Collaborative Testing Services, Inc.

Wine Industry Interlaboratory Program

Summary Report #030- Fall 2008

Introduction to the Wine Program

Explanation of Tables and Definitions of Terms

Analysis	Analysis Name
901	Ethanol (% of volume)
902	Total Sulfur Dioxide
903	Free Sulfur Dioxide
904	Titratable Acidity
905	Volatile Acidity
906	Specific Gravity
907	pH
908	Residual Sugar
909	L-Malic Acid
910	Glucose + Fructose
950	Research Property: Potassium (K) Content
951	Research: Copper (Cu) Content

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 Testing Guidance Committee (LPTGC) of the Technical Projects Committee (TPC). 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 55 countries, currently participate in the CTS programs.

For further information concerning this report contact:

Collaborative Testing Services, Inc.
21331 Gentry Drive
Sterling, Virginia 20166 USA

+1-571-434-1925
FAX #: +1-571-434-1937
wine@cts-interlab.com

(Toll-free fax within the U.S.: 1-866-fax-2cts)

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

Key for Web Summary Report (Page 1 of 2)

WebCode Assigned laboratory identification number (temporary) used to ensure lab confidentiality while permitting a lab to locate its data in the 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 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.

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.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 901

Ethanol (% of volume)

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
1RVXAJ		13.47	0.03	0.38	13.45	0.01	0.17
24YSWT		13.53	0.08	1.21	13.49	0.06	0.87
25SMC9		13.30	-0.14	-2.20	13.30	-0.13	-2.08
2ETJ9E		13.50	0.06	0.84	13.50	0.07	1.02
2SYSZ9		13.48	0.03	0.46	13.46	0.02	0.33
327XTW		13.40	-0.04	-0.68	13.40	-0.03	-0.53
3AZG14		13.40	-0.05	-0.76	13.37	-0.06	-0.99
3HTNGY		13.45	0.01	0.08	13.45	0.02	0.25
3LEC2A		13.43	-0.02	-0.30	13.43	0.00	-0.06
3UCSC3		13.43	-0.02	-0.30	13.43	-0.01	-0.14
5KPLW3	X	13.60	0.16	2.35	13.65	0.22	3.35
61Y2P3	X	13.50	0.06	0.84	13.40	-0.03	-0.53
66N14C		13.51	0.07	0.99	13.48	0.05	0.71
6H32U5		13.45	0.01	0.08	13.42	-0.01	-0.22
6T5V98		13.44	0.00	-0.07	13.44	0.00	0.02
7A8PRU	*	13.33	-0.11	-1.74	13.36	-0.07	-1.15
81TKQV		13.38	-0.06	-0.98	13.38	-0.05	-0.84
855994		13.45	0.00	0.00	13.42	-0.01	-0.22
8PUEBH		13.49	0.04	0.61	13.51	0.07	1.10
AKZC47		13.44	0.00	-0.07	13.40	-0.03	-0.53
ANAPG9	X	13.41	-0.04	-0.61	13.29	-0.15	-2.31
B8V4LG		13.51	0.07	0.99	13.50	0.07	1.02
BLN5FB		13.36	-0.08	-1.29	13.33	-0.11	-1.69
BMV38D	*	13.28	-0.16	-2.50	13.25	-0.19	-2.93
CHJCQ5		13.53	0.08	1.21	13.52	0.09	1.33
CQYN3B		13.45	0.01	0.08	13.45	0.02	0.25
D1H8AE		13.45	0.01	0.08	13.45	0.01	0.17
D45SBB		13.46	0.02	0.23	13.45	0.01	0.17
D6XTHD		13.48	0.04	0.53	13.49	0.06	0.87
DEYGJW	X	13.80	0.36	5.39	13.35	-0.08	-1.30
E2L3Y4		13.44	0.00	-0.07	13.43	0.00	-0.06
EGPTHV	X	13.08	-0.37	-5.61	13.08	-0.36	-5.57
EQ728C		13.44	-0.01	-0.15	13.43	0.00	-0.06
G8CFFG		13.43	-0.02	-0.30	13.43	-0.01	-0.14
H5QWEK		13.52	0.08	1.14	13.51	0.07	1.10

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 901

Ethanol (% of volume)

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
HUWZJH	X	13.37	-0.07	-1.14	13.46	0.03	0.40
HVQVZZ		13.30	-0.14	-2.20	13.29	-0.15	-2.31
J4HE86		13.46	0.02	0.23	13.44	0.01	0.09
JBCKN1	X	12.85	-0.59	-9.03	12.35	-1.08	-16.80
JL95H7		13.47	0.03	0.38	13.45	0.02	0.25
JQD5FR		13.40	-0.04	-0.68	13.40	-0.03	-0.53
JS3BY2		13.49	0.05	0.68	13.48	0.04	0.64
K1ZJ5E	*	13.38	-0.06	-0.98	13.42	-0.02	-0.29
K5L9WW	X	13.16	-0.28	-4.32	13.15	-0.29	-4.48
K7PWJ9		13.47	0.03	0.38	13.48	0.04	0.64
K7TQL8	X	13.75	0.31	4.63	13.73	0.29	4.51
KNVAMP		13.50	0.06	0.84	13.45	0.02	0.25
M819GV		13.41	-0.03	-0.53	13.40	-0.04	-0.60
MK19ED		13.47	0.02	0.30	13.45	0.02	0.25
MSVEU8	X	13.80	0.36	5.39	13.80	0.37	5.67
PESMY8	X	13.40	-0.04	-0.68	13.30	-0.13	-2.08
PR3T19		13.58	0.13	1.97	13.58	0.14	2.19
PRRSCL	X	13.23	-0.22	-3.34	13.35	-0.08	-1.30
QR6NPZ		13.45	0.00	0.00	13.42	-0.01	-0.22
SBMC32		13.40	-0.04	-0.68	13.40	-0.03	-0.53
SE9W4Z	*	13.46	0.01	0.15	13.40	-0.04	-0.60
SN1FC6		13.45	0.01	0.08	13.43	0.00	-0.06
SWQ3CA	X	13.90	0.45	6.83	13.89	0.45	6.99
SYUC87		13.51	0.07	0.99	13.50	0.07	1.02
TKHK9D		13.47	0.03	0.38	13.46	0.03	0.40
UGZRFC	*	13.35	-0.10	-1.52	13.38	-0.05	-0.84
URFFX4		13.40	-0.04	-0.68	13.40	-0.03	-0.53
UU3ZY2		13.45	0.01	0.08	13.45	0.01	0.17
VSJALU		13.49	0.05	0.68	13.46	0.02	0.33
VUSRA6	X	13.47	0.03	0.38	13.58	0.14	2.19
VV4Z67		13.47	0.02	0.30	13.46	0.02	0.33
XF2EC8		13.38	-0.06	-0.98	13.36	-0.08	-1.22
XHM4WL		13.48	0.03	0.46	13.48	0.04	0.64
YAPPTZ		13.50	0.06	0.84	13.50	0.07	1.02
YMPPRH		13.46	0.02	0.23	13.43	0.00	-0.06

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 901

Ethanol (% of volume)

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
YVN429		13.59	0.15	2.20	13.57	0.14	2.11
YY8TLM		13.57	0.12	1.82	13.55	0.12	1.80
ZB98LH		13.30	-0.14	-2.20	13.30	-0.13	-2.08

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	13.445 percent	13.434 percent
Stnd Dev Btwn Labs	0.066 percent	0.065 percent

Statistics based on 59 of 73 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

Comments on assigned Data Flags

5KPLW3 (X) - Inconsistent in testing between samples, data for Sample SA58 are high. Also inconsistent in testing within both sample sets.

61Y2P3 (X) - Inconsistent in testing between samples.

ANAPG9 (X) - Inconsistent in testing between samples.

DEYGJW (X) - Inconsistent in testing between samples, data for Sample SA57 are high. Also inconsistent in testing within both sample sets.

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

HUWZJH (X) - Inconsistent in testing between samples.

JBCKN1 (X) - Data for both samples are low.

K5L9WW (X) - Data for both samples are low. Possible systematic error.

K7TQL8 (X) - Data for both samples are high. Possible Systematic Error.

MSVEU8 (X) - Data for both samples are high.

PESMY8 (X) - Inconsistent in testing between samples.

PRRSCL (X) - Inconsistent in testing between samples, data for Sample SA57 are low. Also inconsistent in testing within both sample sets.

SWQ3CA (X) - Data for both samples are high.

VUSRA6 (X) - Inconsistent in testing between samples.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 901

Ethanol (% of volume)

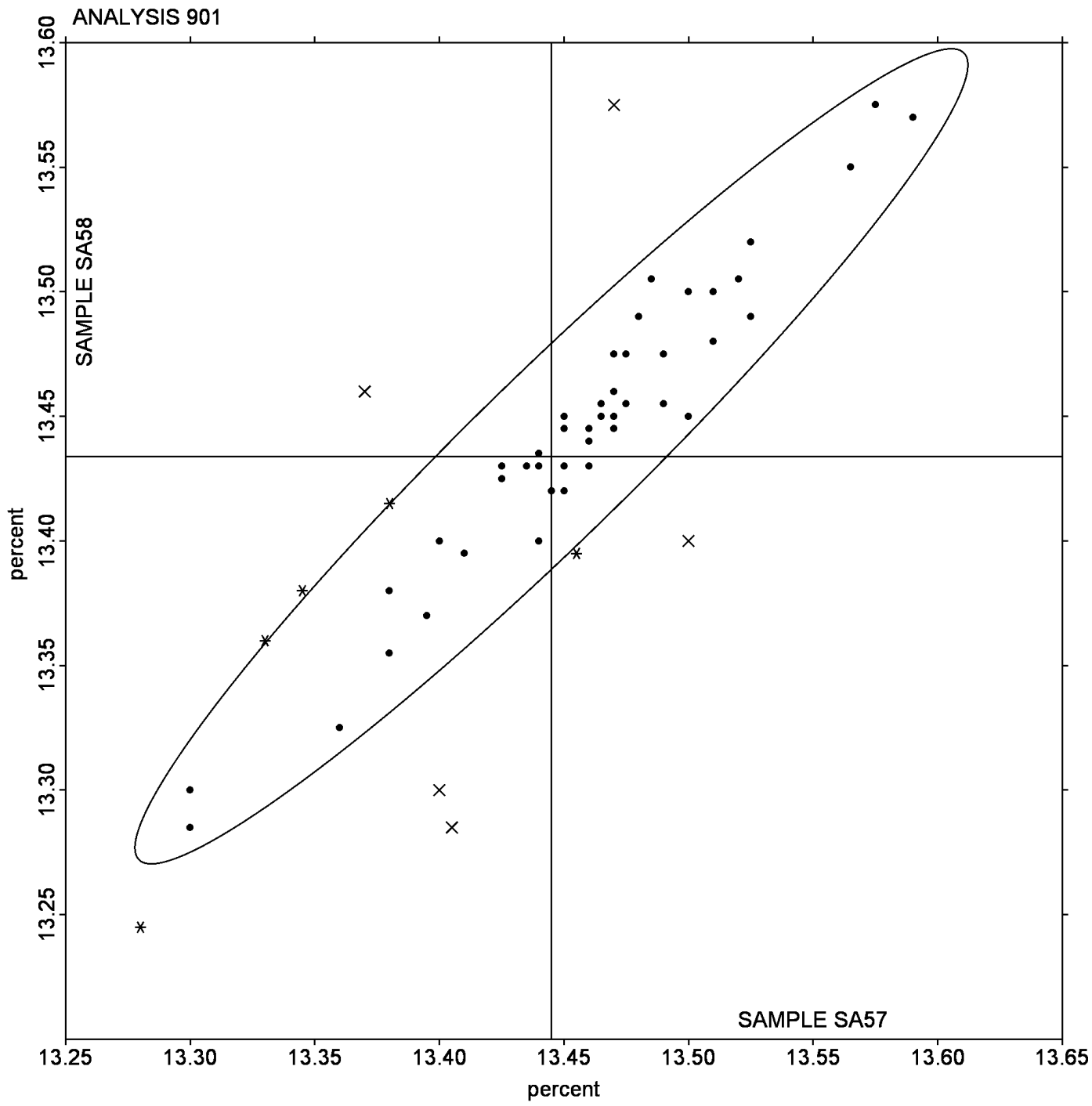
Results by Methodology (as reported by laboratory)

	Sample SA57 *Chardonnay*			Sample SA58 *Chardonnay*				
Test Methodology	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	/ Rpt
Ebulliometer Method	13.44	0.10	0.00	13.44	0.10	0.01	4	9
Gas Chromatography Method	13.44	0.03	-0.01	13.43	0.03	0.00	4	6
Near Infrared Method	13.46	0.06	0.01	13.44	0.06	0.01	27	31
Dist. / Density Method	13.44	0.07	-0.01	13.44	0.07	0.00	7	12
FTIR	13.47	0.05	0.02	13.45	0.06	0.01	11	14
Other _____	13.43	0.00	-0.02	13.43	0.00	-0.01	1	1

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 901

Ethanol (% of volume)



