.07
Q84VWM	X	1.0023	0.0055	12.88	1.0045	0.0055	13.92
T4XAXF		0.9977	0.0009	2.05	0.9997	0.0007	1.88
TJBHYJ	X	0.9960	-0.0008	-1.79	0.9980	-0.0010	-2.39
U27D9L		0.9968	0.0000	-0.05	0.9989	-0.0001	-0.13
UBXTXQ		0.9968	0.0000	0.07	0.9990	0.0000	0.12
UF7CWJ		0.9961	-0.0007	-1.58	0.9982	-0.0007	-1.78
V8QTCJ		0.9969	0.0001	0.30	0.9990	0.0000	0.02
V8QV3N		0.9968	0.0001	0.16	0.9990	0.0000	0.07
VYFTH9		0.9968	0.0001	0.17	0.9990	0.0001	0.19
W6HX98		0.9966	-0.0002	-0.40	0.9988	-0.0002	-0.38
WA8AJQ	X	0.9948	-0.0020	-4.61	0.9968	-0.0022	-5.42
WAQKL9	X	0.9993	0.0025	5.89	0.9972	-0.0018	-4.39
X7N4LJ	X	1.0000	0.0032	7.52	1.0020	0.0030	7.65
X86XPE		0.9968	0.0000	0.07	0.9990	0.0000	0.12
ZBVACA		0.9968	0.0000	0.02	0.9990	0.0000	0.03
ZE7VYJ		0.9967	-0.0001	-0.12	0.9990	0.0000	0.01

| Summary Statistics	
Grand Means	
0.99677 sp gr 20/20 C	0.99895 sp gr 20/20 C
Stnd Dev Btwn Labs	
0.00043 sp gr 20/20 C	0.00040 sp gr 20/20 C
	Statistics based on 53 of 69 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #906

WAQKL9 (X) - Data for sample SA11 are high and data for sample SA12 are low. Lab may have switched data between replicates.

X7N4LJ (X) - Data for both samples are high. Possible Systematic Error.

GHFZRZ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

AZK3P8 (X) - Extreme data.

WA8AJQ (X) - Data for both samples are low. Possible Systematic Error.

KP4W8Y (X) - Data for both samples are low. Possible Systematic Error.

9QTU7D (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA11.

TJBHYJ (X) - Inconsistent in testing between samples.

CMA9BZ (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA12.

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

Q84VWM (X) - Data for both samples are high.

J7BR2T (X) - Data for both samples are low. Possible Systematic Error.

3TKAGC (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.

E9RZ2Z (X) - Extreme data.

29DDXC (X) - Data for both samples are high.

6J4389 (X) - Data for sample SA12 are low. Inconsistent within the determinations of both samples.
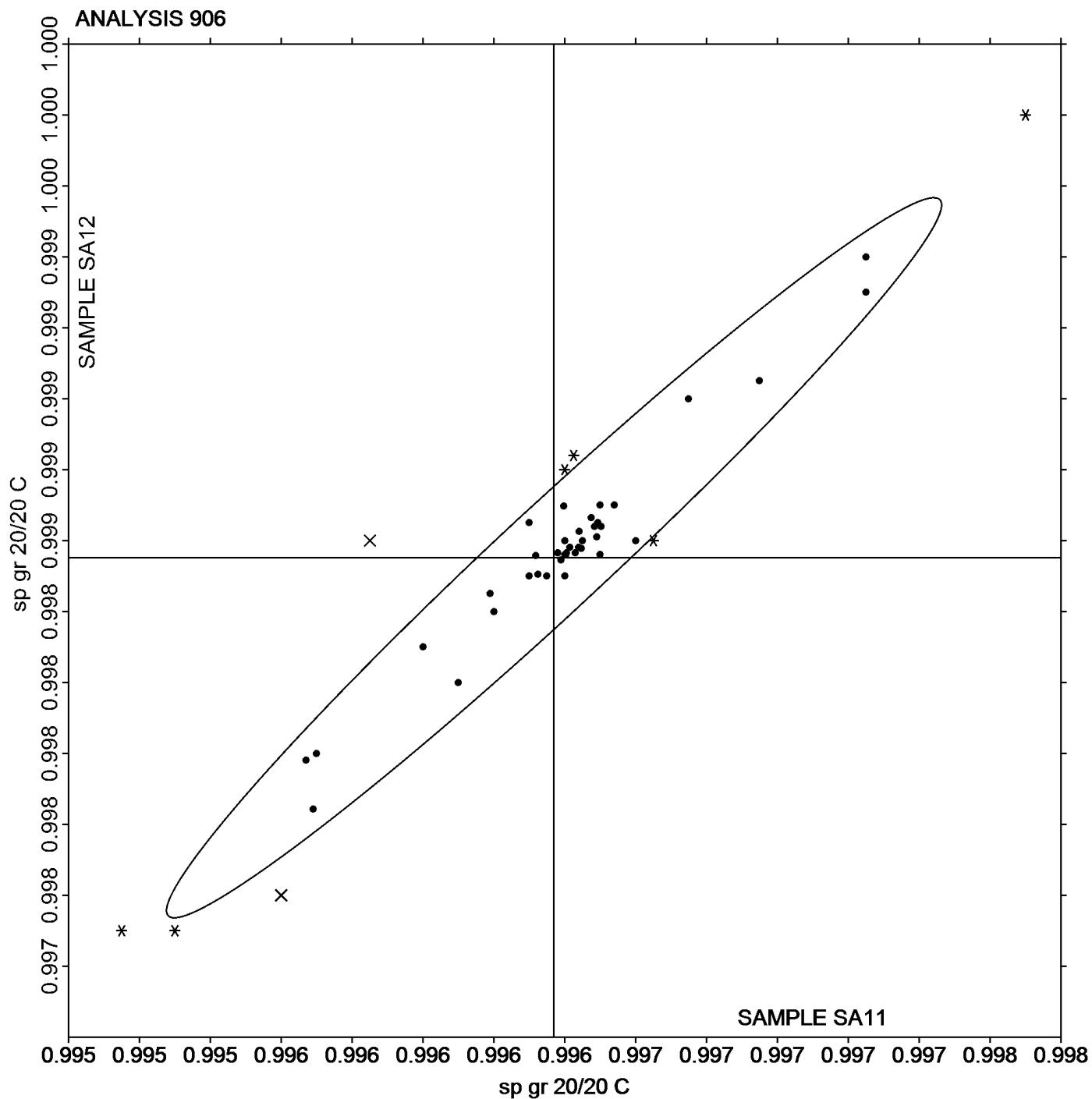
ANALYSIS 906

SAMPLE SA12

sp gr 20/20 C

SAMPLE SA11

sp gr 20/20 C

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		3.665	0.004	0.20	3.505	-0.001	-0.06
2B3GRJ		3.705	0.044	2.00	3.555	0.049	2.11
2LLVUL		3.675	0.014	0.65	3.530	0.024	1.03
2T9BM3		3.620	-0.041	-1.83	3.460	-0.046	-2.01
2VXG8Y		3.620	-0.041	-1.83	3.465	-0.041	-1.79
34MP3A		3.660	-0.001	-0.02	3.495	-0.011	-0.49
3TKAGC		3.620	-0.041	-1.83	3.470	-0.036	-1.57
4BRQEH		3.660	-0.001	-0.02	3.505	-0.001	-0.06
4BZX7W		3.650	-0.011	-0.47	3.500	-0.006	-0.27
4EZ9ZB		3.660	-0.001	-0.02	3.500	-0.006	-0.27
64JMRV		3.660	-0.001	-0.02	3.510	0.004	0.16
68DJDF		3.640	-0.021	-0.93	3.490	-0.016	-0.71
68EKWT	X	3.625	-0.036	-1.60	3.435	-0.071	-3.09
6DHHN7		3.690	0.029	1.33	3.545	0.039	1.67
6GJN6W		3.640	-0.021	-0.93	3.500	-0.006	-0.27
6J4389	*	3.660	-0.001	-0.02	3.480	-0.026	-1.14
6R4RDW		3.705	0.044	2.00	3.540	0.034	1.46
6ZW8ZF		3.680	0.019	0.88	3.530	0.024	1.03
7EDH4W		3.660	-0.001	-0.02	3.505	-0.001	-0.06
7PTAR7		3.670	0.009	0.43	3.520	0.014	0.59
8MLEK9		3.670	0.009	0.43	3.510	0.004	0.16
8NDAA3		3.690	0.029	1.33	3.540	0.034	1.46
8PAMUA		3.630	-0.031	-1.38	3.480	-0.026	-1.14
8PBK66		3.660	-0.001	-0.02	3.505	-0.001	-0.06
9QTU7D		3.700	0.039	1.78	3.540	0.034	1.46
ANNWW9		3.649	-0.012	-0.52	3.488	-0.019	-0.81
AZK3P8		3.670	0.009	0.43	3.510	0.004	0.16
CAK7VT		3.650	-0.011	-0.47	3.505	-0.001	-0.06
CB4T44		3.665	0.004	0.20	3.515	0.009	0.38
CJ9Z8P		3.650	-0.011	-0.47	3.480	-0.026	-1.14
CMA9BZ		3.665	0.004	0.20	3.530	0.024	1.03
DT7MA7		3.645	-0.016	-0.70	3.505	-0.001	-0.06
DVVUU3		3.660	-0.001	-0.02	3.510	0.004	0.16
E2F9XZ	X	3.735	0.074	3.36	3.585	0.079	3.41
E9RZ2Z		3.670	0.009	0.43	3.530	0.024	1.03
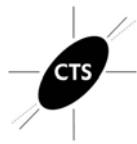
WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EZKTL4		3.630	-0.031	-1.38	3.480	-0.026	-1.14
F2UVAM		3.666	0.005	0.25	3.514	0.008	0.33
FEJUZP		3.665	0.004	0.20	3.500	-0.006	-0.27
FGMMUN		3.655	-0.006	-0.25	3.500	-0.006	-0.27
FHKZFV		3.685	0.024	1.10	3.530	0.024	1.03
FM8FH6	X	3.555	-0.106	-4.76	3.370	-0.136	-5.90
G3D2H7		3.650	-0.011	-0.47	3.490	-0.016	-0.71
GHFZRZ		3.670	0.009	0.43	3.510	0.004	0.16
H4QMTW		3.635	-0.026	-1.15	3.470	-0.036	-1.57
HNZFXJ		3.645	-0.016	-0.70	3.475	-0.031	-1.36
HRJFDY		3.650	-0.011	-0.47	3.500	-0.006	-0.27
HTEVQW		3.643	-0.018	-0.81	3.487	-0.019	-0.84
J7BR2T	X	3.725	0.064	2.91	3.595	0.089	3.84
J8TJEK		3.655	-0.006	-0.25	3.500	-0.006	-0.27
JJEQN3		3.675	0.014	0.65	3.515	0.009	0.38
JJHFGH		3.660	-0.001	-0.02	3.500	-0.006	-0.27
KP4W8Y		3.670	0.009	0.43	3.520	0.014	0.59
KPL48P		3.675	0.014	0.65	3.520	0.014	0.59
KRAHVY		3.640	-0.021	-0.93	3.480	-0.026	-1.14
KVU8JH	*	3.710	0.049	2.23	3.540	0.034	1.46
L4KAYY		3.700	0.039	1.78	3.550	0.044	1.89
L89JLY	*	3.640	-0.021	-0.93	3.510	0.004	0.16
LN4CTX	X	3.630	-0.031	-1.38	3.435	-0.071	-3.09
MCT4TR	X	3.985	0.324	14.63	3.780	0.274	11.85
NBTHEQ		3.640	-0.021	-0.93	3.485	-0.021	-0.92
NLEPCV	X	3.545	-0.116	-5.21	3.400	-0.106	-4.60
PWT26J		3.665	0.004	0.20	3.510	0.004	0.16
Q84VWM	*	3.710	0.049	2.23	3.570	0.064	2.76
RRXUBT		3.690	0.029	1.33	3.530	0.024	1.03
T4XAXF		3.640	-0.021	-0.93	3.490	-0.016	-0.71
TJBHYJ		3.655	-0.006	-0.25	3.510	0.004	0.16
TZYVCC		3.665	0.004	0.20	3.510	0.004	0.16
U27D9L		3.630	-0.031	-1.38	3.485	-0.021	-0.92
UBXTXQ		3.675	0.014	0.65	3.520	0.014	0.59
UF7CWJ		3.685	0.024	1.10	3.530	0.024	1.03