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 902

Total Sulfur Dioxide

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
1Z5GDF		84.50	7.78	1.29	78.50	3.17	0.50
21T8QK		77.50	0.78	0.13	78.50	3.17	0.50
24QNSV	*	65.00	-11.72	-1.95	58.00	-17.33	-2.74
2MMV58		72.00	-4.72	-0.78	73.00	-2.33	-0.37
2N33BA		71.50	-5.22	-0.87	72.00	-3.33	-0.53
3AKVQG		78.50	1.78	0.30	73.00	-2.33	-0.37
3GE16B		89.50	12.78	2.12	88.50	13.17	2.08
3US5QD		84.50	7.78	1.29	84.50	9.17	1.45
3WQD7N		70.40	-6.32	-1.05	67.20	-8.13	-1.28
4FQ617	*	61.50	-15.22	-2.53	66.50	-8.83	-1.40
4XHGNB		82.50	5.78	0.96	85.00	9.67	1.53
53C2G5	*	92.00	15.28	2.54	85.00	9.67	1.53
5GQ9Z3		73.50	-3.22	-0.53	73.50	-1.83	-0.29
5JQLHV		87.04	10.32	1.72	88.70	13.37	2.11
5N8FLN		75.00	-1.72	-0.28	76.50	1.17	0.19
6Z18Y5		86.50	9.78	1.63	77.00	1.67	0.26
764QTB		75.00	-1.72	-0.28	78.00	2.67	0.42
76WS9Z		83.00	6.28	1.04	78.50	3.17	0.50
7J11SP		72.00	-4.72	-0.78	75.50	0.17	0.03
7JVXNC		77.50	0.78	0.13	79.50	4.17	0.66
7QV68J		79.50	2.78	0.46	77.50	2.17	0.34
8B2R7H		82.50	5.78	0.96	83.00	7.67	1.21
8CUTN6		74.00	-2.72	-0.45	79.00	3.67	0.58
8JPZ41	*	72.50	-4.22	-0.70	62.50	-12.83	-2.03
A6D1ER		74.90	-1.82	-0.30	77.60	2.27	0.36
AF5NEM		88.00	11.28	1.87	80.00	4.67	0.74
AMZTVG		76.50	-0.22	-0.04	75.00	-0.33	-0.05
AYFMCQ		80.50	3.78	0.63	71.50	-3.83	-0.61
B2A7WU		73.00	-3.72	-0.62	72.80	-2.53	-0.40
B31EWX		74.00	-2.72	-0.45	71.00	-4.33	-0.68
C8V1PR		80.50	3.78	0.63	79.50	4.17	0.66
CN6DR4		81.50	4.78	0.79	75.00	-0.33	-0.05
CUCSVT		75.00	-1.72	-0.28	76.00	0.67	0.11
D5L1NB		76.00	-0.72	-0.12	76.00	0.67	0.11
D79E6U		75.10	-1.62	-0.27	75.15	-0.18	-0.03

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 902

Total Sulfur Dioxide

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
EC9A2L		71.34	-5.38	-0.89	69.50	-5.83	-0.92
FBPHHG		75.20	-1.52	-0.25	73.80	-1.53	-0.24
FGLJWP		82.50	5.78	0.96	75.00	-0.33	-0.05
FNFQCH		68.00	-8.72	-1.45	71.00	-4.33	-0.68
GFHABH		78.00	1.28	0.21	80.00	4.67	0.74
HMLS6N		75.00	-1.72	-0.28	75.00	-0.33	-0.05
HTFXLH		82.00	5.28	0.88	76.00	0.67	0.11
JFWFLS		71.00	-5.72	-0.95	68.50	-6.83	-1.08
KDFTEW		65.50	-11.22	-1.86	64.00	-11.33	-1.79
KPDXL6		73.50	-3.22	-0.53	76.65	1.32	0.21
LA94FF		69.00	-7.72	-1.28	68.50	-6.83	-1.08
LDSCDE		84.00	7.28	1.21	81.00	5.67	0.90
LTR6F9		76.50	-0.22	-0.04	75.50	0.17	0.03
NXS86U		76.00	-0.72	-0.12	76.00	0.67	0.11
PAJF1V		72.50	-4.22	-0.70	71.50	-3.83	-0.61
Q9TRF7		76.50	-0.22	-0.04	77.50	2.17	0.34
QWFMV4		70.00	-6.72	-1.12	70.00	-5.33	-0.84
RQEBVR	*	72.00	-4.72	-0.78	60.00	-15.33	-2.42
RS4QD9		79.00	2.28	0.38	83.00	7.67	1.21
RX9HBL		72.00	-4.72	-0.78	71.00	-4.33	-0.68
S2KX7V		76.50	-0.22	-0.04	80.50	5.17	0.82
SBFTSY		75.00	-1.72	-0.28	75.00	-0.33	-0.05
ST5NUP		80.00	3.28	0.55	78.50	3.17	0.50
SVU1C7		74.05	-2.67	-0.44	74.65	-0.68	-0.11
UVBAGY		77.50	0.78	0.13	75.50	0.17	0.03
VLXDZS		79.50	2.78	0.46	80.50	5.17	0.82
WA6DB2		71.50	-5.22	-0.87	72.50	-2.83	-0.45
WLU4DL		75.00	-1.72	-0.28	74.50	-0.83	-0.13
WXLB8M		80.00	3.28	0.55	71.35	-3.98	-0.63
XRR6SS		76.00	-0.72	-0.12	68.50	-6.83	-1.08
XSK189		74.56	-2.16	-0.36	72.32	-3.01	-0.48
XUHARJ		72.50	-4.22	-0.70	70.50	-4.83	-0.76
Y2ZEKA	*	93.00	16.28	2.71	91.00	15.67	2.48
ZHXS1K		74.00	-2.72	-0.45	73.00	-2.33	-0.37
ZL7Z1A		81.70	4.98	0.83	88.60	13.27	2.10

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 902

Total Sulfur Dioxide

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
ZZLRLQ		74.00	-2.72	-0.45	69.50	-5.83	-0.92

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	76.715 mg/L	75.328 mg/L
Stnd Dev Btwn Labs	6.019 mg/L	6.326 mg/L

Statistics based on 71 of 71 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

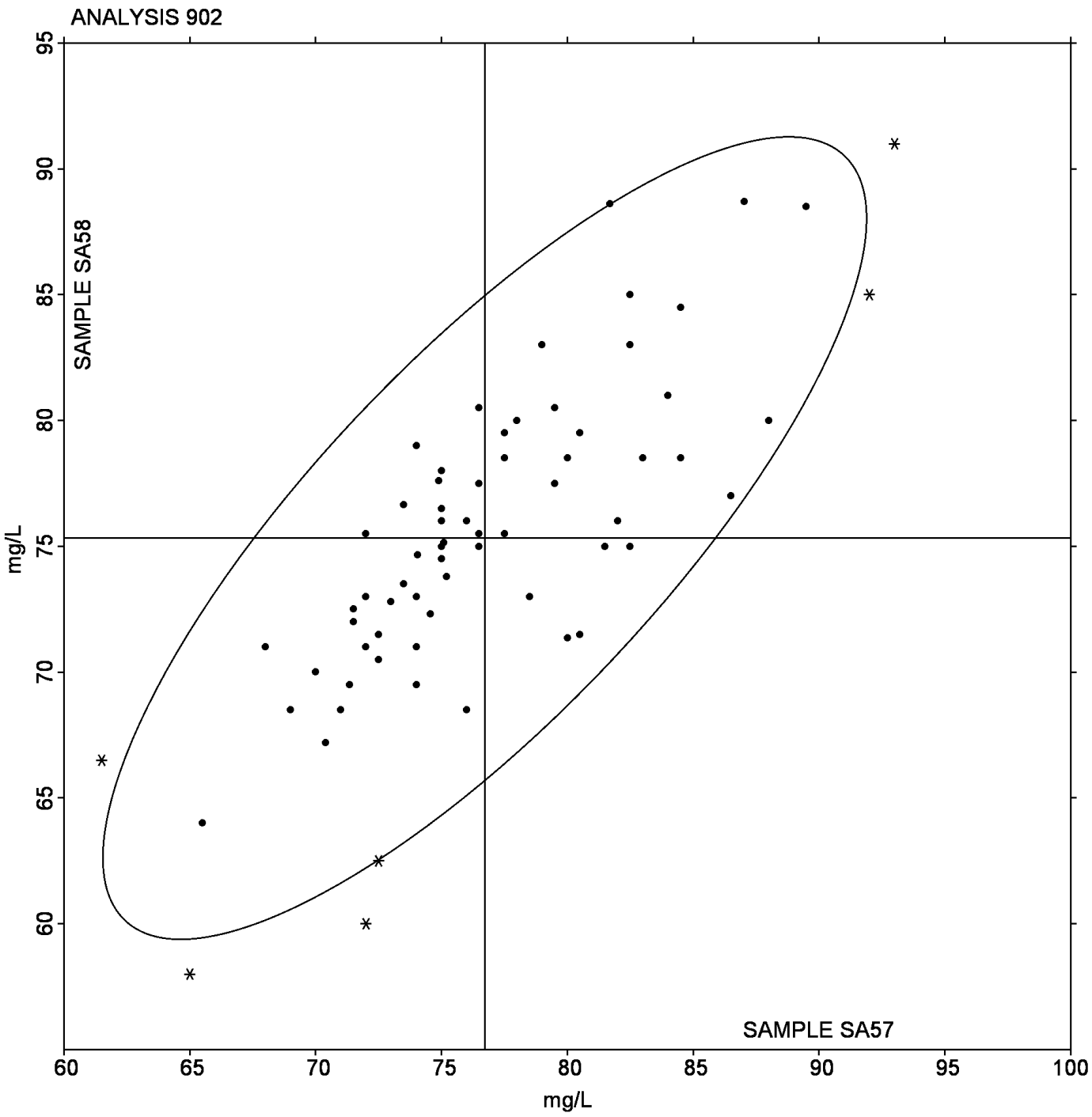
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA57 *Chardonnay* Group Mean	Sample SA57 Btwn Lab STD	Sample SA57 Diff from GM	Sample SA58 *Chardonnay* Group Mean	Sample SA58 Btwn Lab STD	Sample SA58 Diff from GM	Labs Incl	Labs Rpt
Please specify method used	74.02	1.00	-2.70	74.15	1.18	-1.18	3	3
Ripper Method	75.52	4.19	-1.20	74.82	5.30	-0.51	34	35
Aeration Oxidation (AO) Method	75.38	4.14	-1.33	74.35	4.15	-0.97	11	15
Segemented Flow Analyzer	78.13	4.68	1.41	79.00	5.05	3.67	4	5
Enzymatic Method	79.50	0.00	2.78	80.50	0.00	5.17	1	1
Colormetric Analyzer	83.50	3.45	6.78	79.83	6.21	4.50	6	6
FTIR	86.50	0.00	9.78	77.00	0.00	1.67	1	1
Flow Injection Analysis	78.50	8.02	1.78	77.70	3.80	2.37	5	5

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 902

Total Sulfur Dioxide



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 903

Free Sulfur Dioxide

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
1J1SGH		24.00	2.78	0.83	18.50	-1.92	-0.57
1MA8DZ		25.00	3.78	1.13	20.50	0.08	0.02
1QVXXC		19.00	-2.22	-0.66	18.00	-2.42	-0.72
1ZTK8A		18.00	-3.22	-0.96	21.50	1.08	0.32
2KWPMW		21.00	-0.22	-0.07	19.00	-1.42	-0.42
2PFKQP		24.00	2.78	0.83	22.00	1.58	0.47
335B83		23.50	2.28	0.68	21.00	0.58	0.17
3LEDXU		17.00	-4.22	-1.26	19.00	-1.42	-0.42
3Q66S4		23.50	2.28	0.68	19.00	-1.42	-0.42
3UQ2VW		14.50	-6.72	-2.00	13.50	-6.92	-2.06
4G3NDL		21.00	-0.22	-0.07	17.00	-3.42	-1.02
5YX4WH		23.50	2.28	0.68	23.00	2.58	0.77
64KS5Z		26.24	5.02	1.50	27.60	7.18	2.14
66272K		26.50	5.28	1.58	21.50	1.08	0.32
69ARHP		25.00	3.78	1.13	23.00	2.58	0.77
6AL35C		25.20	3.98	1.19	26.80	6.38	1.90
6LAQF7		17.00	-4.22	-1.26	19.00	-1.42	-0.42
6S5WV2	*	19.00	-2.22	-0.66	13.00	-7.42	-2.21
6THXRW		23.50	2.28	0.68	22.00	1.58	0.47
71MNAK		18.50	-2.72	-0.81	18.00	-2.42	-0.72
7Z82MR		21.00	-0.22	-0.07	17.00	-3.42	-1.02
8CLHHF		19.20	-2.02	-0.60	16.80	-3.62	-1.08
AY1YHQ		22.63	1.41	0.42	22.14	1.72	0.51
B7SWM4		23.00	1.78	0.53	23.50	3.08	0.92
BD2XFC		24.00	2.78	0.83	24.50	4.08	1.22
BVSWQL		19.20	-2.02	-0.60	19.20	-1.22	-0.36
C1EKY2		20.00	-1.22	-0.36	19.00	-1.42	-0.42
C9P7W4		20.50	-0.72	-0.21	17.50	-2.92	-0.87
CH4H99	*	13.50	-7.72	-2.30	18.00	-2.42	-0.72
DGVNPV		19.60	-1.62	-0.48	22.50	2.08	0.62
DY3NPC		17.92	-3.30	-0.98	15.36	-5.06	-1.51
EC1YVV		22.50	1.28	0.38	19.00	-1.42	-0.42
ETRX53		25.00	3.78	1.13	24.50	4.08	1.22
F17FV2		22.50	1.28	0.38	20.50	0.08	0.02
FZDLEK		22.50	1.28	0.38	19.00	-1.42	-0.42

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 903

Free Sulfur Dioxide

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
HA2USY		25.00	3.78	1.13	23.00	2.58	0.77
HV6D31		27.00	5.78	1.72	27.00	6.58	1.96
JCE1P6		21.00	-0.22	-0.07	19.00	-1.42	-0.42
JHJZMP		25.00	3.78	1.13	25.00	4.58	1.37
JK9651		20.50	-0.72	-0.21	23.50	3.08	0.92
KEAXUK		21.20	-0.02	-0.01	20.80	0.38	0.11
LLVRMG		22.50	1.28	0.38	21.50	1.08	0.32
LQ15XE		25.35	4.13	1.23	24.71	4.29	1.28
LVKEWB		25.00	3.78	1.13	23.00	2.58	0.77
LWFTCP		22.00	0.78	0.23	20.00	-0.42	-0.13
MGCWJP	*	12.00	-9.22	-2.75	12.00	-8.42	-2.51
MK98U9		19.00	-2.22	-0.66	24.00	3.58	1.07
P1FF98		15.00	-6.22	-1.86	17.50	-2.92	-0.87
PJWMJK		22.00	0.78	0.23	23.00	2.58	0.77
Q4AX49		18.70	-2.52	-0.75	20.65	0.23	0.07
QH89AS		18.00	-3.22	-0.96	20.50	0.08	0.02
S4S791		19.00	-2.22	-0.66	20.50	0.08	0.02
S6ERAX		19.00	-2.22	-0.66	17.00	-3.42	-1.02
SFAJ4B		26.50	5.28	1.58	21.00	0.58	0.17
SMFCBD		24.50	3.28	0.98	19.50	-0.92	-0.27
SZKLU4		18.00	-3.22	-0.96	21.50	1.08	0.32
T1DNHW		21.40	0.18	0.05	23.00	2.58	0.77
U4DSQF		18.00	-3.22	-0.96	18.00	-2.42	-0.72
UJMA43		19.00	-2.22	-0.66	18.00	-2.42	-0.72
V1VXNN		19.00	-2.22	-0.66	16.50	-3.92	-1.17
VKG88G		19.50	-1.72	-0.51	17.50	-2.92	-0.87
VQS4B5		21.00	-0.22	-0.07	21.00	0.58	0.17
VXJMAL		22.00	0.78	0.23	19.00	-1.42	-0.42
WCKL79		23.50	2.28	0.68	22.00	1.58	0.47
XFQ1HR		23.50	2.28	0.68	22.50	2.08	0.62
XHE7Z3		17.00	-4.22	-1.26	18.50	-1.92	-0.57
XKWMWN		24.00	2.78	0.83	23.00	2.58	0.77
XQ9CFW		24.00	2.78	0.83	21.00	0.58	0.17
XREPSL		22.50	1.28	0.38	23.00	2.58	0.77
Y641Y1		21.00	-0.22	-0.07	20.50	0.08	0.02