WebCode	Data Flag	Sample SA11 Lab Mean	Sample SA11 Diff from Grand Mean	Sample SA11 CPV	Sample SA12 Lab Mean	Sample SA12 Diff from Grand Mean	Sample SA12 CPV
V8QTCJ		3.680	0.019	0.88	3.535	0.029	1.24
V8QV3N	X	3.835	0.174	7.87	3.605	0.099	4.27
VYFTH9		3.665	0.004	0.20	3.515	0.009	0.38
W6HX98	X	3.670	0.009	0.43	3.550	0.044	1.89
WA8AJQ		3.630	-0.031	-1.38	3.480	-0.026	-1.14
WAQKL9	X	3.505	-0.156	-7.01	3.670	0.164	7.09
X7N4LJ		3.615	-0.046	-2.05	3.470	-0.036	-1.57
X86XPE		3.640	-0.021	-0.93	3.480	-0.026	-1.14
ZE7VYJ		3.675	0.014	0.65	3.500	-0.006	-0.27
ZTDB8C		3.660	-0.001	-0.02	3.500	-0.006	-0.27
ZX3QWJ		3.645	-0.016	-0.70	3.485	-0.021	-0.92

Summary Statistics

Grand Means

3.6605 pH   3.5063 pH

Stnd Dev Btwn Labs

0.0222 pH   0.0231 pH

Statistics based on 71 of 81 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #907

WAQKL9 (X) - Data for sample SA11 are low and data for sample SA12 are high. Lab may have switched samples.

W6HX98 (X) - Inconsistent in testing between samples.

LN4CTX (X) - Inconsistent in testing between samples, data for Sample SA12 are low.

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

V8QV3N (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample SA11.

FM8FH6 (X) - Data for both samples are low. Possible Systematic Error.

E2F9XZ (X) - Data for both samples are high. Possible Systematic Error.

J7BR2T (X) - Data for both samples are high. Possible Systematic Error.

MCT4TR (X) - Data for both samples are high.

68EKWT (X) - Inconsistent in testing between samples, data for Sample SA12 are low.
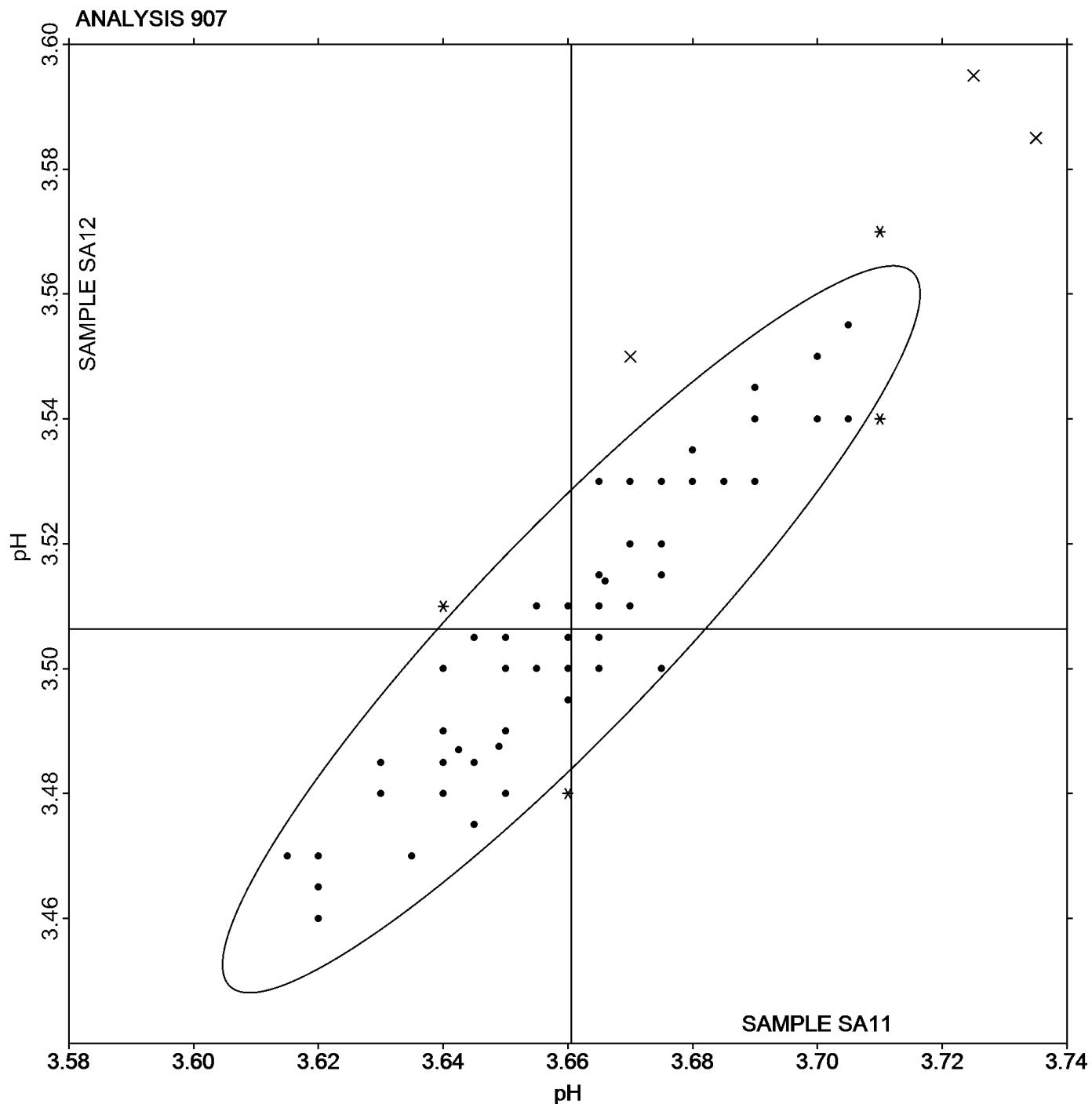
ANALYSIS 907

SAMPLE SA12

pH

SAMPLE SA11

pH

| | | Sample SA11 | | | Sample SA12 | | |
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		8.350	0.412	0.40	13.95	0.18	0.17
2T9BM3		7.950	0.012	0.01	14.10	0.33	0.31
68DJDF		9.400	1.462	1.43	15.60	1.83	1.70
6R4RDW		6.350	-1.588	-1.55	12.60	-1.17	-1.08
8MLEK9		10.000	2.062	2.01	16.00	2.23	2.07
8PAMUA		7.900	-0.038	-0.04	13.60	-0.17	-0.16
AZK3P8		9.100	1.162	1.13	14.20	0.43	0.40
CAK7VT		8.050	0.112	0.11	14.35	0.58	0.54
CJ9Z8P		7.700	-0.238	-0.23	13.85	0.08	0.08
CKGCNQ		7.750	-0.188	-0.18	14.00	0.23	0.21
DT7MA7		8.645	0.707	0.69	13.53	-0.24	-0.22
EZKTL4		8.750	0.812	0.79	14.55	0.78	0.72
H4QMTW		8.680	0.742	0.72	14.31	0.54	0.50
HRJFDY		7.550	-0.388	-0.38	13.40	-0.37	-0.34
L89JLY		6.300	-1.638	-1.60	11.65	-2.12	-1.96
LN4CTX		8.000	0.062	0.06	13.85	0.08	0.08
LXDLKX		6.361	-1.578	-1.54	11.90	-1.87	-1.73
NLEPCV		7.455	-0.483	-0.47	13.02	-0.75	-0.70
V8QV3N		8.566	0.627	0.61	14.72	0.95	0.88
W6HX98		7.545	-0.393	-0.38	13.72	-0.05	-0.05
WA8AJQ		6.300	-1.638	-1.60	12.25	-1.52	-1.41
X7N4LJ	X	5.688	-2.250	-2.19	5.82	-7.95	-7.36

Summary Statistics

Grand Means
7.9381 g/L   13.768 g/L

Stnd Dev Btwn Labs
1.0256 g/L   1.080 g/L

Statistics based on 21 of 22 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #908

X7N4LJ (X) - Inconsistent in testing between samples, data for Sample SA12 are low.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 Cabernet Sauvignon			Sample SA12 Red Blend			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Cu Reduction Method	8.357	0.815	0.419	14.101	0.888	0.333	9/9
HPLC	8.680	0.000	0.742	14.310	0.000	0.542	1/1
Segmented Flow	7.725	0.035	-0.213	13.925	0.106	0.157	2/2
FTIR	7.814	1.171	-0.125	13.788	1.131	0.020	7/7
Other _____	6.330	0.043	-1.608	11.773	0.174	-1.995	2/3
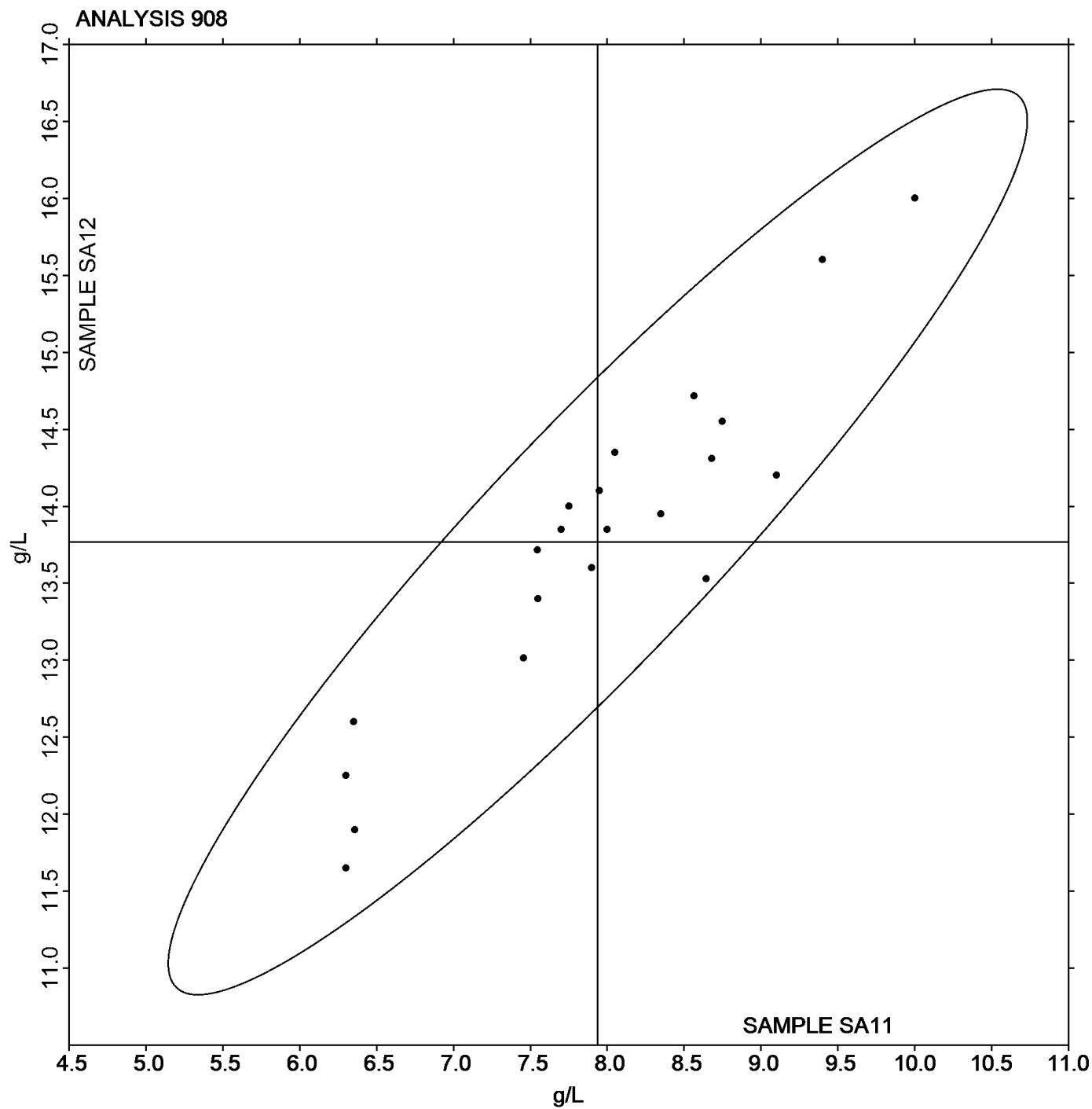
ANALYSIS 908

SAMPLE SA12

g/L

SAMPLE SA11

g/L

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		0.1100	-0.0381	-0.64	0.1700	-0.0515	-0.68
2B3GRJ		0.1850	0.0369	0.62	0.2200	-0.0015	-0.02
2VXG8Y		0.1900	0.0419	0.71	0.2600	0.0385	0.51
34MP3A		0.1500	0.0019	0.03	0.2350	0.0135	0.18
4BRQEH	M				0.0850	-0.1365	-1.80
4BZX7W		0.1860	0.0379	0.64	0.2645	0.0430	0.57
4EZ9ZB		0.1600	0.0119	0.20	0.2300	0.0085	0.11
64JMRV		0.2760	0.1279	2.16	0.3635	0.1420	1.87
68DJDF		0.1900	0.0419	0.71	0.2800	0.0585	0.77
68EKWT		0.2550	0.1069	1.81	0.3250	0.1035	1.36
6DHHN7		0.1300	-0.0181	-0.31	0.2050	-0.0165	-0.22
6GJN6W		0.1400	-0.0081	-0.14	0.2250	0.0035	0.05
6J4389		0.1400	-0.0081	-0.14	0.2500	0.0285	0.38
6ZW8ZF		0.2200	0.0719	1.22	0.3350	0.1135	1.50
7EDH4W		0.1150	-0.0331	-0.56	0.1900	-0.0315	-0.41
7PTAR7		0.1150	-0.0331	-0.56	0.1950	-0.0265	-0.35
8MLEK9		0.1380	-0.0101	-0.17	0.2140	-0.0075	-0.10
8NDAA3		0.0940	-0.0541	-0.91	0.1840	-0.0375	-0.49
8PAMUA		0.0990	-0.0491	-0.83	0.1610	-0.0605	-0.80
8PBK66		0.1200	-0.0281	-0.47	0.1900	-0.0315	-0.41
AZK3P8		0.2100	0.0619	1.05	0.2700	0.0485	0.64
CAK7VT		0.1750	0.0269	0.45	0.2200	-0.0015	-0.02
CB4T44		0.0850	-0.0631	-1.07	0.1700	-0.0515	-0.68
CMA9BZ		0.1712	0.0231	0.39	0.2573	0.0358	0.47
DVVUU3		0.1715	0.0234	0.40	0.2500	0.0285	0.38
E2F9XZ		0.0750	-0.0731	-1.24	0.1050	-0.1165	-1.53
E9RZ2Z	X	0.1000	-0.0481	-0.81	0.8000	0.5785	7.62
EZKTL4		0.1800	0.0319	0.54	0.2350	0.0135	0.18
F2UVAM		0.1960	0.0479	0.81	0.2750	0.0535	0.70
FGMMUN		0.1610	0.0129	0.22	0.2465	0.0250	0.33
FHKZFV		0.1950	0.0469	0.79	0.2600	0.0385	0.51
FM8FH6		0.0700	-0.0781	-1.32	0.1300	-0.0915	-1.20
G3D2H7		0.1250	-0.0231	-0.39	0.2150	-0.0065	-0.09
GHFZRZ		0.1500	0.0019	0.03	0.2215	0.0000	0.00
HNZFXJ		0.1600	0.0119	0.20	0.2250	0.0035	0.05

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
HRJFDY	X	0.0700	-0.0781	-1.32	0.0350	-0.1865	-2.46
J7BR2T	*	0.3100	0.1619	2.74	0.4500	0.2285	3.01
J8TJEK		0.2065	0.0584	0.99	0.2775	0.0560	0.74
JJEQN3		0.1550	0.0069	0.12	0.2300	0.0085	0.11
JJHFGH		0.1585	0.0104	0.18	0.2495	0.0280	0.37
KPL48P		0.1100	-0.0381	-0.64	0.1800	-0.0415	-0.55
KVU8JH		0.0100	-0.1381	-2.33	0.0400	-0.1815	-2.39
L4KAYY		0.2070	0.0589	1.00	0.2945	0.0730	0.96
L89JLY	X	0.3900	0.2419	4.09	0.2250	0.0035	0.05
LN4CTX		0.1150	-0.0331	-0.56	0.2000	-0.0215	-0.28
LXDLKX		0.1600	0.0119	0.20	0.2615	0.0400	0.53
MCT4TR	X	0.4550	0.3069	5.19	0.4900	0.2685	3.54
NBTHEQ		0.1600	0.0119	0.20	0.2400	0.0185	0.24
PWT26J		0.1760	0.0279	0.47	0.2555	0.0340	0.45
Q84VWM	X	0.3550	0.2069	3.50	0.4250	0.2035	2.68
RRXUBT		0.1700	0.0219	0.37	0.2610	0.0395	0.52
T4XAXF	X	0.1850	0.0369	0.62	0.5250	0.3035	4.00
TJBHYJ		0.1250	-0.0231	-0.39	0.2200	-0.0015	-0.02
TZYVCC		0.1720	0.0239	0.40	0.2550	0.0335	0.44
U27D9L	X	0.4250	0.2769	4.68	0.4050	0.1835	2.42
UBXTXQ		0.2050	0.0569	0.96	0.2765	0.0550	0.72
UF7CWJ		0.2050	0.0569	0.96	0.2850	0.0635	0.84
V8QTCJ		0.1095	-0.0386	-0.65	0.1905	-0.0310	-0.41
V8QV3N		0.0440	-0.1041	-1.76	0.0573	-0.1642	-2.16
VYFTH9	*	0.0650	-0.0831	-1.40	0.1750	-0.0465	-0.61
W6HX98	M				0.0150	-0.2065	-2.72
WA8AJQ	*	0.0100	-0.1381	-2.33	0.0100	-0.2115	-2.79
WAQKL9	*	0.0300	-0.1181	-2.00	0.0250	-0.1965	-2.59
X7N4LJ	X	0.2550	0.1069	1.81	0.1950	-0.0265	-0.35
X86XPE		0.1700	0.0219	0.37	0.2450	0.0235	0.31
ZE7VYJ	X	0.2400	0.0919	1.55	0.2600	0.0385	0.51
ZTDB8C		0.1150	-0.0331	-0.56	0.1850	-0.0365	-0.48
ZX3QWJ		0.1155	-0.0326	-0.55	0.1830	-0.0385	-0.51

Summary Statistics	
Grand Means	
0.14810 g/L	0.22148 g/L
Stnd Dev Btwn Labs	
0.05917 g/L	0.07593 g/L
	Statistics based on 57 of 68 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #909

T4XAXF (X) - Data for sample SA12 are high.

W6HX98 (M) - Participant did not submit data for sample SA11.

ZE7VYJ (X) - Inconsistent in testing between samples.

X7N4LJ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

HRJFDY (X) - Inconsistent in testing between samples.

4BRQEH (M) - Participant did not submit data for sample SA11.

L89JLY (X) - Data for sample SA11 are high.

U27D9L (X) - Data for sample SA11 are high. Inconsistent within the determinations of both samples.

Q84VWM (X) - Data for sample SA11 are high.

MCT4TR (X) - Data for both samples are high.

E9RZ2Z (X) - Data for sample SA12 are high. Inconsistent within the determinations of sample SA12.
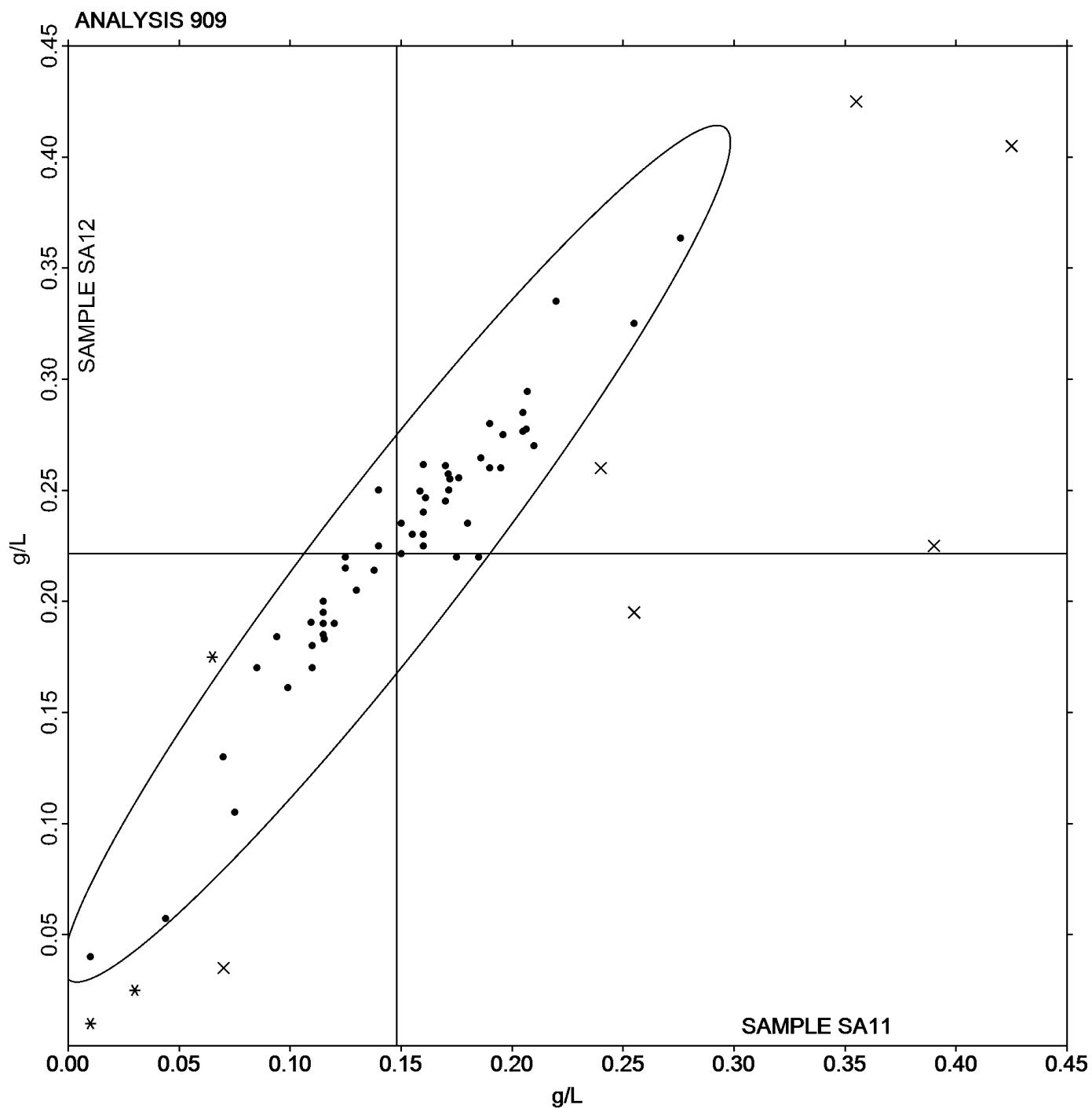
ANALYSIS 909