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 903

Free Sulfur Dioxide

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
YHREDV	*	27.70	6.48	1.93	30.50	10.08	3.01
YJA45F		16.00	-5.22	-1.56	18.00	-2.42	-0.72
YNTZ88		20.40	-0.82	-0.24	19.50	-0.92	-0.27
ZT3GDF		16.50	-4.72	-1.41	13.50	-6.92	-2.06

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	21.219 mg/L	20.420 mg/L
Stnd Dev Btwn Labs	3.352 mg/L	3.353 mg/L

Statistics based on 74 of 74 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

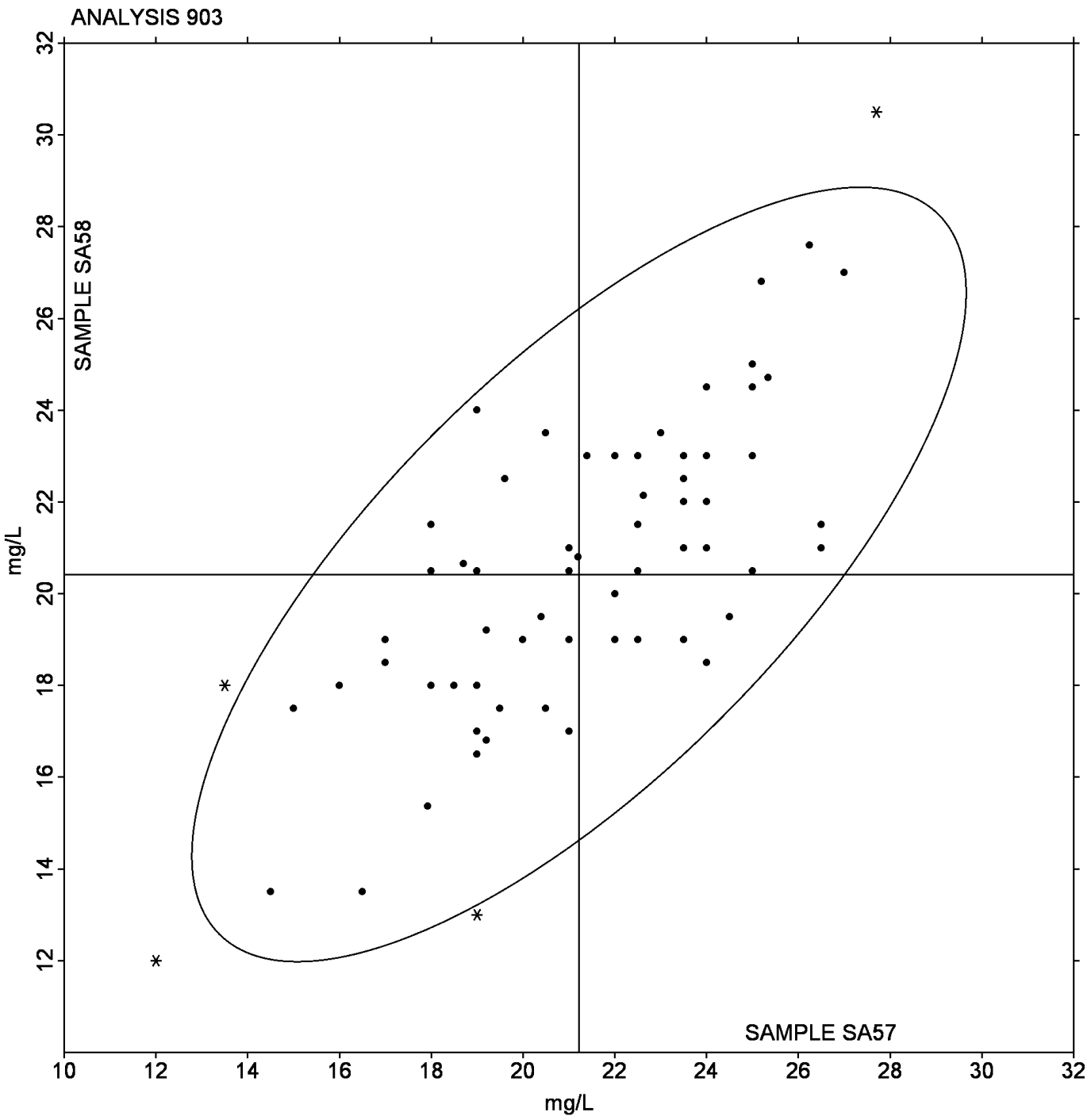
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA57 *Chardonnay* Group Mean	Sample SA57 Btwn Lab STD	Sample SA57 Diff from GM	Sample SA58 *Chardonnay* Group Mean	Sample SA58 Btwn Lab STD	Sample SA58 Diff from GM	Labs Incl	Labs Rpt
Please specify method used	21.30	2.65	0.08	21.15	0.74	0.73	3	3
Ripper Method	22.33	2.61	1.11	21.57	2.66	1.15	24	25
Aeration Oxidation (AO) Method	21.23	3.37	0.01	20.39	3.53	-0.03	23	26
Segmented Flow Analyzer	19.75	3.03	-1.47	19.17	2.93	-1.25	6	6
Enzymatic Method	23.50	0.00	2.28	23.00	0.00	2.58	1	1
Colormetric Analyzer	22.08	2.60	0.86	20.00	2.26	-0.42	6	6
Flow Injection Analysis	19.36	2.95	-1.86	18.50	0.87	-1.92	7	7

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 903

Free Sulfur Dioxide



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titratable Acidity

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
11YAVS	X	5.500	0.251	1.36	5.300	0.034	0.18
1M9XHB		5.210	-0.039	-0.21	5.220	-0.046	-0.23
1MFV2N		5.200	-0.049	-0.27	5.200	-0.066	-0.34
1SDWFU		5.600	0.351	1.90	5.700	0.434	2.22
1UXZWE		5.200	-0.049	-0.27	5.200	-0.066	-0.34
1Y83WP		5.480	0.231	1.25	5.410	0.144	0.74
2176X5		5.185	-0.064	-0.35	5.210	-0.056	-0.29
3MQ7N3		5.600	0.351	1.90	5.700	0.434	2.22
41PF3W		4.830	-0.419	-2.27	4.850	-0.416	-2.13
4TU9M2		5.435	0.186	1.00	5.435	0.169	0.87
4Z6A5C		5.225	-0.024	-0.13	5.225	-0.041	-0.21
52KAH6		5.200	-0.049	-0.27	5.200	-0.066	-0.34
5738KT		5.250	0.001	0.00	5.230	-0.036	-0.18
6LPBVA	X	6.245	0.996	5.38	6.415	1.149	5.88
6MVCF3		4.950	-0.299	-1.62	4.900	-0.366	-1.87
7MNEWR	X	5.650	0.401	2.17	6.600	1.334	6.83
7TLFAX	*	5.150	-0.099	-0.54	5.350	0.084	0.43
8UR6AL		5.325	0.076	0.41	5.300	0.034	0.18
92F23V		5.235	-0.014	-0.08	5.250	-0.016	-0.08
9EGN47		5.200	-0.049	-0.27	5.200	-0.066	-0.34
9LBTK1		5.255	0.006	0.03	5.245	-0.021	-0.11
9MNX7K		5.200	-0.049	-0.27	5.200	-0.066	-0.34
AUHM2U	*	5.800	0.551	2.98	5.800	0.534	2.73
B2ZSVL	X	0.530	-4.719	-25.51	0.550	-4.716	-24.14
B81VVS		5.620	0.371	2.00	5.600	0.334	1.71
B9UXBE		5.200	-0.049	-0.27	5.200	-0.066	-0.34
BF29WK		5.230	-0.019	-0.10	5.240	-0.026	-0.13
CN12SL		5.400	0.151	0.81	5.400	0.134	0.69
DA1G82		5.315	0.066	0.36	5.320	0.054	0.28
DW9VMD		5.250	0.001	0.00	5.200	-0.066	-0.34
EM3ELZ		5.450	0.201	1.09	5.500	0.234	1.20
ENLKJJ		5.300	0.051	0.27	5.400	0.134	0.69
EPST4H		5.300	0.051	0.27	5.250	-0.016	-0.08
EQLNKZ		5.000	-0.249	-1.35	5.000	-0.266	-1.36
FVHQY6		5.200	-0.049	-0.27	5.200	-0.066	-0.34

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titratable Acidity

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
G3FNDM		5.300	0.051	0.27	5.300	0.034	0.18
GBGUD8		5.285	0.036	0.19	5.260	-0.006	-0.03
GEEAUJ		5.235	-0.014	-0.08	5.265	-0.001	0.00
GP8289		5.350	0.101	0.54	5.375	0.109	0.56
H3CESF		5.326	0.076	0.41	5.371	0.105	0.54
JWGQ6N		5.400	0.151	0.81	5.400	0.134	0.69
K4353C		5.450	0.201	1.09	5.450	0.184	0.94
K9GT32	*	5.150	-0.099	-0.54	5.340	0.074	0.38
KA8125		4.900	-0.349	-1.89	4.910	-0.356	-1.82
LNF2HV		5.415	0.166	0.90	5.395	0.129	0.66
LP79GX		5.135	-0.114	-0.62	5.140	-0.126	-0.64
LRT7D3		5.275	0.026	0.14	5.270	0.004	0.02
LXNDUX		5.300	0.051	0.27	5.300	0.034	0.18
MAQA7W		5.110	-0.139	-0.75	5.125	-0.141	-0.72
MRL9UR		5.500	0.251	1.36	5.550	0.284	1.45
MVX7BL		5.400	0.151	0.81	5.500	0.234	1.20
MYFFAL	X	5.250	0.001	0.00	5.550	0.284	1.45
NPJNVL		4.820	-0.429	-2.32	4.860	-0.406	-2.08
NQ1N98		5.020	-0.229	-1.24	5.020	-0.246	-1.26
Q5BHX9		5.245	-0.004	-0.02	5.310	0.044	0.23
QACTXM		5.200	-0.049	-0.27	5.200	-0.066	-0.34
QQJD2Y	X	5.950	0.701	3.79	5.950	0.684	3.50
QXMEJ6		4.870	-0.379	-2.05	4.800	-0.466	-2.38
R3KGXC		5.250	0.001	0.00	5.265	-0.001	0.00
RHBLTM		5.100	-0.149	-0.81	5.250	-0.016	-0.08
SWAU8F		5.250	0.001	0.00	5.195	-0.071	-0.36
SX4PPX		5.300	0.051	0.27	5.300	0.034	0.18
TCC79Q		5.100	-0.149	-0.81	5.100	-0.166	-0.85
TYAX9W		4.935	-0.314	-1.70	4.900	-0.366	-1.87
UCYSJZ		5.100	-0.149	-0.81	5.100	-0.166	-0.85
US4J56	*	5.500	0.251	1.36	5.350	0.084	0.43
V1UJ1A		5.445	0.196	1.06	5.445	0.179	0.92
VRW1YT		5.220	-0.029	-0.16	5.225	-0.041	-0.21
VXR7EN	*	5.250	0.001	0.00	5.450	0.184	0.94
W5P5U4		5.200	-0.049	-0.27	5.350	0.084	0.43

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titratable Acidity

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
W8SGFQ		5.280	0.031	0.17	5.345	0.079	0.41
WC2KF1		4.905	-0.344	-1.86	4.885	-0.381	-1.95
XHWAKW		5.245	-0.004	-0.02	5.260	-0.006	-0.03
XZBT62		5.320	0.071	0.38	5.370	0.104	0.53
Y6FV51		5.315	0.066	0.36	5.290	0.024	0.12
ZCUJ4Q		5.250	0.001	0.00	5.250	-0.016	-0.08

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	5.2492 g/L as tartaric acid	5.2658 g/L as tartaric acid
Stnd Dev Btwn Labs	0.1850 g/L as tartaric acid	0.1953 g/L as tartaric acid

Statistics based on 70 of 76 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

Comments on assigned Data Flags

11YAVS (X) - Inconsistent in testing between samples and inconsistent within the determinations for Sample SA57.

6LPBVA (X) - Data for both samples are high.

7MNEWR (X) - Inconsistent in testing between samples, data for Sample SA58 are high.

B2ZSVL (X) - Extreme data. Lab indicated reporting in g/L Tartaric, but data appear to be in g/100mL Tartaric.

MYFFAL (X) - Inconsistent in testing between samples.