SAMPLE SA12

g/L

SAMPLE SA11

g/L

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29DDXC		6.400	0.117	0.31	12.18	0.13	0.23
2B3GRJ		6.605	0.322	0.85	12.88	0.83	1.45
2LLVUL		5.765	-0.518	-1.36	11.81	-0.24	-0.42
2VXG8Y		6.730	0.447	1.18	12.80	0.75	1.32
34MP3A	M	6.135	-0.148	-0.39	No data reported for this sample		
4BRQEH		6.525	0.242	0.64	11.83	-0.22	-0.39
4BZX7W		6.070	-0.213	-0.56	12.41	0.36	0.63
4EZ9ZB		5.790	-0.493	-1.30	11.66	-0.39	-0.68
64JMRV		6.845	0.562	1.48	12.02	-0.03	-0.06
68DJDF		6.400	0.117	0.31	12.20	0.15	0.27
68EKWT		6.190	-0.093	-0.24	11.92	-0.13	-0.22
6DHHN7	M	5.905	-0.378	-1.00	No data reported for this sample		
6GJN6W		6.450	0.167	0.44	12.25	0.20	0.35
6J4389		5.895	-0.388	-1.02	11.77	-0.28	-0.49
6ZW8ZF		5.850	-0.433	-1.14	11.50	-0.55	-0.96
7EDH4W		6.400	0.117	0.31	11.75	-0.30	-0.52
7PTAR7		5.850	-0.433	-1.14	11.10	-0.95	-1.66
8MLEK9		6.650	0.367	0.97	12.85	0.80	1.41
8NDAA3	X	6.150	-0.133	-0.35	13.20	1.15	2.02
8PBK66		6.100	-0.183	-0.48	11.80	-0.25	-0.43
9QTU7D		5.700	-0.583	-1.54	11.20	-0.85	-1.49
ANNWW9		6.600	0.317	0.84	12.45	0.40	0.70
CAK7VT		6.945	0.662	1.75	13.04	0.99	1.73
CB4T44		6.235	-0.048	-0.13	11.88	-0.17	-0.29
CKGCNQ		5.950	-0.333	-0.88	11.80	-0.25	-0.43
CMA9BZ		6.192	-0.091	-0.24	11.59	-0.46	-0.80
DT7MA7	X	6.900	0.617	1.63	7.87	-4.18	-7.32
DVVUU3		6.550	0.267	0.70	12.60	0.55	0.97
E2F9XZ		6.250	-0.033	-0.09	11.80	-0.25	-0.43
E9RZ2Z	*	5.300	-0.983	-2.59	10.65	-1.40	-2.45
EZKTL4		6.200	-0.083	-0.22	12.02	-0.03	-0.05
F2UVAM		6.300	0.017	0.05	11.55	-0.50	-0.87
FGMMUN		6.600	0.317	0.84	12.90	0.85	1.49
FHKZFV	*	6.250	-0.033	-0.09	11.00	-1.05	-1.84
FM8FH6		6.180	-0.103	-0.27	11.87	-0.18	-0.31

		Sample SA11				Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV		Lab Mean	Diff from Grand Mean	CPV
G3D2H7		6.100	-0.183	-0.48		11.40	-0.65	-1.14
GHFZRZ		6.700	0.417	1.10		12.40	0.35	0.62
H4QMTW	X	8.290	2.007	5.29		13.97	1.92	3.36
HNZFXJ		5.900	-0.383	-1.01		11.50	-0.55	-0.96
HRJFDY		5.915	-0.368	-0.97		11.30	-0.75	-1.31
J7BR2T		6.150	-0.133	-0.35		12.27	0.22	0.39
J8TJEK		6.120	-0.163	-0.43		11.79	-0.26	-0.45
JJEQN3		6.490	0.207	0.55		12.03	-0.02	-0.03
JJHFGH		6.550	0.267	0.70		12.55	0.50	0.88
KPL48P		6.240	-0.043	-0.11		11.93	-0.12	-0.21
KVU8JH		6.600	0.317	0.84		12.75	0.70	1.23
L4KAYY		6.250	-0.033	-0.09		11.75	-0.30	-0.52
L89JLY		6.300	0.017	0.05		11.65	-0.40	-0.70
LN4CTX		6.500	0.217	0.57		12.90	0.85	1.49
LXDLKX		5.964	-0.319	-0.84		11.91	-0.14	-0.25
MCT4TR		6.630	0.347	0.92		13.13	1.08	1.90
NBTHEQ		6.470	0.187	0.49		12.70	0.65	1.14
PWT26J		6.750	0.467	1.23		12.90	0.85	1.49
Q84VWM		6.300	0.017	0.05		11.90	-0.15	-0.26
RRXUBT		6.600	0.317	0.84		12.70	0.65	1.14
T4XAXF		5.750	-0.533	-1.40		11.35	-0.70	-1.22
TJBHYJ		6.030	-0.253	-0.67		12.05	0.00	0.00
TZYVCC		6.400	0.117	0.31		12.45	0.40	0.70
U27D9L	*	7.000	0.717	1.89		12.00	-0.05	-0.08
UBXTXQ		7.150	0.867	2.29		12.80	0.75	1.32
UF7CWJ		5.930	-0.353	-0.93		12.05	0.00	0.00
V8QTCJ		6.805	0.522	1.38		12.74	0.69	1.20
V8QV3N	X	4.854	-1.429	-3.77		10.20	-1.85	-3.25
VYFTH9	*	5.290	-0.993	-2.62		11.31	-0.74	-1.30
WA8AJQ		6.400	0.117	0.31		12.10	0.05	0.09
WAQKL9	X	0.865	-5.418	-14.28		0.52	-11.53	-20.21
X7N4LJ	X	5.688	-0.595	-1.57		5.82	-6.23	-10.91
X86XPE		6.060	-0.223	-0.59		12.39	0.34	0.59
ZE7VYJ	X	5.755	-0.528	-1.39		6.22	-5.83	-10.22
ZTDB8C		6.135	-0.148	-0.39		11.19	-0.86	-1.51

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ZX3QWJ	**X**	0.212	-6.071	-16.00	0.21	-11.84	-20.75

Summary Statistics

Grand Means
    6.2827 g/L   12.048 g/L

Stnd Dev Btwn Labs
    0.3794 g/L   0.570 g/L

Statistics based on 61 of 71 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #910

8NDAA3 (X) - Inconsistent in testing between samples.

WAQKL9 (X) - Extreme data.

ZE7VYJ (X) - Data for sample SA12 are low.

X7N4LJ (X) - Data for sample SA12 are low.

DT7MA7 (X) - Data for sample SA12 are low.

V8QV3N (X) - Data for both samples are low. Inconsistent within the determinations of sample SA11.

ZX3QWJ (X) - Extreme data.

34MP3A (M) - Participant did not submit data for sample SA12.

6DHHN7 (M) - Participant did not submit data for sample SA12.

H4QMTW (X) - Data for both samples are high. Inconsistent within the determinations of both samples.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 Cabernet Sauvignon			Sample SA12 Red Blend			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
HPLC	5.950	0.000	-0.333	11.800	0.000	-0.248	1/3
Enzymatic/Spectrophotometric	6.308	0.361	0.025	12.069	0.526	0.021	55/63
FTIR	6.069	0.557	-0.214	11.866	1.038	-0.182	5/5