QQJD2Y (X) - Data for both samples are high. Possible Systematic Error.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titratable Acidity

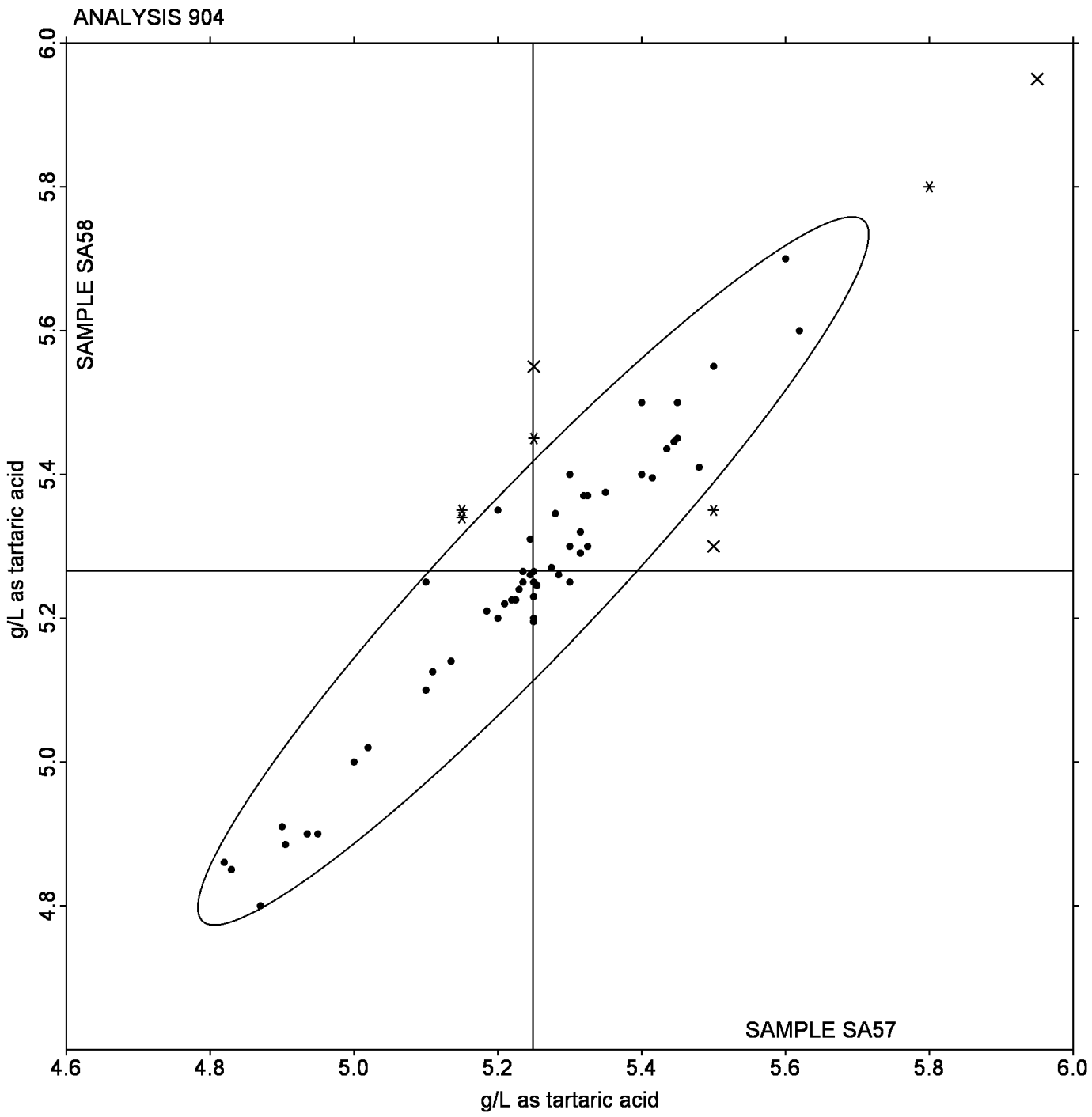
Results by Methodology (as reported by laboratory)

	Sample SA57 *Chardonnay*			Sample SA58 *Chardonnay*				
Test Methodology	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	/ Rpt
Autotitration	5.220	0.158	-0.029	5.233	0.170	-0.032	39	42
Manual Titration	5.259	0.196	0.010	5.265	0.214	-0.001	18	24
FTIR	5.294	0.231	0.044	5.291	0.245	0.025	7	9
Segmented Flow Analyzer	5.300	0.000	0.051	5.400	0.000	0.134	1	1

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titratable Acidity



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 905

Volatile Acidity

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
1EE6BP		0.2600	-0.0716	-1.21	0.2800	-0.0539	-0.97
1ZZMFW		0.3000	-0.0316	-0.53	0.2900	-0.0439	-0.79
2KPVG3		0.3150	-0.0166	-0.28	0.3450	0.0111	0.20
2P1K1C	*	0.3950	0.0634	1.07	0.3500	0.0161	0.29
2P7QKV		0.2650	-0.0666	-1.12	0.2650	-0.0689	-1.24
31NZX5		0.4500	0.1184	2.00	0.4650	0.1311	2.36
3U996R		0.4105	0.0789	1.33	0.4045	0.0706	1.27
3YGWLN		0.3500	0.0184	0.31	0.3500	0.0161	0.29
4H61N2		0.3400	0.0084	0.14	0.3300	-0.0039	-0.07
5EBZFR	*	0.2900	-0.0416	-0.70	0.3400	0.0061	0.11
6F7PKX		0.4000	0.0684	1.15	0.3900	0.0561	1.01
6KRKNQ		0.3750	0.0434	0.73	0.3600	0.0261	0.47
7QT49L		0.2250	-0.1066	-1.80	0.2350	-0.0989	-1.78
7YGXAW		0.4100	0.0784	1.32	0.4100	0.0761	1.37
84BJ3Q		0.3000	-0.0316	-0.53	0.3000	-0.0339	-0.61
8MTHCU		0.3700	0.0384	0.65	0.3750	0.0411	0.74
97A86H	X	0.3900	0.0584	0.98	0.5100	0.1761	3.18
9JJNKW		0.3840	0.0524	0.88	0.3780	0.0441	0.80
A6W34D		0.2400	-0.0916	-1.54	0.2350	-0.0989	-1.78
AEZTG4		0.3250	-0.0066	-0.11	0.3300	-0.0039	-0.07
B2D71L		0.3950	0.0634	1.07	0.4000	0.0661	1.19
BB5R9T		0.4000	0.0684	1.15	0.3650	0.0311	0.56
BDSAAR		0.3400	0.0084	0.14	0.3300	-0.0039	-0.07
BHZXPN		0.3600	0.0284	0.48	0.3600	0.0261	0.47
DG8BVP		0.2800	-0.0516	-0.87	0.2800	-0.0539	-0.97
DNL2L3		0.3100	-0.0216	-0.36	0.3100	-0.0239	-0.43
DQ8LN1		0.2900	-0.0416	-0.70	0.3100	-0.0239	-0.43
E6UAB2		0.3400	0.0084	0.14	0.3800	0.0461	0.83
ELVV4S		0.2575	-0.0741	-1.25	0.2920	-0.0419	-0.76
EYNV17		0.3600	0.0284	0.48	0.3500	0.0161	0.29
G6BKGT	X	1.2500	0.9184	15.48	1.2600	0.9261	16.70
GFZERV		0.3300	-0.0016	-0.03	0.3300	-0.0039	-0.07
GNUK7P		0.3050	-0.0266	-0.45	0.3400	0.0061	0.11
GPZPJ7		0.4150	0.0834	1.41	0.4150	0.0811	1.46
H1TGJG		0.4400	0.1084	1.83	0.4200	0.0861	1.55

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 905

Volatile Acidity

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
HFXY6G		0.3300	-0.0016	-0.03	0.3250	-0.0089	-0.16
JL6NBW		0.3100	-0.0216	-0.36	0.3100	-0.0239	-0.43
K848AR		0.2550	-0.0766	-1.29	0.2550	-0.0789	-1.42
KLW95L		0.3250	-0.0066	-0.11	0.2900	-0.0439	-0.79
KN2CG3		0.3250	-0.0066	-0.11	0.3400	0.0061	0.11
KPGYPY		0.3100	-0.0216	-0.36	0.3050	-0.0289	-0.52
KRL8JV		0.3900	0.0584	0.98	0.3900	0.0561	1.01
KY3CDM		0.2700	-0.0616	-1.04	0.2700	-0.0639	-1.15
LUPTCS		0.3950	0.0634	1.07	0.3850	0.0511	0.92
M1RCZP		0.3350	0.0034	0.06	0.3200	-0.0139	-0.25
M4B2J1		0.3000	-0.0316	-0.53	0.3150	-0.0189	-0.34
NGQGER		0.3650	0.0334	0.56	0.3600	0.0261	0.47
Q79LAH		0.2800	-0.0516	-0.87	0.3200	-0.0139	-0.25
QC2KRY		0.3400	0.0084	0.14	0.3350	0.0011	0.02
QTTB1Z		0.3060	-0.0256	-0.43	0.3060	-0.0279	-0.50
R6W6M9		0.2800	-0.0516	-0.87	0.2700	-0.0639	-1.15
R8JQN6	*	0.3100	-0.0216	-0.36	0.3600	0.0261	0.47
RZFZAG		0.3300	-0.0016	-0.03	0.3600	0.0261	0.47
S5PPFV		0.3050	-0.0266	-0.45	0.3050	-0.0289	-0.52
SBJUWQ		0.3450	0.0134	0.23	0.3350	0.0011	0.02
ST9L6R		0.3700	0.0384	0.65	0.3450	0.0111	0.20
SVW57P		0.4275	0.0959	1.62	0.4500	0.1161	2.09
T8ZZTX		0.2650	-0.0666	-1.12	0.2650	-0.0689	-1.24
U84P1U		0.3900	0.0584	0.98	0.3800	0.0461	0.83
UFCXT9		0.3600	0.0284	0.48	0.3610	0.0271	0.49
UG6T9R		0.2800	-0.0516	-0.87	0.2750	-0.0589	-1.06
UWNX2Y	*	0.5100	0.1784	3.01	0.5050	0.1711	3.09
VDJ98T		0.3100	-0.0216	-0.36	0.3200	-0.0139	-0.25
VL7JM3		0.2950	-0.0366	-0.62	0.3000	-0.0339	-0.61
VNU3N1	*	0.1750	-0.1566	-2.64	0.2050	-0.1289	-2.33
VX8PBW		0.3450	0.0134	0.23	0.3500	0.0161	0.29
W9WCK1		0.3550	0.0234	0.39	0.3350	0.0011	0.02
X8QNDG		0.3050	-0.0266	-0.45	0.3150	-0.0189	-0.34
XERYCU	X	0.5700	0.2384	4.02	0.5400	0.2061	3.72
XQFMNP		0.3000	-0.0316	-0.53	0.2900	-0.0439	-0.79

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 905

Volatile Acidity

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
YFYW6X		0.2300	-0.1016	-1.71	0.2400	-0.0939	-1.69

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	0.33163 g/L as acetic acid	0.33392 g/L as acetic acid
Stnd Dev Btwn Labs	0.05932 g/L as acetic acid	0.05544 g/L as acetic acid

Statistics based on 68 of 71 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

Comments on assigned Data Flags

97A86H (X) - Inconsistent in testing between samples, data for Sample SA58 are high. Also inconsistent in testing within both sample sets.

G6BKGT (X) - Data for both samples are high.

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

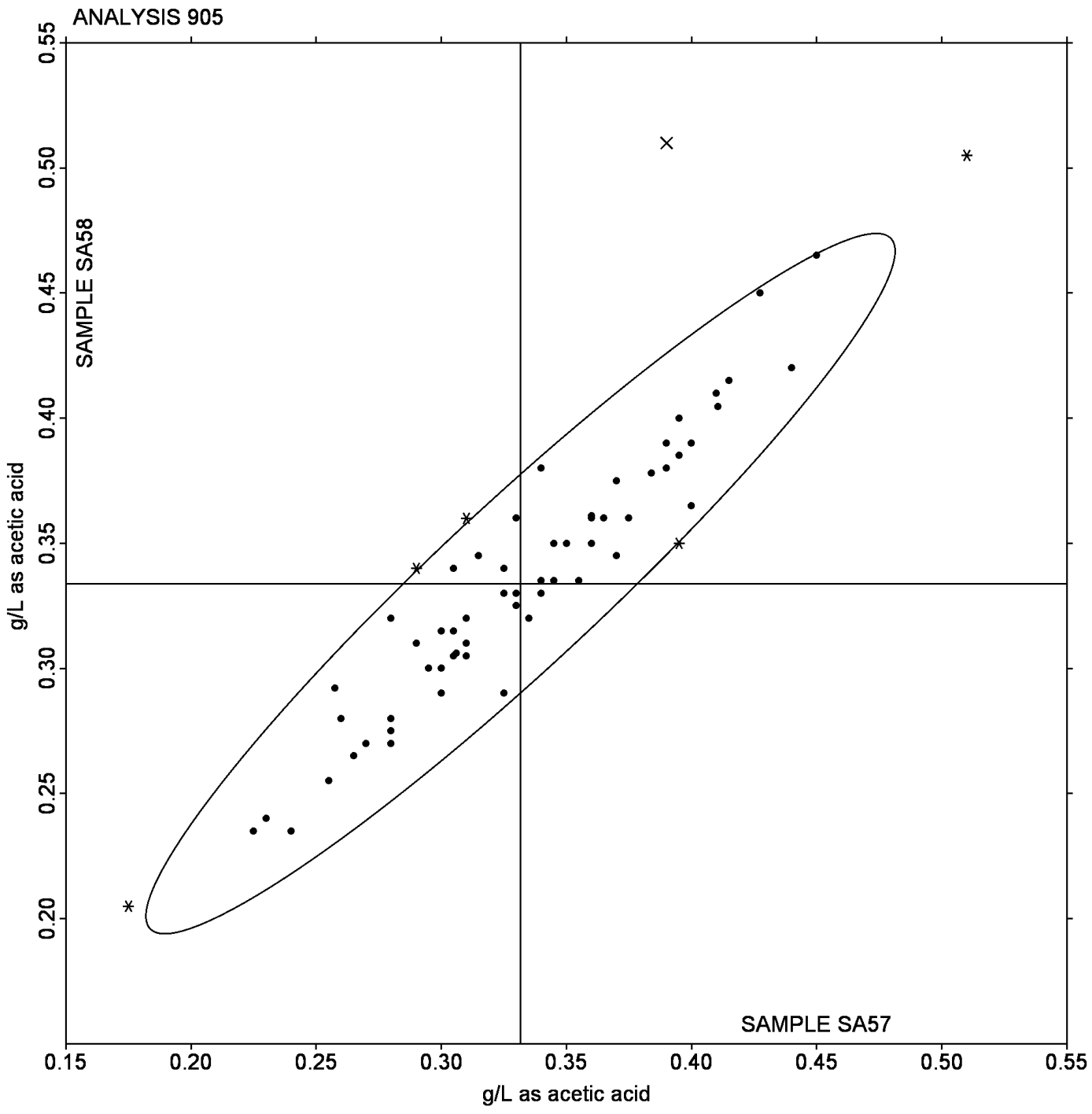
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA57 *Chardonnay* Group Mean	Sample SA57 Btwn Lab STD	Sample SA57 Diff from GM	Sample SA58 *Chardonnay* Group Mean	Sample SA58 Btwn Lab STD	Sample SA58 Diff from GM	Labs Incl	Labs / Rpt
Cash Still method	0.3450	0.0496	0.0134	0.3468	0.0458	0.0129	25	30
Enzymatic method	0.3006	0.0356	-0.0310	0.3006	0.0342	-0.0333	16	18
GC	0.2830	0.0325	-0.0486	0.2930	0.0184	-0.0409	2	2
Colorimetric Analysis	0.4500	0.0000	0.1184	0.4650	0.0000	0.1311	1	1
Seg. Flow / Colorimetric Analyzer	0.3288	0.0541	-0.0029	0.3275	0.0510	-0.0064	8	9
FTIR	0.3445	0.0576	0.0129	0.3451	0.0533	0.0112	11	11