ANALYSIS 910
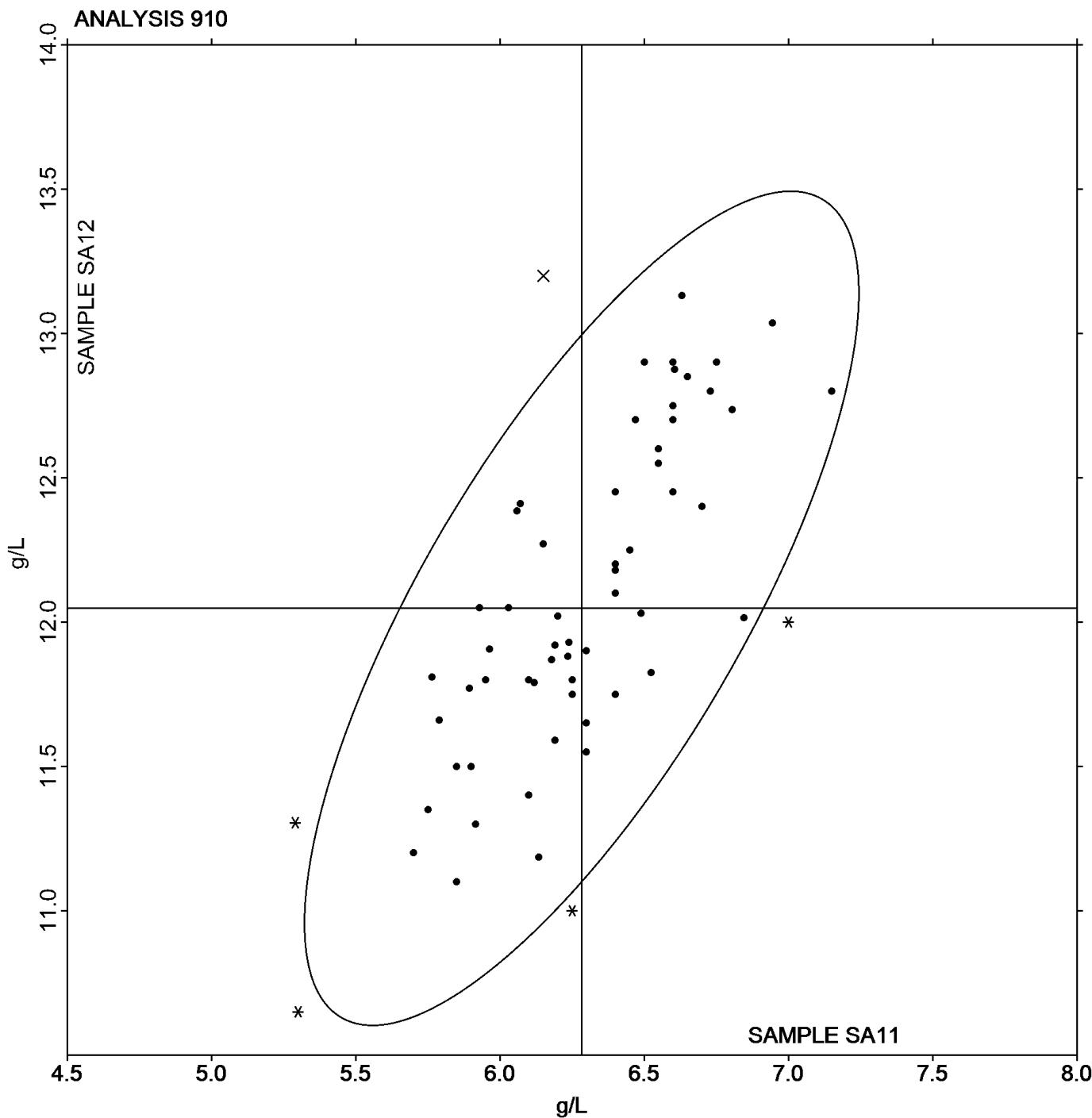
SAMPLE SA12

g/L

SAMPLE SA11

g/L

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
4BRQEH		0.0200	-0.0278	-0.96	0.0250	-0.0291	-0.95
4BZX7W		0.0100	-0.0378	-1.30	0.0100	-0.0441	-1.44
68DJDF		0.0600	0.0122	0.42	0.0500	-0.0041	-0.14
6GJN6W		0.0255	-0.0223	-0.77	0.0380	-0.0161	-0.53
6R4RDW		0.0850	0.0372	1.28	0.1050	0.0509	1.66
6ZW8ZF		0.0345	-0.0133	-0.46	0.0480	-0.0061	-0.20
7EDH4W		0.1000	0.0522	1.80	0.1000	0.0459	1.50
CAK7VT	X	0.1150	0.0672	2.31	0.2100	0.1559	5.09
CJ9Z8P		0.0300	-0.0178	-0.61	0.0415	-0.0126	-0.41
CKGCNQ		0.0325	-0.0153	-0.53	0.0435	-0.0106	-0.35
F2UVAM		0.0200	-0.0278	-0.96	0.0235	-0.0306	-1.00
FGMMUN		0.0580	0.0102	0.35	0.0630	0.0089	0.29
HRJFDY		0.0210	-0.0268	-0.92	0.0280	-0.0261	-0.85
JJHFGH		0.0455	-0.0023	-0.08	0.0470	-0.0071	-0.23
KPL48P		0.0300	-0.0178	-0.61	0.0500	-0.0041	-0.14
LN4CTX		0.0500	0.0022	0.08	0.0600	0.0059	0.19
PWT26J		0.1000	0.0522	1.80	0.1000	0.0459	1.50
T4XAXF		0.0355	-0.0123	-0.42	0.0360	-0.0181	-0.59
V8QV3N		0.0500	0.0022	0.08	0.0400	-0.0141	-0.46
VYFTH9		0.1000	0.0522	1.80	0.1200	0.0659	2.15

Summary Statistics

Grand Means
0.04776 mg/L   0.05413 mg/L

Stnd Dev Btwn Labs
0.02907 mg/L   0.03059 mg/L

Statistics based on 19 of 20 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #911

CAK7VT (X) - Data for sample SA12 are high. Inconsistent within the determinations of sample SA11.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 *Cabernet Sauvignon*			Sample SA12 *Red Blend*			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	0.100	0.000	0.0522	0.100	0.000	0.0459	1/1
Atomic Absorption Spectroscopy	0.052	0.030	0.0040	0.060	0.036	0.0062	8/8
ICP-OES	0.044	0.027	-0.0033	0.048	0.026	-0.0062	7/7
Other _____	0.028	0.007	-0.0203	0.037	0.010	-0.0175	3/4
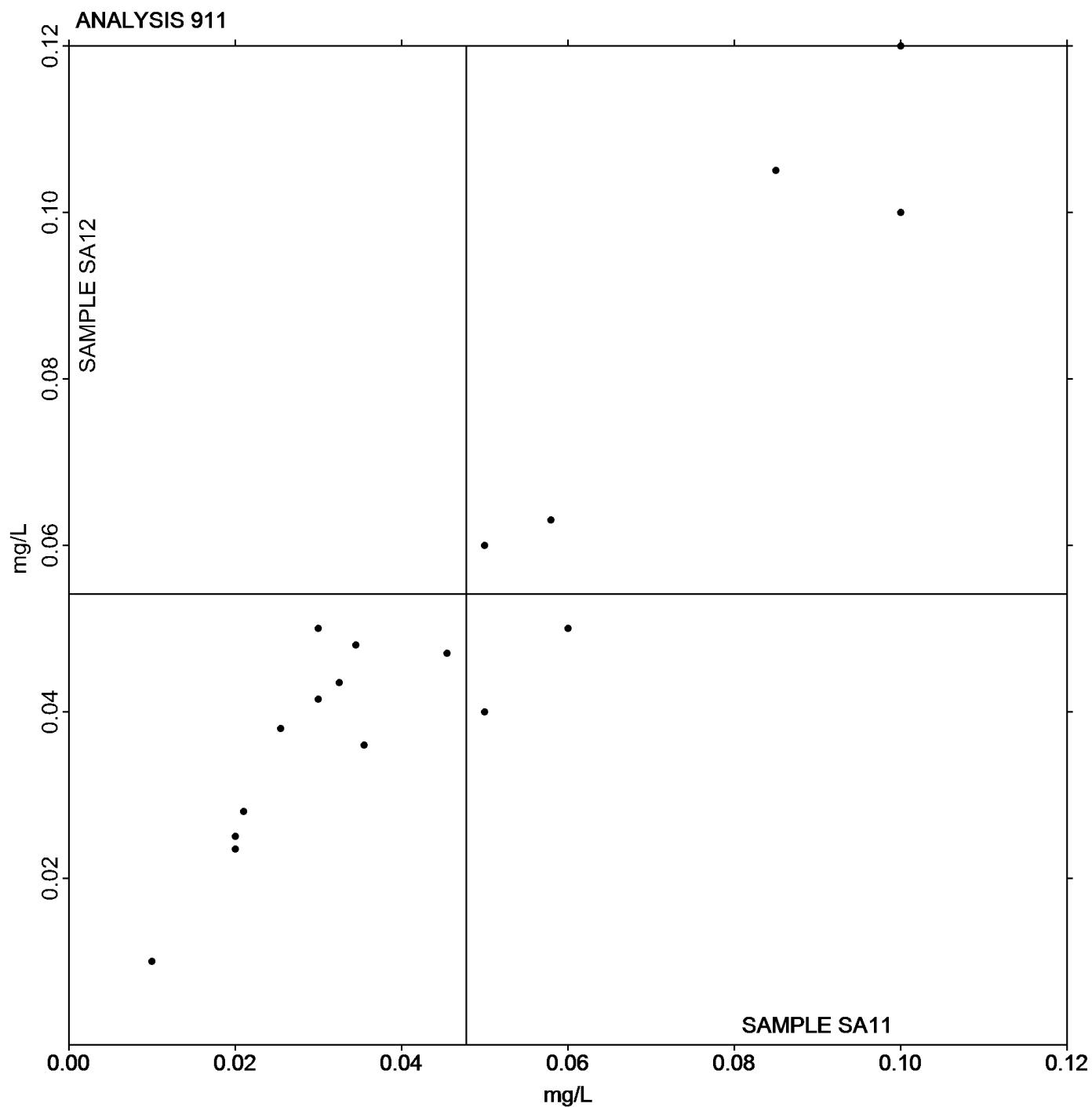
ANALYSIS 911

SAMPLE SA12

mg/L

SAMPLE SA11

mg/L

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

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
4BRQEH		1,243.0	39.1	0.21	1,136.0	102.4	0.49
4BZX7W		1,037.5	-166.4	-0.87	910.0	-123.6	-0.59
68DJDF		1,285.0	81.1	0.43	1,142.0	108.4	0.52
6DHHN7		1,154.0	-49.9	-0.26	1,132.0	98.4	0.47
6ZW8ZF		1,195.0	-8.9	-0.05	1,021.0	-12.6	-0.06
7EDH4W		1,104.0	-99.9	-0.52	904.0	-129.6	-0.62
B692JT		1,191.1	-12.9	-0.07	965.9	-67.8	-0.32
CAK7VT	*	1,714.0	510.1	2.68	1,404.0	370.4	1.76
CKGCNQ		1,200.0	-3.9	-0.02	975.0	-58.6	-0.28
EZKTL4		1,199.5	-4.4	-0.02	1,087.5	53.9	0.26
F2UVAM		1,107.5	-96.4	-0.51	903.5	-130.1	-0.62
G3D2H7		1,282.0	78.1	0.41	1,193.5	159.9	0.76
HRJFDY		938.0	-265.9	-1.40	813.5	-220.1	-1.05
J8TJEK		1,294.5	90.6	0.48	1,127.0	93.4	0.44
JJEQN3		1,103.5	-100.4	-0.53	922.5	-111.1	-0.53
KPL48P		1,300.5	96.6	0.51	1,048.5	14.9	0.07
LN4CTX		1,164.0	-39.9	-0.21	943.0	-90.6	-0.43
PWT26J		1,100.0	-103.9	-0.55	891.5	-142.1	-0.68
T4XAXF		1,439.0	235.1	1.23	1,454.5	420.9	2.00
V8QV3N		968.7	-235.2	-1.24	786.2	-247.4	-1.18
VYFTH9		1,626.5	422.6	2.22	1,495.0	461.4	2.19
X7N4LJ	X	2,060.0	856.1	4.49	1,635.0	601.4	2.86
X86XPE		960.4	-243.6	-1.28	666.4	-367.2	-1.75
ZBVACA		1,083.0	-120.9	-0.64	851.5	-182.2	-0.87

Summary Statistics

Grand Means
 1,203.94 mg/L   1,033.65 mg/L

Stnd Dev Btwn Labs
 190.45 mg/L   210.21 mg/L

Statistics based on 23 of 24 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #912

X7N4LJ (X) - Data for both samples are high. Possible Systematic Error.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA11 Cabernet Sauvignon			Sample SA12 Red Blend			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	1,129.000	35.355	-74.9	1,018.000	161.220	-15.6	2/2
Atomic Absorption Spectroscopy	1,247.717	234.943	43.8	1,054.167	256.923	20.5	5/5
ICP-OES	1,162.367	156.205	-41.6	999.950	235.395	-33.7	6/6
FTIR	1,111.500	245.366	-92.4	977.750	232.285	-55.9	2/2
Other _____	1,249.606	216.715	45.7	1,063.988	216.498	30.3	8/9