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 905

Volatile Acidity



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 906

Specific Gravity

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
2JPFMC		0.9939	0.0002	0.22	0.9940	0.0002	0.34
2XH3MK		0.9941	0.0004	0.51	0.9941	0.0003	0.49
32ZLKL		0.9922	-0.0016	-2.27	0.9922	-0.0016	-2.29
3RBVJ2		0.9939	0.0002	0.26	0.9940	0.0002	0.27
3X51YW		0.9938	0.0001	0.07	0.9938	0.0000	0.05
48QJE9		0.9923	-0.0014	-2.09	0.9924	-0.0014	-2.06
5DTZ9F	X	0.9900	-0.0037	-5.41	0.9900	-0.0038	-5.47
5H5WRA		0.9940	0.0003	0.41	0.9940	0.0003	0.39
77JCKJ	*	0.9938	0.0001	0.07	0.9937	-0.0001	-0.09
7FAYKF	*	0.9920	-0.0017	-2.52	0.9921	-0.0017	-2.42
7N551A	X	0.9915	-0.0022	-3.24	0.9920	-0.0018	-2.57
7ZQ64P		0.9939	0.0002	0.22	0.9939	0.0001	0.20
83FH3M		0.9937	0.0000	-0.06	0.9937	-0.0001	-0.12
9SJ7CX		0.9939	0.0002	0.25	0.9939	0.0002	0.24
A6RBT4		0.9930	-0.0007	-1.08	0.9930	-0.0008	-1.11
A7JD9S	*	0.9921	-0.0017	-2.45	0.9921	-0.0017	-2.49
AWTTRM		0.9940	0.0002	0.32	0.9940	0.0002	0.33
DM29FZ		0.9948	0.0011	1.52	0.9949	0.0011	1.58
DM97ZB		0.9940	0.0003	0.36	0.9940	0.0002	0.34
FQK1RT		0.9939	0.0002	0.22	0.9939	0.0001	0.20
FTQXQF		0.9942	0.0005	0.65	0.9942	0.0004	0.63
GQK8RZ		0.9940	0.0002	0.29	0.9940	0.0002	0.34
GWA5LN		0.9944	0.0006	0.90	0.9944	0.0007	0.98
H1LJZ5		0.9939	0.0002	0.22	0.9939	0.0001	0.20
H8FQFZ		0.9940	0.0002	0.35	0.9940	0.0002	0.31
HUWGL3	X	0.9948	0.0010	1.44	0.9946	0.0008	1.21
JC2CHD		0.9939	0.0002	0.28	0.9940	0.0002	0.28
L4VLRT		0.9939	0.0001	0.20	0.9939	0.0001	0.17
L5PF7A		0.9941	0.0003	0.44	0.9941	0.0003	0.48
LCJMN5		0.9939	0.0002	0.26	0.9939	0.0002	0.25
LVW17K	X	0.9938	0.0001	0.07	0.9934	-0.0004	-0.53
M4L7JH		0.9939	0.0001	0.17	0.9939	0.0001	0.15
MKWKNG	X	0.9947	0.0010	1.37	0.9949	0.0011	1.65
MRT6PP		0.9950	0.0013	1.86	0.9950	0.0012	1.78
MSUZPH		0.9950	0.0013	1.80	0.9950	0.0012	1.80

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 906

Specific Gravity

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
MYH93R		0.9939	0.0002	0.22	0.9940	0.0002	0.34
NDQ6JR		0.9945	0.0008	1.08	0.9945	0.0007	1.07
NFQH2K	X	0.9922	-0.0015	-2.23	0.9920	-0.0018	-2.64
NYETGD		0.9921	-0.0016	-2.38	0.9922	-0.0016	-2.35
PDEZE8		0.9939	0.0002	0.25	0.9939	0.0002	0.23
PJFADL	M	0.9922	-0.0015	-2.21	No data reported for this sample		
PV41F6		0.9930	-0.0007	-1.08	0.9930	-0.0008	-1.11
RDRDYM		0.9939	0.0002	0.22	0.9939	0.0001	0.20
RDZH56		0.9938	0.0001	0.07	0.9939	0.0001	0.20
RGB3JZ	X	0.9921	-0.0016	-2.35	0.9939	0.0002	0.23
RULALW		0.9940	0.0002	0.32	0.9941	0.0003	0.44
S62345		0.9939	0.0002	0.22	0.9939	0.0001	0.20
SAUT6P	X	0.9939	0.0002	0.22	0.9937	-0.0001	-0.09
T9FDFZ		0.9937	0.0000	-0.07	0.9937	-0.0001	-0.09
TTULZ8		0.9939	0.0002	0.25	0.9939	0.0002	0.25
UNUS8X		0.9926	-0.0011	-1.66	0.9926	-0.0012	-1.69
UXB5XA		0.9930	-0.0007	-1.08	0.9930	-0.0008	-1.11
WZVRPN		0.9946	0.0008	1.21	0.9946	0.0008	1.20
X28ZXU	*	0.9938	0.0001	0.07	0.9937	-0.0001	-0.09
Y5Y7JU		0.9940	0.0002	0.30	0.9940	0.0002	0.32
Y9A51P		0.9937	0.0000	-0.07	0.9938	0.0000	-0.02
YBZHJ7		0.9939	0.0002	0.22	0.9940	0.0002	0.27
YJGNCY		0.9939	0.0002	0.22	0.9939	0.0002	0.23
Z138TH		0.9940	0.0002	0.34	0.9940	0.0002	0.33

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	0.99375 sp gr 20/20 C	0.99376 sp gr 20/20 C
Stnd Dev Btwn Labs	0.00069 sp gr 20/20 C	0.00069 sp gr 20/20 C

Statistics based on 50 of 59 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 906

Specific Gravity

Comments on assigned Data Flags

5DTZ9F (X) - Data for both samples are low. Possible Systematic Error.

7N551A (X) - Inconsistent in testing between samples, data for Sample SA57 are low.

HUWGL3 (X) - Inconsistent in testing between samples.

LVW17K (X) - Inconsistent in testing between samples.

MKWKNG (X) - Inconsistent in testing between samples.

NFQH2K (X) - Inconsistent in testing between samples.

PJFADL (M) - Laboratory did not submit data for Sample SA58.

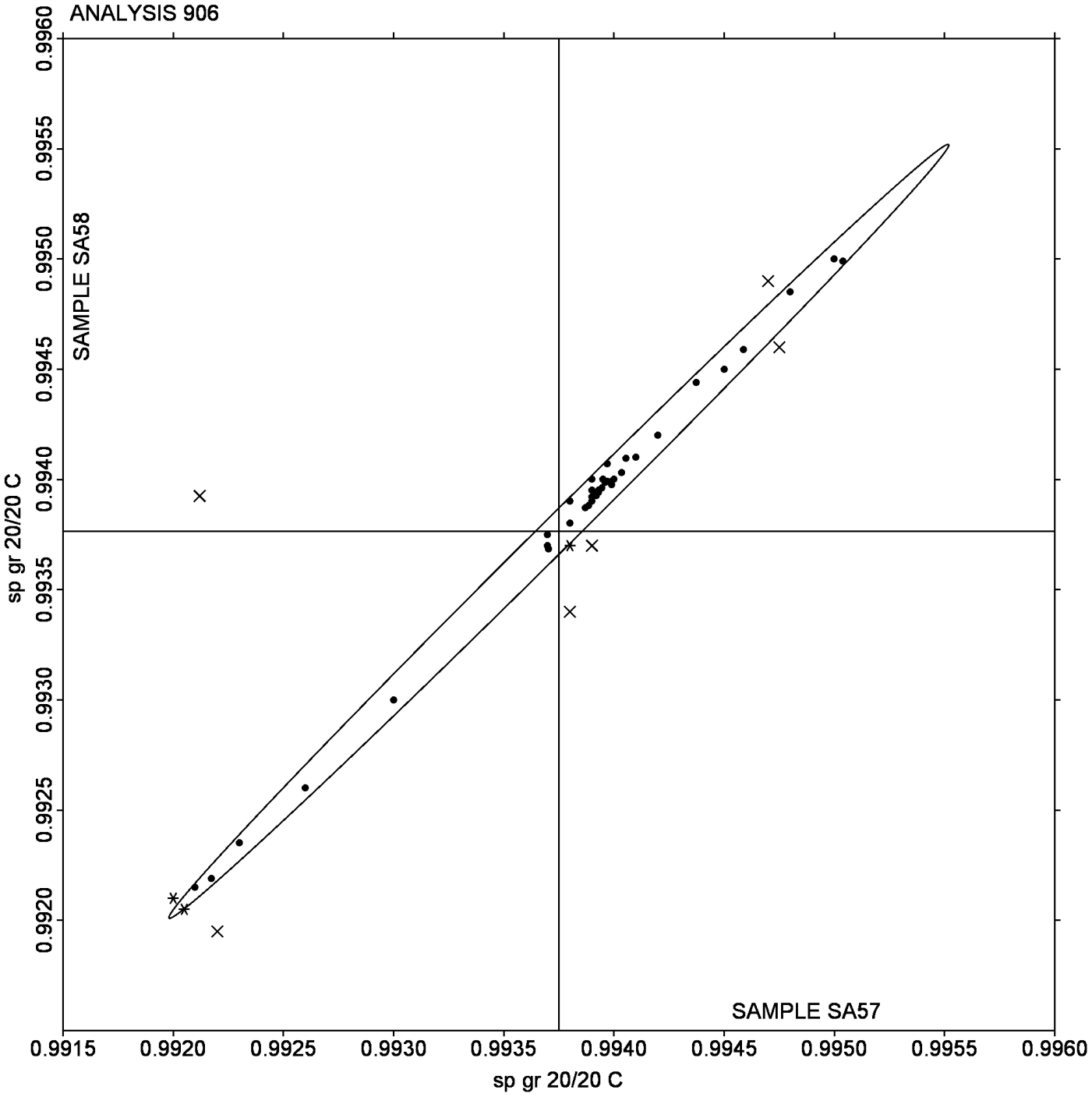
RGB3JZ (X) - Inconsistent in testing between samples.

SAUT6P (X) - Inconsistent in testing between samples.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 906

Specific Gravity



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 907

pH

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
164LT7		3.460	0.040	1.01	3.455	0.034	0.89
1MWDKZ		3.400	-0.020	-0.49	3.400	-0.021	-0.56
1XWDGJ	X	3.470	0.050	1.26	3.435	0.014	0.36
2BUQN2		3.470	0.050	1.26	3.480	0.059	1.54
445GQA	X	3.600	0.180	4.52	3.595	0.174	4.56
4E6GMT	X	3.155	-0.265	-6.63	3.180	-0.241	-6.33
5BMMK1		3.510	0.090	2.26	3.510	0.089	2.33
5JJGKK	X	3.325	-0.095	-2.37	3.375	-0.046	-1.21
5X94DK		3.430	0.010	0.26	3.430	0.009	0.23
67DJRW		3.475	0.055	1.39	3.470	0.049	1.28
6BWEUP		3.455	0.035	0.89	3.455	0.034	0.89
7MBVXE	*	3.300	-0.120	-3.00	3.310	-0.111	-2.92
8BDPZF	X	3.190	-0.230	-5.75	3.180	-0.241	-6.33
8EYDJT		3.475	0.055	1.39	3.480	0.059	1.54
96CL7E		3.470	0.050	1.26	3.455	0.034	0.89
9DCUSL		3.350	-0.070	-1.74	3.370	-0.051	-1.34
A9HTKA		3.435	0.015	0.38	3.425	0.004	0.10
BBZ9FV		3.415	-0.005	-0.12	3.425	0.004	0.10
D16C2T		3.410	-0.010	-0.24	3.410	-0.011	-0.29
D9D62N		3.440	0.020	0.51	3.430	0.009	0.23
DK3TBH		3.415	-0.005	-0.12	3.410	-0.011	-0.29
DV5NP1		3.375	-0.045	-1.12	3.390	-0.031	-0.82
DXVU6C		3.370	-0.050	-1.24	3.375	-0.046	-1.21
DZHD79		3.445	0.025	0.63	3.440	0.019	0.49
ELPX78		3.420	0.000	0.01	3.440	0.019	0.49
ESH4M3	X	3.405	-0.015	-0.37	3.470	0.049	1.28
EY15H1		3.470	0.050	1.26	3.465	0.044	1.15
FCQX1E		3.395	-0.025	-0.62	3.410	-0.011	-0.29
FECG2C		3.440	0.020	0.51	3.440	0.019	0.49
G387JM		3.385	-0.035	-0.87	3.385	-0.036	-0.95
GG4P9L	*	3.360	-0.060	-1.49	3.345	-0.076	-2.00
GXGENS		3.455	0.035	0.89	3.450	0.029	0.76
J9RTYH		3.460	0.040	1.01	3.465	0.044	1.15
JCBHHV		3.450	0.030	0.76	3.450	0.029	0.76
JFMTVX		3.380	-0.040	-0.99	3.380	-0.041	-1.08

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 907

pH

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
JNLRJU	*	3.365	-0.055	-1.37	3.390	-0.031	-0.82
K193GQ		3.450	0.030	0.76	3.450	0.029	0.76
KD24BK		3.420	0.000	0.01	3.420	-0.001	-0.03
KGWL5K		3.410	-0.010	-0.24	3.410	-0.011	-0.29
KJJ57H		3.445	0.025	0.63	3.435	0.014	0.36
LM63BS		3.410	-0.010	-0.24	3.415	-0.006	-0.16
MB68VE		3.405	-0.015	-0.37	3.415	-0.006	-0.16
MJ1EB9		3.415	-0.005	-0.12	3.430	0.009	0.23
MKJ993		3.407	-0.013	-0.32	3.420	-0.002	-0.04
NHJ6M1		3.390	-0.030	-0.74	3.380	-0.041	-1.08
NZ3ZCQ		3.410	-0.010	-0.24	3.420	-0.001	-0.03
P334L8		3.440	0.020	0.51	3.440	0.019	0.49
PELFGK		3.415	-0.005	-0.12	3.420	-0.001	-0.03
PK8Y8V		3.410	-0.010	-0.24	3.410	-0.011	-0.29
PNTNS8		3.440	0.020	0.51	3.430	0.009	0.23
PV8Y5E		3.410	-0.010	-0.24	3.415	-0.006	-0.16
Q1PKU5	X	3.470	0.050	1.26	3.335	-0.086	-2.26
RX21T7	*	3.325	-0.095	-2.37	3.315	-0.106	-2.79
S3DCF1		3.480	0.060	1.51	3.480	0.059	1.54
S4PP3P		3.415	-0.005	-0.12	3.420	-0.001	-0.03
SWUJMU		3.410	-0.010	-0.24	3.410	-0.011	-0.29
TTBPJ2		3.490	0.070	1.76	3.480	0.059	1.54
TZ6UZW		3.395	-0.025	-0.62	3.395	-0.026	-0.69
U13LNG	X	3.600	0.180	4.52	3.590	0.169	4.43
U6Q4ES		3.400	-0.020	-0.49	3.390	-0.031	-0.82
U7JTZ8	X	3.680	0.260	6.52	3.675	0.254	6.66
U8BNFQ		3.390	-0.030	-0.74	3.380	-0.041	-1.08
U8WS4A		3.430	0.010	0.26	3.430	0.009	0.23
UECYF3		3.430	0.010	0.26	3.430	0.009	0.23
VBE8AM		3.430	0.010	0.26	3.430	0.009	0.23
VK7K9W		3.420	0.000	0.01	3.410	-0.011	-0.29
XPVHMW		3.360	-0.060	-1.49	3.360	-0.061	-1.61
Y3SUTF		3.415	-0.005	-0.12	3.420	-0.001	-0.03
YERZ9D		3.425	0.005	0.13	3.430	0.009	0.23
YTPBFX	*	3.356	-0.064	-1.59	3.384	-0.038	-0.99

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 907

pH

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
YUH6WD		3.445	0.025	0.63	3.455	0.034	0.89
YY11Z6		3.465	0.045	1.14	3.465	0.044	1.15

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	3.4197 pH	3.4212 pH
Stnd Dev Btwn Labs	0.0399 pH	0.0381 pH

Statistics based on 63 of 72 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

Comments on assigned Data Flags

1XWDGJ (X) - Inconsistent in testing between samples.

445GQA (X) - Data for both samples are high. Possible Systematic Error.

4E6GMT (X) - Data for both samples are low.

5JJGKK (X) - Inconsistent in testing between samples.

8BDPZF (X) - Data for both samples are low.

ESH4M3 (X) - Inconsistent in testing between samples.

Q1PKU5 (X) - Inconsistent in testing between samples.

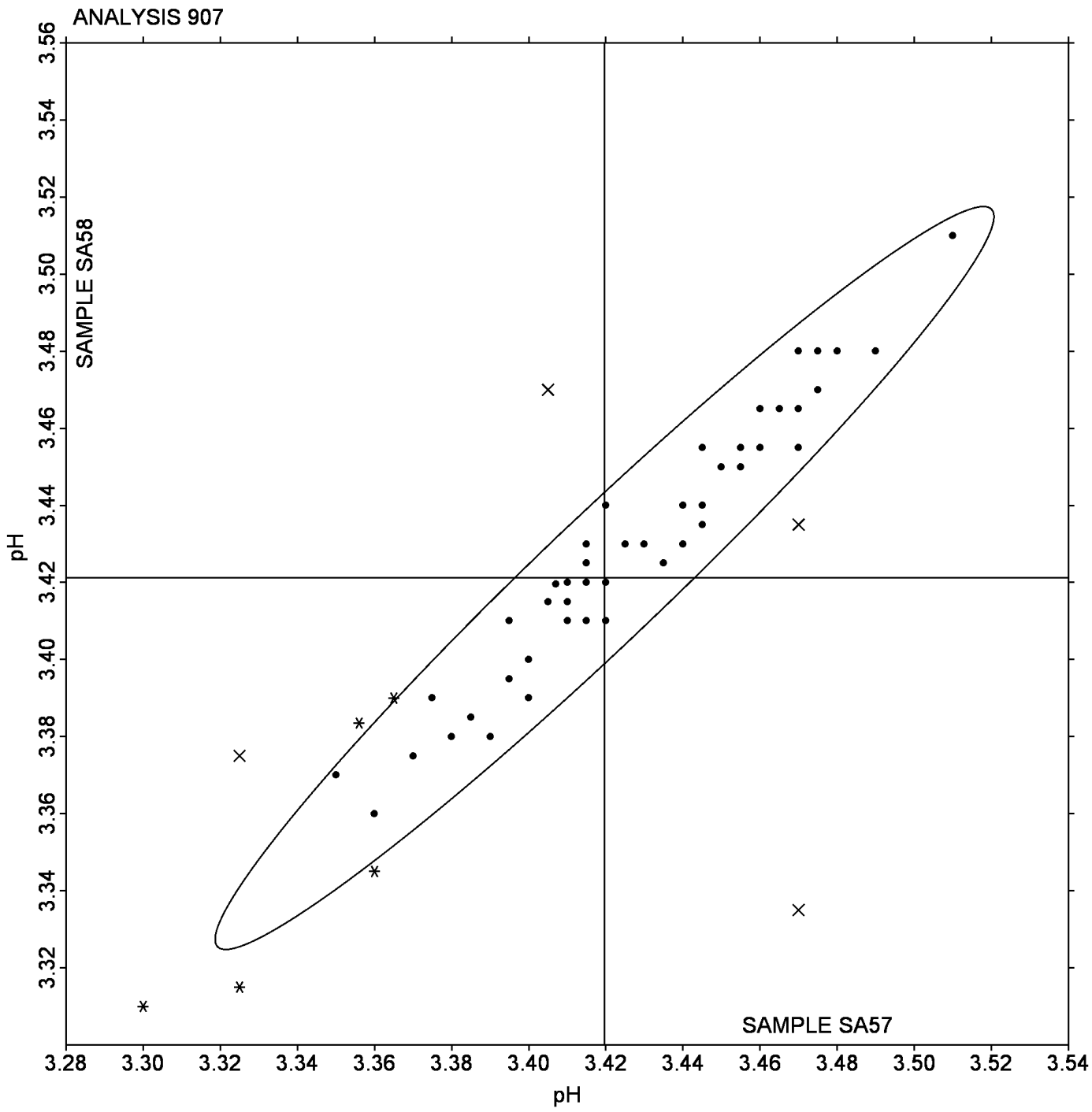
U13LNG (X) - Data for both samples are high. Possible Systematic Error.

U7JTZ8 (X) - Data for both samples are high.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 907

pH



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 908

Residual Sugar

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
4C6ZZZ		8.550	-0.497	-0.35	8.700	-0.302	-0.23
4HBRXB		7.500	-1.547	-1.09	7.500	-1.502	-1.12
4JHTH4		9.150	0.103	0.07	9.250	0.248	0.19
4KAVYS	*	5.000	-4.047	-2.86	5.000	-4.002	-2.99
4KZ5FU		9.180	0.133	0.09	9.120	0.118	0.09
8R534U	X	1.100	-7.947	-5.63	1.100	-7.902	-5.91
96W7Z5	*	10.410	1.363	0.96	9.900	0.898	0.67
9LSRFT		10.505	1.458	1.03	10.125	1.123	0.84
BTDHRQ		8.125	-0.922	-0.65	7.975	-1.027	-0.77
CM84MZ		8.200	-0.847	-0.60	8.250	-0.752	-0.56
D7X9WG		9.550	0.503	0.36	9.450	0.448	0.33
E84AG9		10.900	1.853	1.31	10.600	1.598	1.19
ELVHBA		10.095	1.048	0.74	10.065	1.063	0.79
EZZVVF		10.169	1.122	0.79	10.119	1.117	0.84
GU2BS3		9.250	0.203	0.14	9.200	0.198	0.15
JSKMEM		10.300	1.253	0.89	10.200	1.198	0.90
KVHWYG		9.300	0.253	0.18	9.350	0.348	0.26
LHR5NH		6.000	-3.047	-2.16	6.000	-3.002	-2.25
NU9VM6		7.150	-1.897	-1.34	7.510	-1.492	-1.12
QV1MX4		9.500	0.453	0.32	9.500	0.498	0.37
RVXDBW		9.800	0.753	0.53	9.700	0.698	0.52
T9P1J1		9.495	0.448	0.32	9.520	0.518	0.39
VG3WSL	X	14.900	5.853	4.14	13.300	4.298	3.21
W346PL		9.175	0.128	0.09	9.125	0.123	0.09
WPQX3A		10.315	1.268	0.90	10.250	1.248	0.93
XWXSMG		9.300	0.253	0.18	9.450	0.448	0.33
YXUMZ5		9.250	0.203	0.14	9.200	0.198	0.15

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	9.0467 g/L	9.0024 g/L
Stnd Dev Btwn Labs	1.4128 g/L	1.3371 g/L

Statistics based on 25 of 27 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 908

Residual Sugar

Comments on assigned Data Flags

8R534U (X) - Data for both samples are low.

VG3WSL (X) - Data for both samples are high.

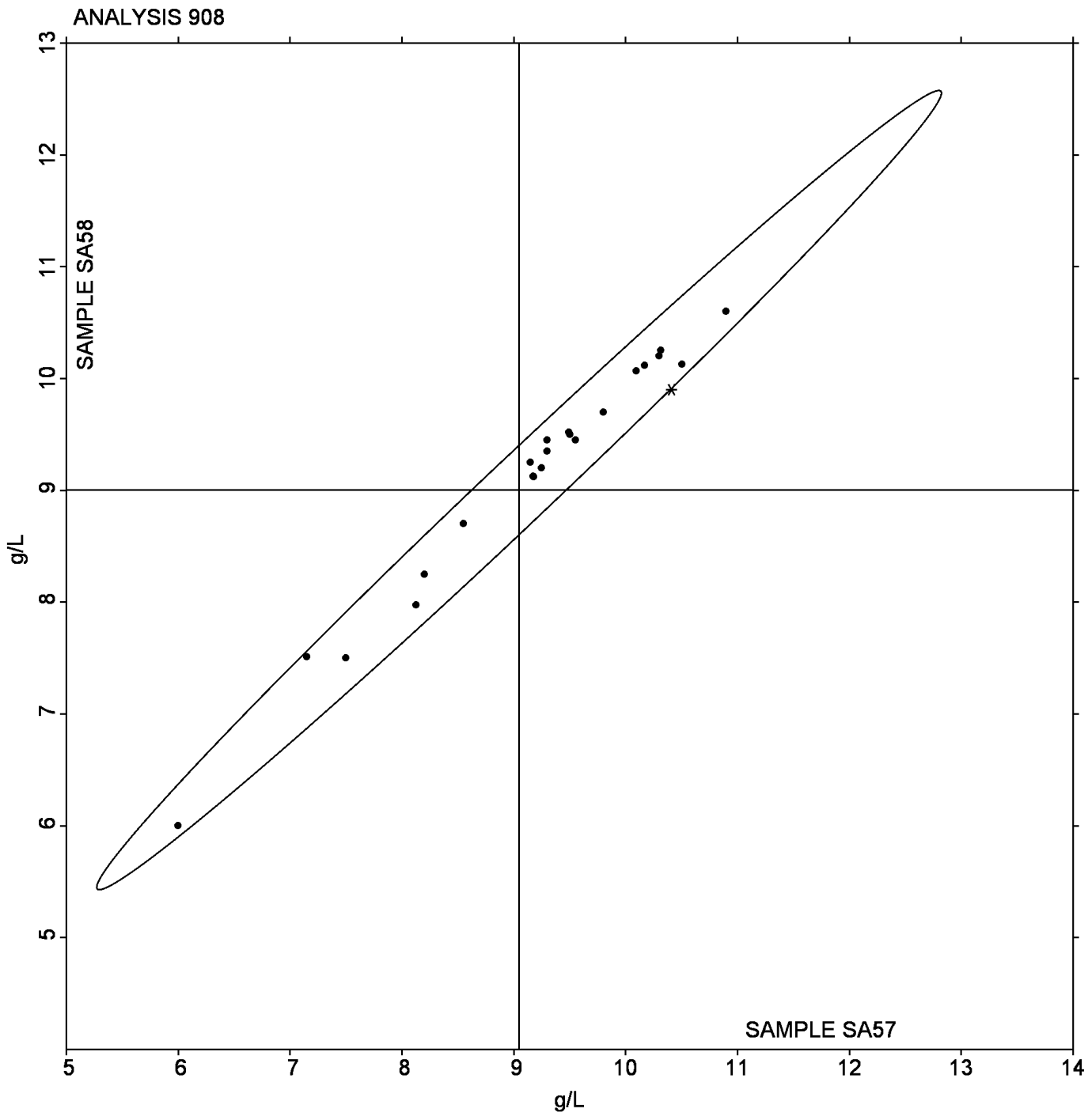
Results by Methodology (as reported by laboratory)

	Sample SA57 *Chardonnay*			Sample SA58 *Chardonnay*				
Test Methodology	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	/ Rpt
Please specify method used	8.200	0.000	-0.847	8.250	0.000	-0.752	1	1
Cu Reduction Method	9.329	1.069	0.282	9.324	0.954	0.322	13	16
Segmented Flow	9.717	0.520	0.670	9.700	0.433	0.698	3	3
FTIR	9.240	0.976	0.193	9.118	0.883	0.115	4	5
Other _____	7.588	2.245	-1.459	7.563	2.210	-1.440	2	2