ANALYSIS 912
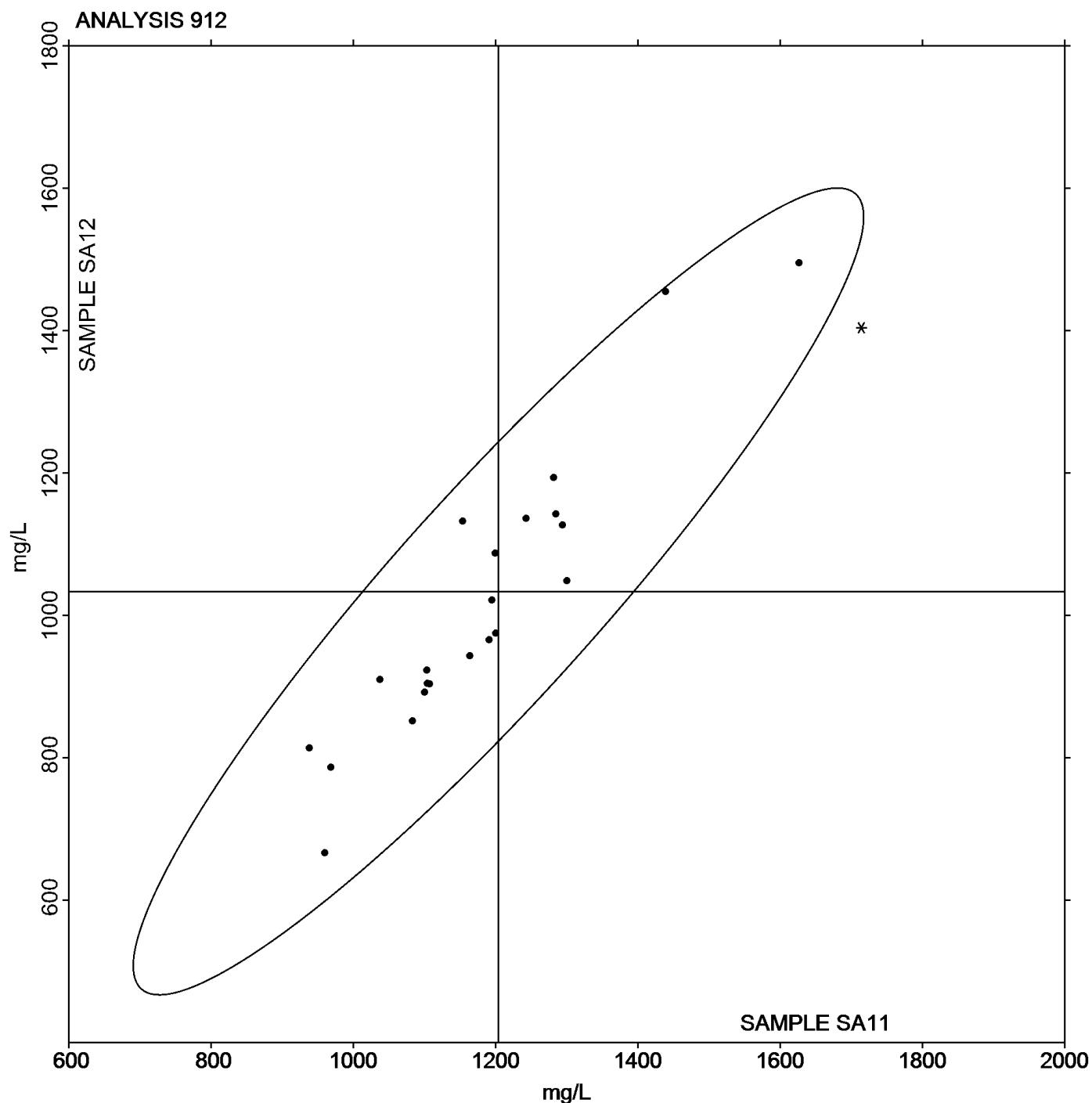
SAMPLE SA12

mg/L

SAMPLE SA11

mg/L

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2T9BM3	X	0.668	-2.643	-11.00	0.666	-2.623	-10.89
2VXG8Y		3.290	-0.021	-0.09	3.315	0.026	0.11
4BRQEH		3.470	0.159	0.66	3.440	0.151	0.63
4BZX7W		3.301	-0.010	-0.04	3.374	0.085	0.35
4EZ9ZB		2.865	-0.446	-1.86	2.840	-0.449	-1.87
64JMRV		3.280	-0.031	-0.13	3.230	-0.059	-0.24
68DJDF		3.500	0.189	0.79	3.400	0.111	0.46
68EKWT		3.175	-0.136	-0.56	3.115	-0.174	-0.72
6DHHN7		3.230	-0.081	-0.34	3.210	-0.079	-0.33
6GJN6W		3.370	0.059	0.25	3.345	0.056	0.23
6J4389		3.377	0.066	0.28	3.447	0.158	0.66
6R4RDW		2.972	-0.338	-1.41	3.000	-0.289	-1.20
6ZW8ZF		3.885	0.574	2.39	3.880	0.591	2.46
8MLEK9		3.310	-0.001	0.00	3.294	0.005	0.02
8PAMUA	X	3.169	-0.142	-0.59	3.334	0.045	0.19
8PBK66		3.220	-0.091	-0.38	3.215	-0.074	-0.31
9QTU7D		2.808	-0.503	-2.09	2.775	-0.514	-2.13
AZK3P8		3.613	0.302	1.26	3.508	0.220	0.91
CAK7VT	X	0.632	-2.679	-11.15	0.665	-2.624	-10.90
E2F9XZ		3.199	-0.112	-0.46	3.172	-0.117	-0.48
E9RZ2Z	X	0.108	-3.203	-13.34	0.107	-3.182	-13.21
EZKTL4		3.365	0.054	0.23	3.335	0.046	0.19
F2UVAM		3.060	-0.251	-1.04	3.020	-0.269	-1.12
FM8FH6	X	3.315	0.004	0.02	4.180	0.891	3.70
G3D2H7		3.292	-0.019	-0.08	3.274	-0.015	-0.06
GHFZRZ		3.270	-0.041	-0.17	3.290	0.001	0.01
HNZFXJ		3.400	0.089	0.37	3.390	0.101	0.42
HRJFDY		3.520	0.209	0.87	3.480	0.191	0.79
J7BR2T	*	3.780	0.469	1.95	3.665	0.376	1.56
J8TJEK		3.195	-0.116	-0.48	3.175	-0.114	-0.47
KPL48P		3.535	0.224	0.93	3.515	0.226	0.94
L4KAYY		3.200	-0.111	-0.46	3.168	-0.121	-0.50
MCT4TR	X	0.616	-2.695	-11.22	0.616	-2.673	-11.10
PWT26J		3.332	0.021	0.09	3.328	0.039	0.16
Q84VWM		3.303	-0.008	-0.03	3.291	0.002	0.01

		Sample SA11				Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV		Lab Mean	Diff from Grand Mean	CPV
T4XAXF		3.336	0.025	0.10		3.322	0.033	0.14
UBXTXQ	*	3.935	0.624	2.60		3.960	0.671	2.79
UF7CWJ		3.195	-0.116	-0.48		3.175	-0.114	-0.47
V8QV3N		3.320	0.009	0.04		3.336	0.047	0.19
VYFTH9	X	0.760	-2.551	-10.62		0.035	-3.254	-13.51
W6HX98		3.012	-0.299	-1.24		2.907	-0.382	-1.59
WAQKL9		3.145	-0.166	-0.69		3.140	-0.149	-0.62
X7N4LJ		3.435	0.124	0.52		3.380	0.091	0.38
X86XPE		2.958	-0.353	-1.47		2.946	-0.343	-1.43
ZE7VYJ		3.261	-0.050	-0.21		3.200	-0.089	-0.37
ZTDB8C		3.400	0.089	0.37		3.405	0.116	0.48

Summary Statistics

Grand Means
  3.3105 Absorbance Units   3.2887 Absorbance Units

Stnd Dev Btwn Labs
  0.2402 Absorbance Units   0.2408 Absorbance Units

Statistics based on 39 of 46 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #915

CAK7VT (X) - Data for both samples are low.

2T9BM3 (X) - Data for both samples are low.

VYFTH9 (X) - Data for both samples are low. Also inconsistent in testing between both samples.

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

FM8FH6 (X) - Data for sample SA12 are high.

MCT4TR (X) - Data for both samples are low.

E9RZ2Z (X) - Data for both samples are low.

ANALYSIS 915
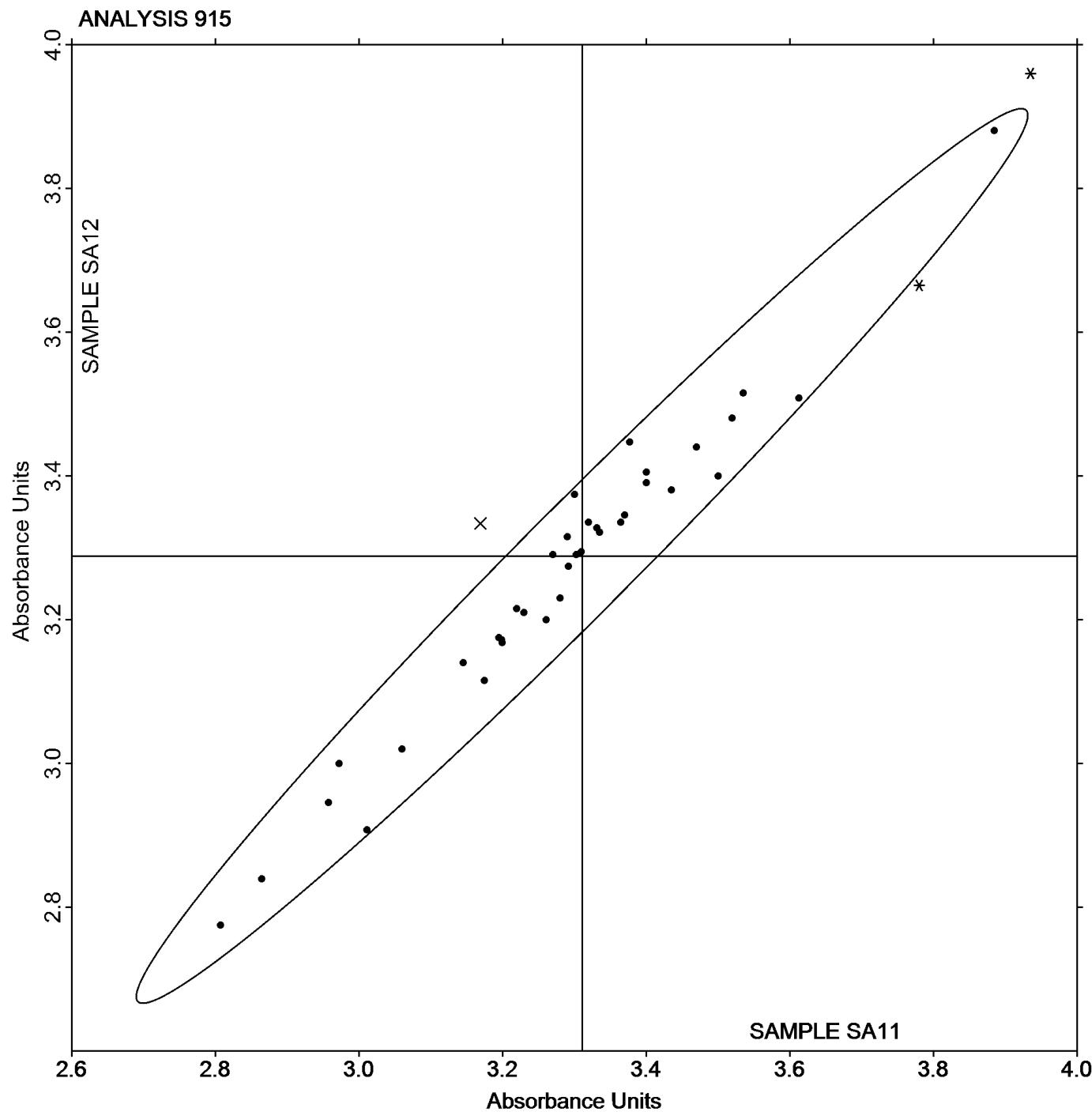
SAMPLE SA12

Absorbance Units

SAMPLE SA11

Absorbance Units

WebCode	Data Flag	Sample SA11 Lab Mean	Diff from Grand Mean	CPV	Sample SA12 Lab Mean	Diff from Grand Mean	CPV
2T9BM3	X	0.854	-3.232	-7.86	0.904	-3.383	-6.87
2VXG8Y		4.165	0.079	0.19	4.325	0.039	0.08
4BRQEH		4.400	0.314	0.76	4.650	0.364	0.74
4BZX7W		4.174	0.087	0.21	4.395	0.108	0.22
4EZ9ZB		3.367	-0.719	-1.75	3.405	-0.882	-1.79
64JMRV		4.000	-0.086	-0.21	4.200	-0.086	-0.18
68DJDF		4.550	0.464	1.13	4.740	0.454	0.92
68EKWT		3.320	-0.766	-1.86	3.370	-0.916	-1.86
6DHHN7		3.839	-0.247	-0.60	3.914	-0.373	-0.76
6GJN6W		4.315	0.229	0.56	4.540	0.254	0.52
6J4389		4.145	0.059	0.14	4.465	0.179	0.36
6R4RDW	X	3.877	-0.209	-0.51	3.696	-0.590	-1.20
6ZW8ZF		4.805	0.719	1.75	5.150	0.864	1.75
8MLEK9		4.413	0.327	0.79	4.720	0.434	0.88
8PAMUA	X	4.070	-0.016	-0.04	4.570	0.284	0.58
8PBK66		4.055	-0.031	-0.08	4.190	-0.096	-0.20
9QTU7D	*	3.010	-1.076	-2.62	3.010	-1.276	-2.59
AZK3P8		3.682	-0.404	-0.98	3.689	-0.598	-1.21
CAK7VT	X	0.808	-3.279	-7.97	0.886	-3.401	-6.91
E2F9XZ		4.110	0.024	0.06	4.408	0.122	0.25
E9RZ2Z	X	0.086	-4.001	-9.73	0.094	-4.192	-8.51
EZKTL4		4.285	0.199	0.48	4.540	0.254	0.52
F2UVAM		3.920	-0.166	-0.40	4.130	-0.156	-0.32
FM8FH6	X	3.770	-0.316	-0.77	4.420	0.134	0.27
G3D2H7		4.144	0.058	0.14	4.353	0.066	0.13
GHFZRZ		4.050	-0.036	-0.09	4.330	0.044	0.09
HNZFXJ		4.320	0.234	0.57	4.590	0.304	0.62
HRJFDY		4.580	0.494	1.20	4.840	0.554	1.12
J7BR2T	X	5.255	1.169	2.84	5.370	1.084	2.20
J8TJEK		4.180	0.094	0.23	4.360	0.074	0.15
KPL48P		4.540	0.454	1.10	4.825	0.539	1.09
L4KAYY		4.013	-0.074	-0.18	4.214	-0.072	-0.15
MCT4TR	X	0.924	-3.163	-7.69	0.969	-3.318	-6.74
PWT26J		4.274	0.188	0.46	4.548	0.262	0.53
Q84VWM		4.184	0.098	0.24	4.325	0.039	0.08

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
T4XAXF		4.176	0.089	0.22	4.386	0.100	0.20
UBXTXQ		4.635	0.549	1.33	4.915	0.629	1.28
UF7CWJ		3.980	-0.106	-0.26	4.175	-0.111	-0.23
V8QV3N		4.252	0.165	0.40	4.540	0.254	0.52
VYFTH9	X	0.983	-3.104	-7.55	0.045	-4.241	-8.61
W6HX98	X	1.862	-2.224	-5.41	1.762	-2.524	-5.13
WAQKL9	*	3.000	-1.086	-2.64	2.995	-1.291	-2.62
X7N4LJ		3.965	-0.121	-0.30	4.205	-0.081	-0.17
X86XPE		3.721	-0.366	-0.89	3.915	-0.372	-0.76
ZE7VYJ		4.132	0.046	0.11	4.256	-0.031	-0.06
ZTDB8C		4.410	0.324	0.79	4.700	0.414	0.84

Summary Statistics

Grand Means
　4.0864　Absorbance Units　　　　4.2864　Absorbance Units

Stnd Dev Btwn Labs
　0.4113　Absorbance Units　　　　0.4924　Absorbance Units

Statistics based on 36 of 46 reporting participants

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

Comments on Assigned Data Flags for Test #916

6R4RDW (X) - Inconsistent in testing between samples.

CAK7VT (X) - Data for both samples are low.

2T9BM3 (X) - Data for both samples are low.

W6HX98 (X) - Data for both samples are low.

VYFTH9 (X) - Data for both samples are low.

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

FM8FH6 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA12.

J7BR2T (X) - Data for sample SA11 are high.

MCT4TR (X) - Data for both samples are low.

E9RZ2Z (X) - Extreme data.

ANALYSIS 916
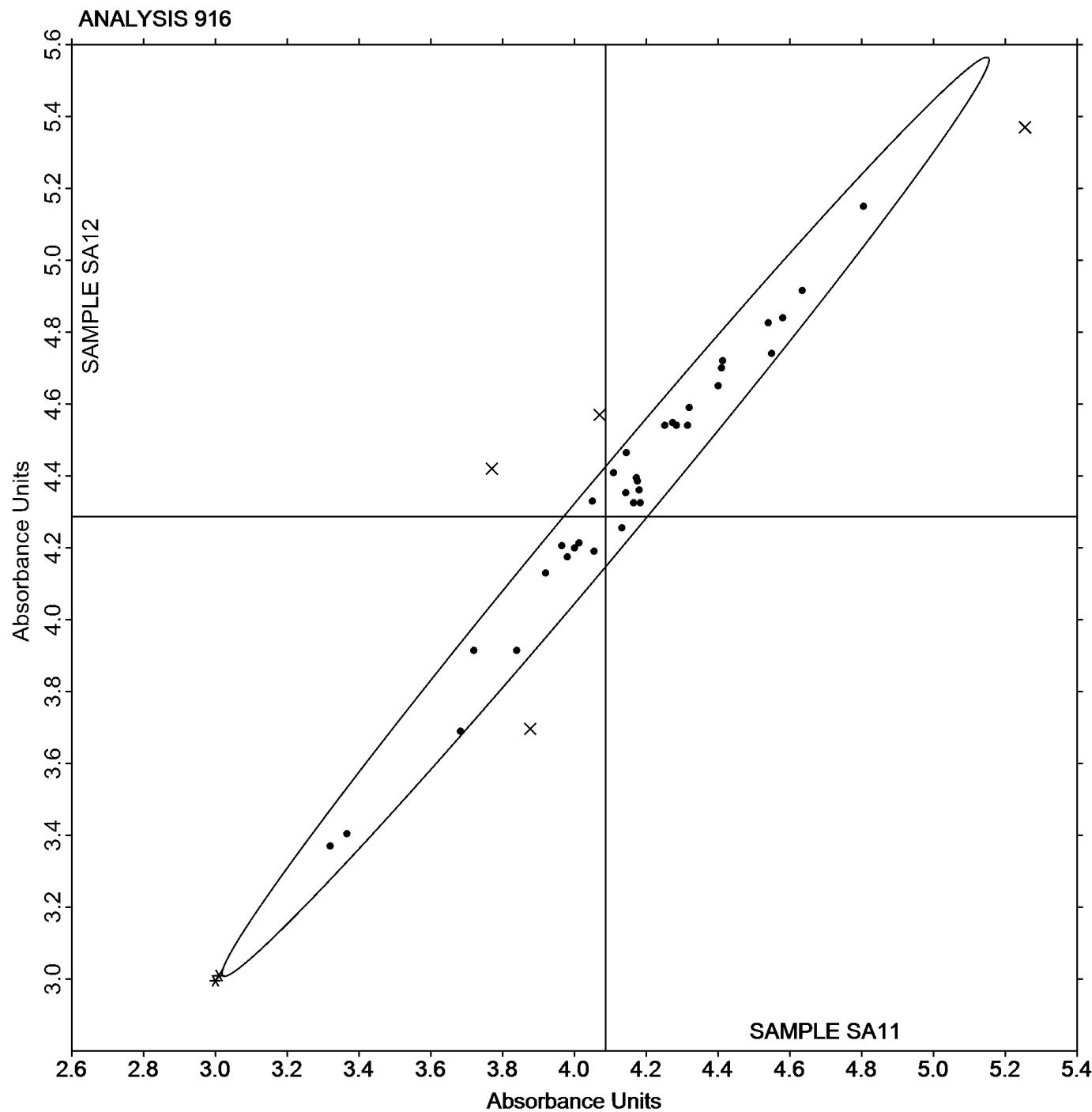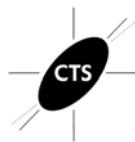
		Sample SA11			Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
2LLVUL		0.2650	0.0281	0.34	0.3170	0.0922	1.36
2T9BM3		0.3100	0.0731	0.88	0.3000	0.0752	1.11
3TKAGC		0.1450	-0.0919	-1.11	0.1500	-0.0748	-1.11
4BRQEH	X	0.4450	0.2081	2.51	0.5050	0.2802	4.14
4BZX7W		0.1850	-0.0519	-0.63	0.2550	0.0302	0.45
4EZ9ZB		0.3750	0.1381	1.67	0.3050	0.0802	1.19
64JMRV		0.2285	-0.0084	-0.10	0.2190	-0.0058	-0.09
68DJDF		0.3000	0.0631	0.76	0.2900	0.0652	0.96
68EKWT		0.2000	-0.0369	-0.45	0.2000	-0.0248	-0.37
6DHHN7	X	6.8650	6.6281	79.98	1.3550	1.1302	16.71
6GJN6W		0.1775	-0.0594	-0.72	0.1915	-0.0333	-0.49
6J4389	M	No data reported for this sample			0.5000	0.2752	4.07
6R4RDW		0.3395	0.1026	1.24	0.2680	0.0432	0.64
6ZW8ZF		0.2885	0.0516	0.62	0.2860	0.0612	0.90
7PTAR7		0.2750	0.0381	0.46	0.2150	-0.0098	-0.15
8MLEK9		0.1250	-0.1119	-1.35	0.1350	-0.0898	-1.33
8NDAA3		0.2100	-0.0269	-0.32	0.1950	-0.0298	-0.44
8PAMUA	M	No data reported for this sample			0.0100	-0.2148	-3.18
9QTU7D	X	0.5100	0.2731	3.30	0.7950	0.5702	8.43
ANNWW9		0.2135	-0.0234	-0.28	0.2365	0.0117	0.17
CAK7VT		0.3300	0.0931	1.12	0.3200	0.0952	1.41
E2F9XZ		0.1865	-0.0504	-0.61	0.1845	-0.0403	-0.60
EZKTL4	X	1.1550	0.9181	11.08	0.6105	0.3857	5.70
FGMMUN		0.2750	0.0381	0.46	0.1665	-0.0583	-0.86
FHKZFV	X	0.2200	-0.0169	-0.20	0.4200	0.1952	2.88
FM8FH6	*	0.1540	-0.0829	-1.00	0.0705	-0.1543	-2.28
G3D2H7		0.2055	-0.0314	-0.38	0.2265	0.0017	0.02
GHFZRZ		0.3775	0.1406	1.70	0.2690	0.0442	0.65
HNZFXJ	X	0.6750	0.4381	5.29	0.7000	0.4752	7.02
HRJFDY		0.1800	-0.0569	-0.69	0.1885	-0.0363	-0.54
HTEVQW	X	0.7585	0.5216	6.29	0.7935	0.5687	8.41
J7BR2T		0.0950	-0.1419	-1.71	0.1300	-0.0948	-1.40
J8TJEK		0.2115	-0.0254	-0.31	0.1985	-0.0263	-0.39
JJEQN3		0.1750	-0.0619	-0.75	0.1900	-0.0348	-0.51
JJHFGH		0.2375	0.0006	0.01	0.2040	-0.0208	-0.31
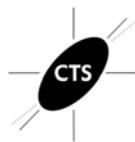
		Sample SA11			Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
KP4W8Y		0.3400	0.1031	1.24	0.3050	0.0802	1.19
KPL48P		0.2100	-0.0269	-0.32	0.1950	-0.0298	-0.44
KRAHVY		0.4000	0.1631	1.97	0.3400	0.1152	1.70
L4KAYY		0.2600	0.0231	0.28	0.2850	0.0602	0.89
L89JLY		0.2600	0.0231	0.28	0.2900	0.0652	0.96
LN4CTX	*	0.2900	0.0531	0.64	0.3500	0.1252	1.85
MCT4TR		0.1500	-0.0869	-1.05	0.1600	-0.0648	-0.96
NBTHEQ		0.0800	-0.1569	-1.89	0.1200	-0.1048	-1.55
NLEPCV	X	0.7750	0.5381	6.49	0.6500	0.4252	6.28
PWT26J		0.3000	0.0631	0.76	0.2500	0.0252	0.37
RRXUBT		0.2150	-0.0219	-0.26	0.2250	0.0002	0.00
T4XAXF		0.2065	-0.0304	-0.37	0.2125	-0.0123	-0.18
TJBHYJ		0.2190	-0.0179	-0.22	0.2310	0.0062	0.09
TZYVCC		0.2390	0.0021	0.03	0.2065	-0.0183	-0.27
U27D9L		0.1000	-0.1369	-1.65	0.1000	-0.1248	-1.85
UBXTXQ	X	0.6590	0.4221	5.09	0.9055	0.6807	10.06
UF7CWJ		0.2900	0.0531	0.64	0.2855	0.0607	0.90
V8QV3N		0.3200	0.0831	1.00	0.2400	0.0152	0.22
VYFTH9		0.2130	-0.0239	-0.29	0.1795	-0.0453	-0.67
WA8AJQ	*	0.4100	0.1731	2.09	0.2900	0.0652	0.96
WAQKL9	X	0.5200	0.2831	3.42	0.1950	-0.0298	-0.44
X7N4LJ		0.0600	-0.1769	-2.13	0.0850	-0.1398	-2.07
X86XPE		0.2950	0.0581	0.70	0.2900	0.0652	0.96
ZTDB8C		0.2110	-0.0259	-0.31	0.2160	-0.0088	-0.13