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 908

Residual Sugar



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 909

L-Malic Acid

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
1A7P7U		0.9640	0.0276	0.34	0.9590	0.0209	0.24
1W3EED		0.9150	-0.0214	-0.26	0.9150	-0.0231	-0.27
39AY8J		0.9350	-0.0014	-0.02	0.9450	0.0069	0.08
3F55PD		0.8850	-0.0514	-0.64	0.8750	-0.0631	-0.73
3GC3GF		0.9400	0.0036	0.04	0.9150	-0.0231	-0.27
61ETRE	*	0.9750	0.0386	0.48	0.9200	-0.0181	-0.21
6P1S1N		0.9600	0.0236	0.29	0.9550	0.0169	0.20
7F57DM		0.8100	-0.1264	-1.56	0.7700	-0.1681	-1.95
87668S	X	1.1700	0.2336	2.89	1.1250	0.1869	2.17
8CA56B	X	1.1700	0.2336	2.89	1.1050	0.1669	1.94
91ZS43		0.8800	-0.0564	-0.70	0.8850	-0.0531	-0.62
95JM7V		0.8930	-0.0434	-0.54	0.8865	-0.0516	-0.60
9FLFJD		1.0245	0.0881	1.09	1.0285	0.0904	1.05
9TRQBT		0.9720	0.0356	0.44	0.9900	0.0519	0.60
9Z6WNL		0.8650	-0.0714	-0.88	0.8450	-0.0931	-1.08
AQ7V82		0.8550	-0.0814	-1.01	0.8650	-0.0731	-0.85
BVFJDF		0.8700	-0.0664	-0.82	0.8700	-0.0681	-0.79
BZN6TC		1.0300	0.0936	1.16	1.0300	0.0919	1.07
BZT9XQ		0.9615	0.0251	0.31	0.9615	0.0234	0.27
C1V4LE	*	1.1500	0.2136	2.64	1.1500	0.2119	2.46
D8UZ96		0.8850	-0.0514	-0.64	0.9080	-0.0301	-0.35
DEH9NF		0.9315	-0.0049	-0.06	0.9395	0.0014	0.02
DJUZ7P		0.9310	-0.0054	-0.07	0.9285	-0.0096	-0.11
E2YSPA		1.0100	0.0736	0.91	1.0100	0.0719	0.83
EKXUVE	*	0.9000	-0.0364	-0.45	0.9500	0.0119	0.14
FGDZSM	X	1.4050	0.4686	5.79	1.4050	0.4669	5.42
FRZDGA		0.7665	-0.1699	-2.10	0.7555	-0.1826	-2.12
G3ZDEU		0.9000	-0.0364	-0.45	0.9000	-0.0381	-0.44
J63CB3		0.9850	0.0486	0.60	1.0100	0.0719	0.83
J9QWC1	*	1.1650	0.2286	2.83	1.1900	0.2519	2.92
JWJT5L		0.8500	-0.0864	-1.07	0.8500	-0.0881	-1.02
KGPR1R		1.0850	0.1486	1.84	1.0950	0.1569	1.82
MREVVQ		0.9715	0.0351	0.43	0.9790	0.0409	0.47
NNU6AC		0.9000	-0.0364	-0.45	0.9000	-0.0381	-0.44
P53UDA		0.9860	0.0496	0.61	0.9860	0.0479	0.56

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 909

L-Malic Acid

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
PY2JDX		0.9650	0.0286	0.35	0.9700	0.0319	0.37
QLJEHT		0.9175	-0.0189	-0.23	0.9015	-0.0366	-0.42
QRYZRS		0.9810	0.0446	0.55	0.9850	0.0469	0.54
SMCXJL		0.9900	0.0536	0.66	1.0000	0.0619	0.72
SRPN3U		0.8600	-0.0764	-0.94	0.8600	-0.0781	-0.91
ST73ZF		0.9115	-0.0249	-0.31	0.9370	-0.0011	-0.01
T9AJHF		0.9050	-0.0314	-0.39	0.9050	-0.0331	-0.38
TQLDE3		0.9400	0.0036	0.04	0.9650	0.0269	0.31
TSSHRK	X	1.3500	0.4136	5.11	1.4000	0.4619	5.36
U2CWF8		0.8500	-0.0864	-1.07	0.8500	-0.0881	-1.02
U9U2AZ	X	1.3540	0.4176	5.16	1.3425	0.4044	4.69
UGP7RU		0.8725	-0.0639	-0.79	0.8885	-0.0496	-0.58
V5FG95		1.0400	0.1036	1.28	1.0250	0.0869	1.01
V69CRM		1.0400	0.1036	1.28	1.0800	0.1419	1.65
V8RSN7		0.8750	-0.0614	-0.76	0.9000	-0.0381	-0.44
VAXWZQ		0.9050	-0.0314	-0.39	0.8800	-0.0581	-0.67
XHWSMF		0.7945	-0.1419	-1.75	0.8005	-0.1376	-1.60
YUZM8P		0.9500	0.0136	0.17	0.9150	-0.0231	-0.27

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	0.93643 g/L	0.93811 g/L
Stnd Dev Btwn Labs	0.08089 g/L	0.08621 g/L

Statistics based on 48 of 53 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

Comments on assigned Data Flags

87668S (X) - Inconsistent in testing between samples, data for Sample SA57 are high.

8CA56B (X) - Inconsistent in testing between samples, data for Sample SA57 are high.

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

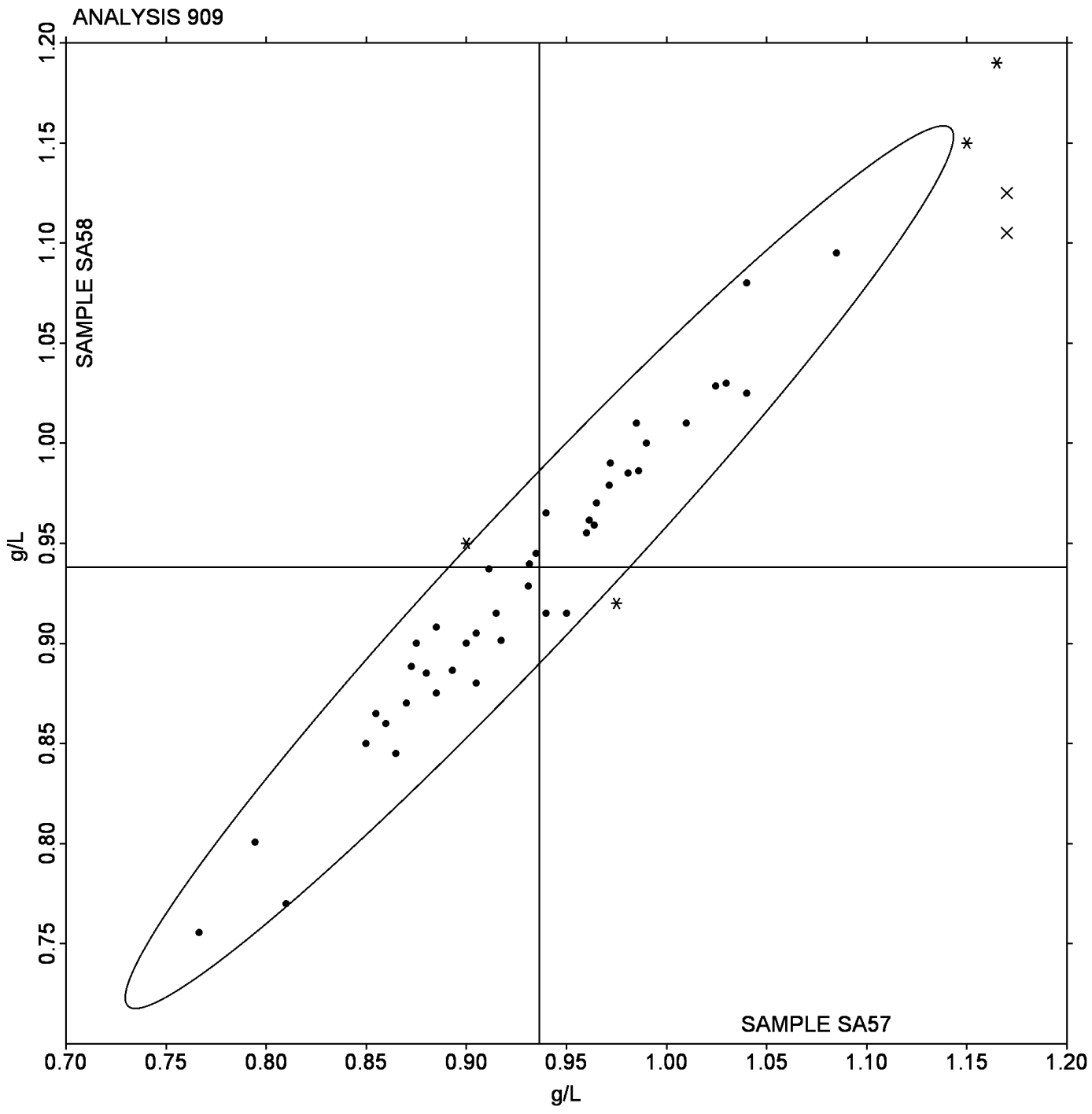
TSSHRK (X) - Data for both samples are high.

U9U2AZ (X) - Data for both samples are high.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 909

L-Malic Acid



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 910

Glucose + Fructose

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
2K53DK		8.665	0.250	0.34	8.605	0.240	0.33
2WPBG6		8.350	-0.065	-0.09	8.350	-0.015	-0.02
3F18VN		8.950	0.535	0.73	9.050	0.685	0.94
3GSFVR	X	5.000	-3.415	-4.66	5.000	-3.365	-4.60
3ZFFEX		9.030	0.615	0.84	8.950	0.585	0.80
4ZZ68M		8.100	-0.315	-0.43	7.900	-0.465	-0.64
6G9QZH	X	6.750	-1.665	-2.27	6.050	-2.315	-3.16
6SQJHR		8.700	0.285	0.39	8.650	0.285	0.39
6WK32V		8.820	0.405	0.55	8.830	0.465	0.64
727RBC	*	8.605	0.190	0.26	8.205	-0.160	-0.22
7NMP1U	X	4.150	-4.265	-5.82	4.025	-4.340	-5.93
7PFJGB	X	5.410	-3.005	-4.10	3.855	-4.510	-6.17
87QQFK		9.050	0.635	0.87	8.950	0.585	0.80
8W3TUL	X	5.800	-2.615	-3.57	6.500	-1.865	-2.55
9H53RL		8.550	0.135	0.18	8.450	0.085	0.12
9RL64L	*	6.150	-2.265	-3.09	6.200	-2.165	-2.96
A45J72		8.250	-0.165	-0.22	8.200	-0.165	-0.23
A76YKB	X	8.335	-0.080	-0.11	7.765	-0.600	-0.82
AN8KLS		8.055	-0.360	-0.49	8.065	-0.300	-0.41
B6FAYN		9.400	0.985	1.34	9.350	0.985	1.35
BLJ649		8.510	0.095	0.13	8.245	-0.120	-0.16
C4EVTG	X	8.000	-0.415	-0.57	8.550	0.185	0.25
C9GJXW		8.400	-0.015	-0.02	8.600	0.235	0.32
DFVNAP		8.645	0.230	0.31	8.525	0.160	0.22
DX9B7W		7.485	-0.930	-1.27	7.465	-0.900	-1.23
DXKPCM		8.100	-0.315	-0.43	8.150	-0.215	-0.29
F8QPJX		8.850	0.435	0.59	8.650	0.285	0.39
FD8NN6		9.700	1.285	1.75	9.700	1.335	1.83
H6URC3		8.800	0.385	0.53	8.700	0.335	0.46
H9PBW8	X	4.100	-4.315	-5.89	4.220	-4.145	-5.67
LLEF1V		9.175	0.760	1.04	9.125	0.760	1.04
NE6TAY		8.470	0.055	0.08	8.660	0.295	0.40
NEYVRM	X	6.015	-2.400	-3.28	3.650	-4.715	-6.45
NNWFAV		8.700	0.285	0.39	8.700	0.335	0.46
P94T9N		8.900	0.485	0.66	8.900	0.535	0.73

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 910

Glucose + Fructose

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Grand Mean	Sample SA57 CPV	Sample SA58 Lab Mean	Sample SA58 Diff from Grand Mean	Sample SA58 CPV
PBT6S5		7.150	-1.265	-1.73	7.000	-1.365	-1.87
RB9FXW		7.715	-0.700	-0.96	7.715	-0.650	-0.89
RE41JM		8.650	0.235	0.32	8.725	0.360	0.49
S58CXR		8.625	0.210	0.29	8.595	0.230	0.31
SLUXDA	*	8.680	0.265	0.36	8.990	0.625	0.85
T122UG		8.700	0.285	0.39	8.550	0.185	0.25
TJF9DQ		8.715	0.300	0.41	8.611	0.246	0.34
TR4JSZ		8.700	0.285	0.39	8.500	0.135	0.19
UEKAPD	X	10.185	1.770	2.42	9.335	0.970	1.33
UUVNQR		8.200	-0.215	-0.29	8.250	-0.115	-0.16
VB9HM6		7.200	-1.215	-1.66	7.100	-1.265	-1.73
VCVFJA		8.890	0.475	0.65	8.600	0.235	0.32
VKNRJK		8.435	0.020	0.03	8.350	-0.015	-0.02
WDMNJD		8.350	-0.065	-0.09	8.250	-0.115	-0.16
WLGUZ8	X	3.000	-5.415	-7.39	3.000	-5.365	-7.33
WUEDJG		9.150	0.735	1.00	9.050	0.685	0.94
X4WLB3		8.360	-0.055	-0.07	8.280	-0.085	-0.12
XGCZGB		8.455	0.040	0.05	8.410	0.045	0.06
XU5ZB6		7.120	-1.295	-1.77	7.110	-1.255	-1.72
YM7KA5		9.000	0.585	0.80	9.000	0.635	0.87
ZKNT8T	*	6.160	-2.255	-3.08	6.150	-2.215	-3.03
ZSA25B	X	5.000	-3.415	-4.66	5.250	-3.115	-4.26

Summary Statistics

	Sample SA57	Sample SA58
Grand Means	8.4148 g/L	8.3647 g/L
Stnd Dev Btwn Labs	0.7326 g/L	0.7314 g/L

Statistics based on 45 of 57 reporting participants

Wines tested: SA57: Chardonnay; SA58: Chardonnay

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 910

Glucose + Fructose

Comments on assigned Data Flags

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

6G9QZH (X) - Inconsistent in testing between samples, data for Sample SA58 are low.