Research Property Consensus Value

Consensus Average	0.23688 NTU	0.22483 NTU

Note: Tests 950, 951 and 952, are research tests. As a result participants should use caution when evaluating data for these tests.

**Wines tested:** SA11: Cabernet Sauvignon; SA12: Red Blend

This consensus average is based on 47 reporting participants.
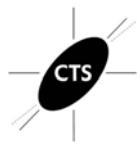
Comments on Assigned Data Flags for Test #950

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

WAQKL9 (X) - Data for sample SA11 are high. Inconsistent within the determinations of sample SA11.

EZKTL4 (X) - Data for both samples are high.

8PAMUA (M) - Participant did not submit data for sample SA11.

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

4BRQEH (X) - Data for sample SA12 are high.

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

9QTU7D (X) - Data for both samples are high.

6DHHN7 (X) - Extreme data.

FHKZFV (X) - Data for sample SA12 are high.

HTEVQW (X) - Data for both samples are high. Inconsistent within the determinations of both samples.

6J4389 (M) - Participant did not submit data for sample SA11.

ANALYSIS 950

SAMPLE SA12

NTU

SAMPLE SA11

NTU

WebCode	Data Flag	Sample SA11			Sample SA12		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
4BRQEH		274.5	70.7	1.87	292.5	82.1	2.14
68DJDF	X	1.2	-202.6	-5.34	1.2	-209.1	-5.44
6ZW8ZF		197.5	-6.3	-0.17	209.5	-0.9	-0.02
B692JT		201.5	-2.3	-0.06	215.2	4.8	0.13
CJ9Z8P		147.0	-56.8	-1.50	146.5	-63.9	-1.66
CKGCNQ		180.0	-23.8	-0.63	195.0	-15.4	-0.40
KPL48P		170.5	-33.3	-0.88	163.0	-47.4	-1.23
LN4CTX		210.5	6.7	0.18	229.5	19.1	0.50
T4XAXF		215.0	11.2	0.30	238.5	28.1	0.73
V8QV3N		192.7	-11.1	-0.29	203.2	-7.1	-0.19
X86XPE		265.7	62.0	1.63	222.0	11.6	0.30
ZBVACA		186.5	-17.3	-0.46	199.0	-11.4	-0.30

| Research Property Consensus Value		
Consensus Average	203.76 mg/L	210.36 mg/L

Note: Tests 950, 951 and 952, are research tests. As a result participants should use caution when evaluating data for these tests.

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

This consensus average is based on 11 reporting participants.

Comments on Assigned Data Flags for Test #951

68DJDF (X) - Extreme data.
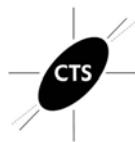
ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 951
Research Property: Methanol Content
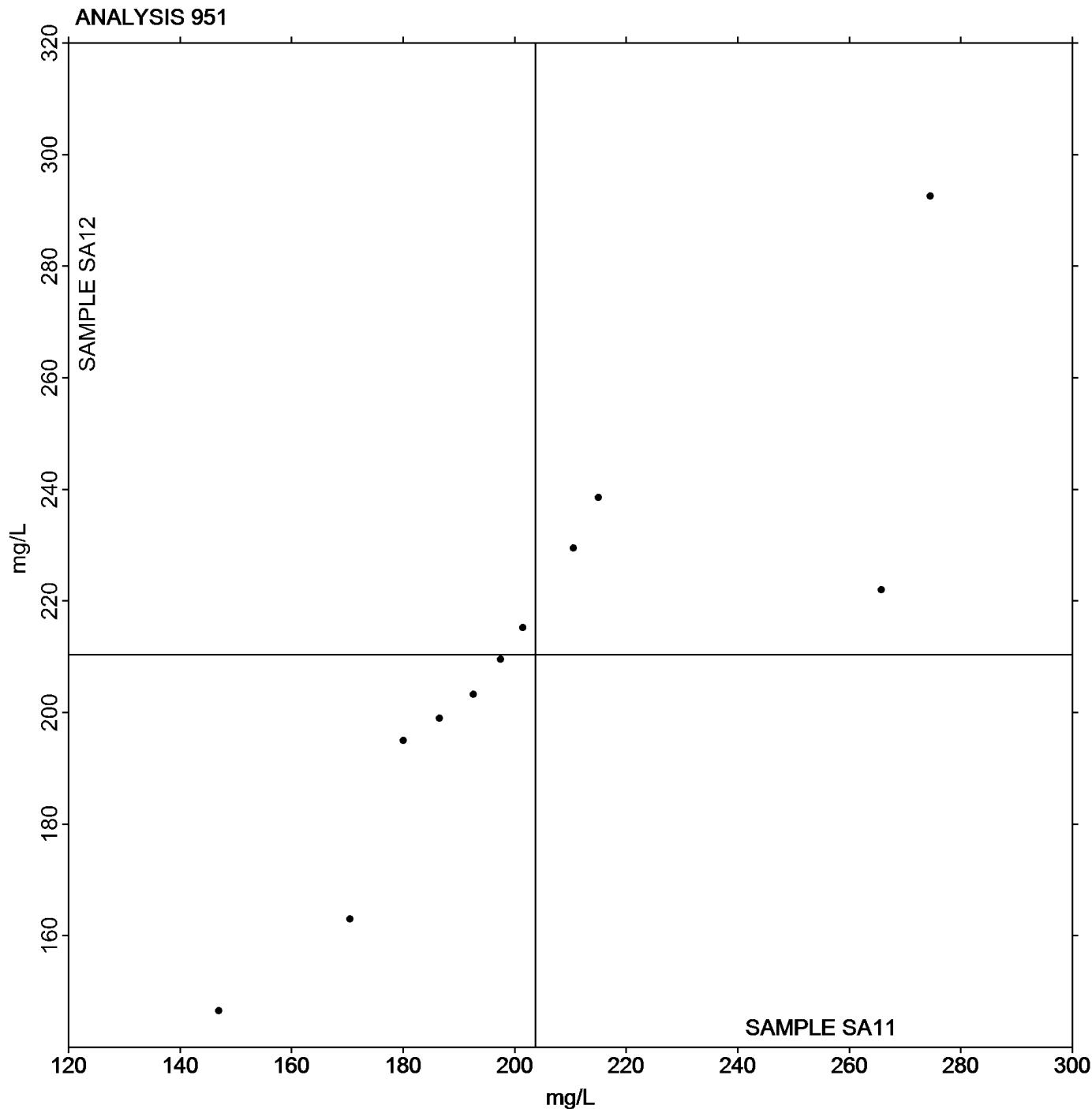
Report #056
Summer 2017

ANALYSIS 951

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

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 952
Research Property: Molecular SO2 Content

Report #056
Summer 2017

		Sample SA11				Sample SA12		
WebCode	Data Flag	Lab Mean	Diff from Target Value	% Diff from Target Value		Lab Mean	Diff from Target Value	% Diff from Target Value
29DDXC		0.2550	-0.0155	-0.37		0.3700	-0.0357	-0.54
4BRQEH		0.2500	-0.0205	-0.50		0.4500	0.0443	0.67
4BZX7W		0.2750	0.0045	0.11		0.4000	-0.0057	-0.09
68DJDF		0.2700	-0.0005	-0.01		0.4200	0.0143	0.22
6DHHN7		0.2140	-0.0565	-1.37		0.3220	-0.0837	-1.27
E2F9XZ		0.2435	-0.0270	-0.65		0.3595	-0.0462	-0.70
E9RZ2Z		0.2555	-0.0150	-0.36		0.3355	-0.0702	-1.07
FM8FH6		0.3380	0.0675	1.64		0.5150	0.1093	1.66
GHFZRZ		0.3000	0.0295	0.72		0.4500	0.0443	0.67
HRJFDY		0.3300	0.0595	1.44		0.4100	0.0043	0.07
JJEQN3		0.3100	0.0395	0.96		0.4850	0.0793	1.21
KPL48P		0.2650	-0.0055	-0.13		0.3650	-0.0407	-0.62
V8QTCJ		0.1905	-0.0800	-1.94		0.3075	-0.0982	-1.49
V8QV3N		0.2900	0.0195	0.47		0.4900	0.0843	1.28

| Research Property Consensus Value		
Consensus Average	0.27046 mg/L	0.40568 mg/L

Note: Tests 950, 951 and 952, are research tests. As a result participants should use caution when evaluating data for these tests.

Wines tested: SA11: Cabernet Sauvignon; SA12: Red Blend

This consensus average is based on 14 reporting participants.

ANALYSIS 952

SAMPLE SA12

SAMPLE SA11

mg/L

mg/L

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