7NMP1U (X) - Data for both samples are low.

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

8W3TUL (X) - Inconsistent in testing between samples, data for Sample SA57 are low.

A76YKB (X) - Inconsistent in testing between samples.

C4EVTG (X) - Inconsistent in testing between samples.

H9PBW8 (X) - Data for both samples are low.

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

UEKAPD (X) - Inconsistent in testing between samples.

WLGUZ8 (X) - Data for both samples are low.

ZSA25B (X) - Dat for both samples are low. Possible Systematic Error.

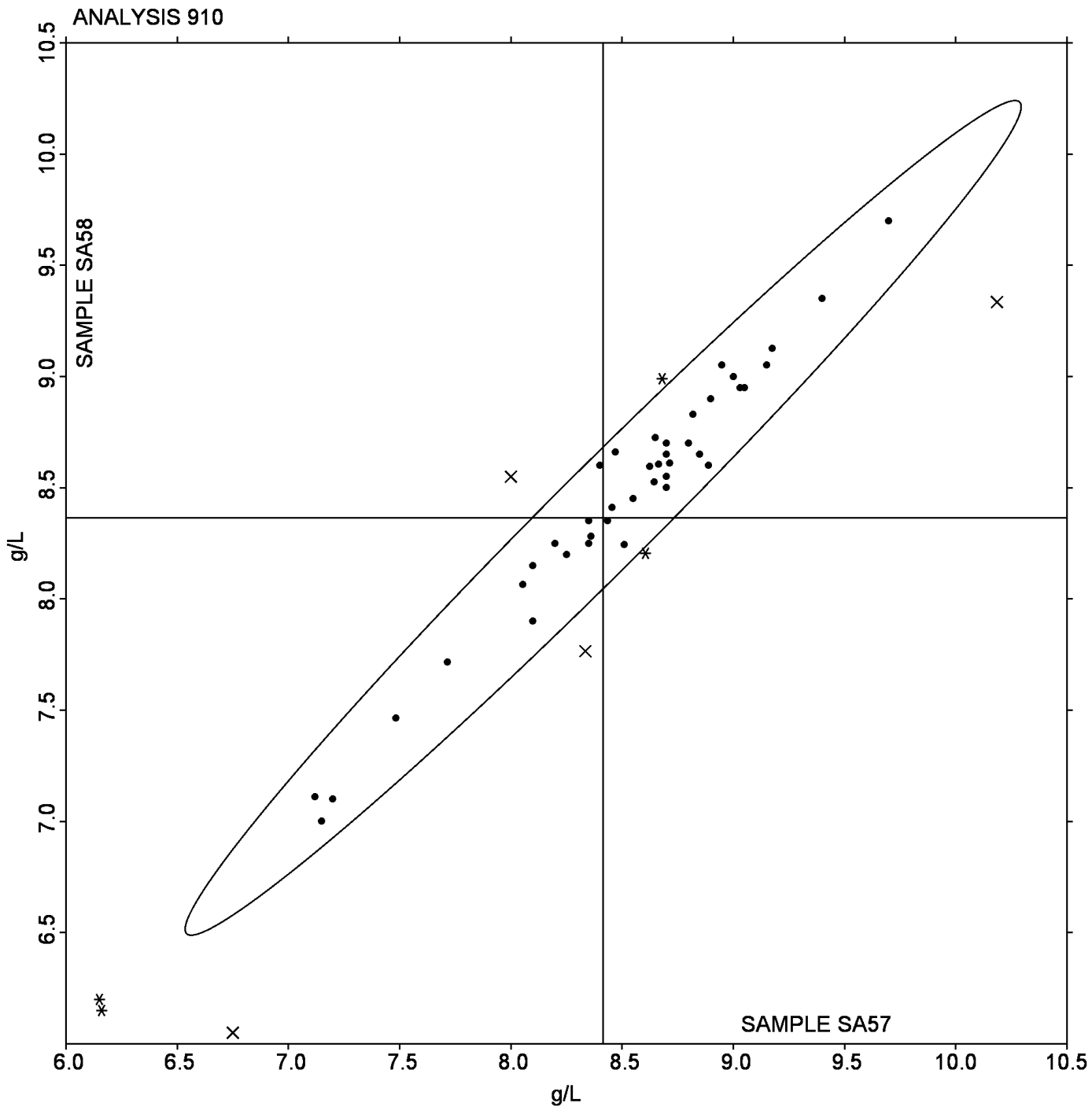
Results by Methodology (as reported by laboratory)

	Sample SA57 *Chardonnay*			Sample SA58 *Chardonnay*				
Test Methodology	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	/ Rpt
HPLC	9.700	0.000	1.285	9.700	0.000	1.335	1	3
Enzymatic/Spectrophotometric	8.459	0.510	0.044	8.404	0.500	0.040	33	41
FTIR	8.620	0.773	0.205	8.597	0.819	0.232	6	10
Other _____	8.510	0.000	0.095	8.245	0.000	-0.120	1	3

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 910

Glucose + Fructose



ASEV-CTS Wine Industry Interlaboratory Testing Program

Research Property 950

Research Property - Potassium (K) Content

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Target Value	Sample SA57 % Diff from Target Value	Sample SA58 Lab Mean	Sample SA58 Diff from Target Value	Sample SA58 % Diff from Target Value
3ZHNW3		611.5	12.8	2.1%	606.5	3.4	0.6%
56GYWS		620.0	21.3	3.6%	625.0	21.9	3.6%
5F6M7M		682.5	83.8	14.0%	668.5	65.4	10.8%
6CMR4U		735.0	136.3	22.8%	732.5	129.4	21.5%
84FZCA		641.0	42.3	7.1%	680.0	76.9	12.8%
8FNVCD		623.9	25.1	4.2%	616.6	13.5	2.2%
9AMTKC		645.0	46.3	7.7%	655.0	51.9	8.6%
BKZVJG		640.5	41.8	7.0%	616.0	12.9	2.1%
BPBK3R		630.0	31.3	5.2%	645.0	41.9	6.9%
BRT1ZB		632.0	33.3	5.6%	633.0	29.9	5.0%
BW6RJK		640.2	41.5	6.9%	642.0	38.9	6.5%
DZZUF5		1,105.0	506.3	84.6%	1,115.0	511.9	84.9%
S5Z1S1		780.0	181.3	30.3%	795.0	191.9	31.8%
WKBDRU		533.0	-65.7	-11.0%	519.0	-84.1	-13.9%
Z3GSYZ		597.0	-1.7	-0.3%	632.0	28.9	4.8%
Z9BYEU		511.5	-87.2	-14.6%	510.0	-93.1	-15.4%

Research Property Target Value

Target Value	**598.70**	mg/L	**603.10**	mg/L

For test 950, CTS has chosen to designate a target value for this property instead of using an average value. The target value was calculated from the average of two laboratories accredited for this property underISO 17025, with the difference between those laboratories being less than 10% of the target value.
For Test 951 CTS has choosen to use the average value as the target.

Wines tested: SA57: Chardonnay; SA58: Chardonnay

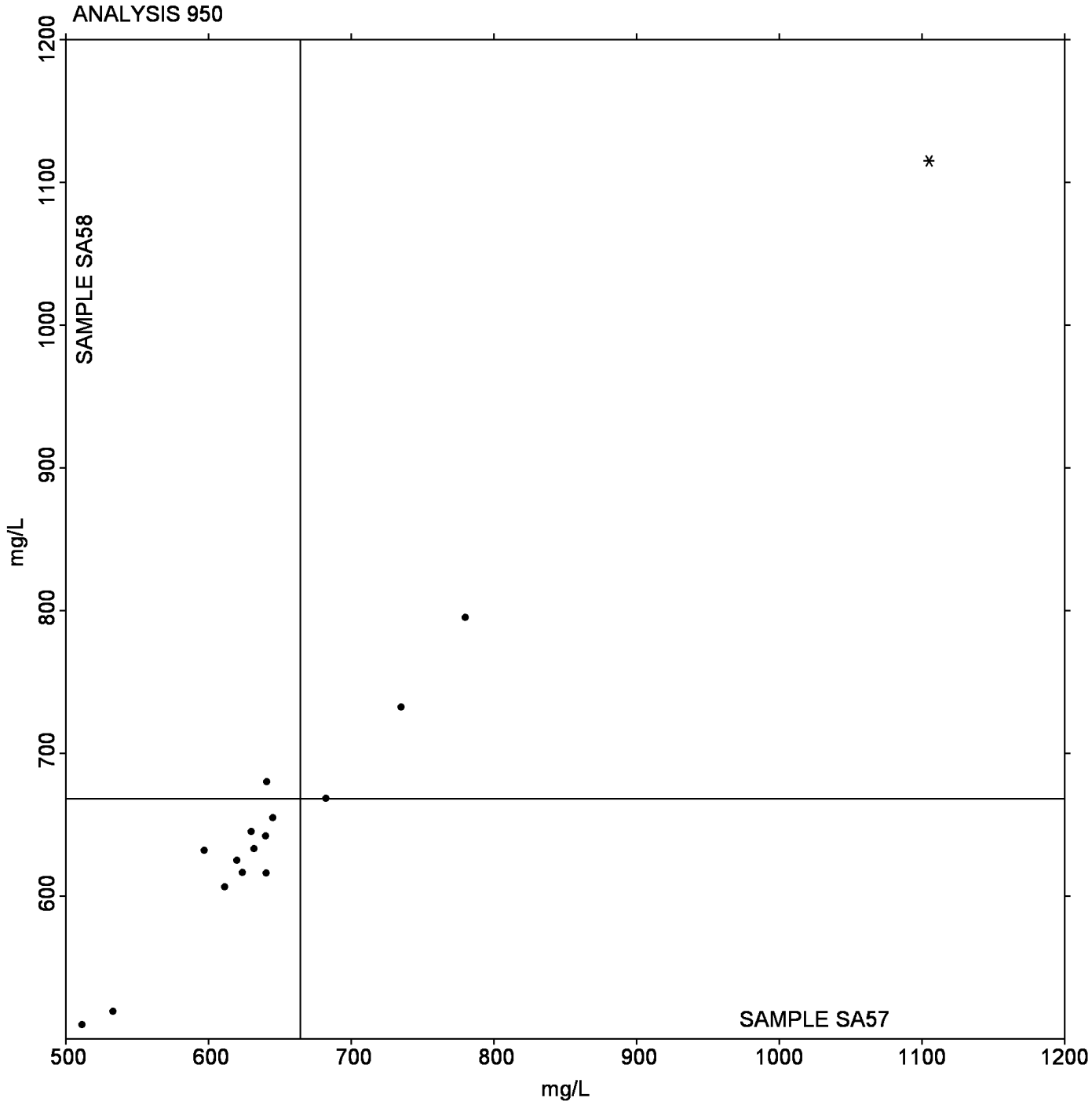
Consensus Average (may differ from target value)	664.25	mg/L	668.19	mg/L

This consensus average is based on 16 reporting participants.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Research Property 950

Research Property - Potassium (K) Content



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

Research Property 951

Research Property: Copper (Cu) Content

WebCod	Data Flag	Sample SA57 Lab Mean	Sample SA57 Diff from Target Value	Sample SA57 % Diff from Target Value	Sample SA58 Lab Mean	Sample SA58 Diff from Target Value	Sample SA58 % Diff from Target Value
19TF2Z		0.1500	0.0288	23.7%	0.2050	0.0803	64.4%
1GMLHU		0.0810	-0.0402	-33.2%	0.0815	-0.0432	-34.6%
2F732P		0.1800	0.0588	48.5%	0.2050	0.0803	64.4%
6W7UJ2		0.1120	-0.0092	-7.6%	0.1140	-0.0107	-8.6%
BGU726		0.1000	-0.0212	-17.5%	0.1100	-0.0147	-11.8%
CHHYDA		0.1200	-0.0012	-1.0%	0.1200	-0.0047	-3.7%
DJETTK		0.1700	0.0488	40.2%	0.1600	0.0353	28.3%
DR8Y9E		0.0975	-0.0237	-19.6%	0.0955	-0.0292	-23.4%
DRPSV4		0.1350	0.0138	11.3%	0.1000	-0.0247	-19.8%
EXC28D		0.1300	0.0088	7.2%	0.1300	0.0053	4.3%
GJ4Y1P		0.0900	-0.0312	-25.8%	0.0800	-0.0447	-35.8%
J7KEAP		0.1150	-0.0062	-5.1%	0.1200	-0.0047	-3.7%
JEUDB8		0.1250	0.0038	3.1%	0.1010	-0.0237	-19.0%
NSKUEX		0.1100	-0.0112	-9.3%	0.1050	-0.0197	-15.8%
RK6X4U		0.1200	-0.0012	-1.0%	0.1180	-0.0067	-5.4%
S1ZZG5		0.1450	0.0238	19.6%	0.1300	0.0053	4.3%
TDQCUL		0.1070	-0.0142	-11.7%	0.1030	-0.0217	-17.4%
TEY8WY		0.0750	-0.0462	-38.1%	0.0800	-0.0447	-35.8%
XFBBGZ		0.1100	-0.0112	-9.3%	0.1100	-0.0147	-11.8%
Y82PR3		0.1900	0.0688	56.7%	0.1400	0.0153	12.3%
YEGYVK		0.0835	-0.0377	-31.1%	0.2100	0.0853	68.4%

Research Property Target Value

	SA57		SA58	
Target Value	**0.12124**	mg/L	**0.12467**	mg/L

For test 950, CTS has chosen to designate a target value for this property instead of using an average value. The target value was calculated from the average of two laboratories accredited for this property underISO 17025, with the difference between those laboratories being less than 10% of the target value.
For Test 951 CTS has choosen to use the average value as the target.

Wines tested: SA57: Chardonnay; SA58: Chardonnay

	SA57		SA58	
Consensus Average (may differ from target value)	0.12124	mg/L	0.12467	mg/L

This consensus average is based on 21 reporting participants.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Research Property 951

Research Property: Copper (Cu) Content