



Wine Industry Interlaboratory Program

Summary Report #026- Summer 2007

[Introduction to the Wine Program](#)

[Explanation of Tables and Definitions of Terms](#)

Analysis	Analysis Name
901	<u>Ethanol (% of volume)</u>
902	<u>Total Sulfur Dioxide</u>
903	<u>Free Sulfur Dioxide</u>
904	<u>Titrateable Acidity</u>
905	<u>Volatile Acidity</u>
906	<u>Specific Gravity</u>
907	<u>pH</u>
908	<u>Residual Sugar</u>
909	<u>L-Malic Acid</u>
910	<u>Glucose + Fructose</u>
950	<u>Research Property: Copper (Cu) Content</u>
951	<u>Research Property: A520nm (1cm path)</u>

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:

<u>DATA FLAG</u>	<u>STATISTICALLY INCLUDED/EXCLUDED</u>	<u>ACTION REQUIRED</u>
*	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)

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
13R537	X	12.85	0.36	4.08	13.15	0.30	3.54
2CSBCU		12.54	0.04	0.50	12.89	0.04	0.48
2XRTA9		12.47	-0.03	-0.30	12.75	-0.10	-1.17
2ZWYKW		12.40	-0.09	-1.04	12.77	-0.08	-0.94
319FA1	*	12.60	0.11	1.24	12.85	0.00	0.00
39TTXK		12.60	0.11	1.24	12.90	0.05	0.59
3PLP9B	*	12.30	-0.19	-2.18	12.75	-0.10	-1.17
3UKDBQ		12.50	0.01	0.10	12.93	0.08	0.89
4JF464	X	12.71	0.22	2.49	12.91	0.06	0.65
4Z8YF9		12.53	0.04	0.44	12.86	0.01	0.12
5KTFG2		12.56	0.07	0.78	12.90	0.05	0.59
5TYYM6	*	12.76	0.27	3.06	13.11	0.26	3.01
6PBLN		12.50	0.01	0.10	12.90	0.05	0.59
7V8ZCU		12.54	0.04	0.50	12.88	0.03	0.36
8254JS		12.52	0.02	0.27	12.79	-0.06	-0.70
85A6MG	X	12.80	0.31	3.51	13.15	0.30	3.54
86329Q		12.49	0.00	-0.02	12.85	0.00	-0.05
8BZ2PR		12.35	-0.15	-1.67	12.70	-0.15	-1.82
8TMDMS		12.46	-0.04	-0.41	12.87	0.02	0.18
8YZ546		12.51	0.01	0.15	12.85	0.00	0.00
9DX4TT		12.56	0.06	0.72	12.91	0.06	0.65
9MN8LN		12.48	-0.01	-0.13	12.85	0.00	-0.05
AV67DC		12.46	-0.03	-0.36	12.82	-0.03	-0.35
AWWFCF		12.55	0.05	0.61	12.87	0.02	0.24
B5ZDKA		12.49	0.00	-0.02	12.83	-0.02	-0.23
B6M43G		12.47	-0.02	-0.24	12.89	0.04	0.42
B8CJGJ		12.49	0.00	-0.02	12.91	0.06	0.71
BTJMLE		12.48	-0.01	-0.13	12.85	0.00	0.00
C18V8Q		12.55	0.05	0.61	12.87	0.02	0.24
C23LCJ		12.53	0.03	0.38	12.89	0.04	0.48
C6KQHT		12.50	0.00	0.04	12.86	0.01	0.12
CBHHW5		12.63	0.13	1.52	12.96	0.11	1.30
CDPJVN	X	12.48	-0.02	-0.19	12.70	-0.15	-1.82
CYFZLG		12.47	-0.02	-0.24	12.84	-0.01	-0.17
DF641Q		12.56	0.07	0.78	12.91	0.06	0.71

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 901
Ethanol (% of volume)

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EE672K		12.53	0.03	0.38	12.89	0.04	0.48
FB1S82		12.62	0.13	1.46	12.99	0.14	1.65
FDC46B	X	12.10	-0.39	-4.46	12.50	-0.35	-4.12
FSTMKS		12.49	0.00	-0.02	12.81	-0.04	-0.47
G3WGPN		12.40	-0.09	-1.04	12.75	-0.10	-1.17
GH4938		12.45	-0.04	-0.47	12.90	0.05	0.59
GUQ5YR		12.46	-0.03	-0.34	12.83	-0.02	-0.19
HHSK17		12.31	-0.18	-2.07	12.70	-0.15	-1.76
HWQC8P		12.43	-0.06	-0.70	12.75	-0.10	-1.17
J3LC53		12.62	0.13	1.46	12.92	0.07	0.83
JBD944		12.40	-0.09	-1.04	12.75	-0.10	-1.17
K8JMBU		12.51	0.02	0.21	12.91	0.06	0.65
L2AQBE		12.40	-0.09	-1.04	12.75	-0.10	-1.17
L43JB4		12.48	-0.01	-0.13	12.85	0.00	-0.05
M4M1AP		12.56	0.06	0.72	12.91	0.06	0.71
M8MB6P		12.56	0.06	0.72	12.91	0.06	0.71
N523TQ		12.50	0.01	0.10	12.90	0.05	0.59
NZ4DPW		12.44	-0.05	-0.59	12.86	0.01	0.06
S7PY2K		12.44	-0.06	-0.64	12.83	-0.02	-0.29
SCHAJG		12.45	-0.04	-0.47	12.80	-0.05	-0.58
SCPKFN		12.40	-0.09	-1.04	12.70	-0.15	-1.76
T457S3	*	12.77	0.27	3.11	13.09	0.24	2.77
T6B53G		12.44	-0.05	-0.59	12.80	-0.05	-0.58
TNV1BH		12.46	-0.04	-0.41	12.85	0.00	0.00
UNP3RL		12.50	0.01	0.10	12.90	0.05	0.59
V3GZMP		12.46	-0.03	-0.36	12.84	-0.01	-0.17
W4VBXM		12.47	-0.02	-0.24	12.87	0.02	0.18
X1F4BJ	*	12.30	-0.19	-2.18	12.60	-0.25	-2.94
XY4V6Y		12.41	-0.09	-0.98	12.74	-0.11	-1.29
Y3TF6E		12.44	-0.06	-0.64	12.81	-0.04	-0.53
YTPMB8	X	12.45	-0.04	-0.47	12.60	-0.25	-2.94
ZYD1FN		12.53	0.04	0.44	12.89	0.04	0.48

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 901
Ethanol (% of volume)

Grand Means	Summary Statistics	
12.491 percent		12.850 percent
Std Dev Btwn Labs		
0.088 percent		0.085 percent
Statistics based on 61 of 67 reporting participants		

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

Comments on assigned Data Flags

13R537 (X) - Data for both samples are high. Possible Systematic Error.

4JF464 (X) - Inconsistent in testing between samples and inconsistent within the determinations for both samples.

85A6MG (X) - Data for both samples are high. Possible Systematic Error.

CDPJVN (X) - Inconsistent in testing between samples.

FDC46B (X) - Data for both samples are low.

YTPMB8 (X) - Inconsistent in testing between samples, data for Sample SA50 are low.

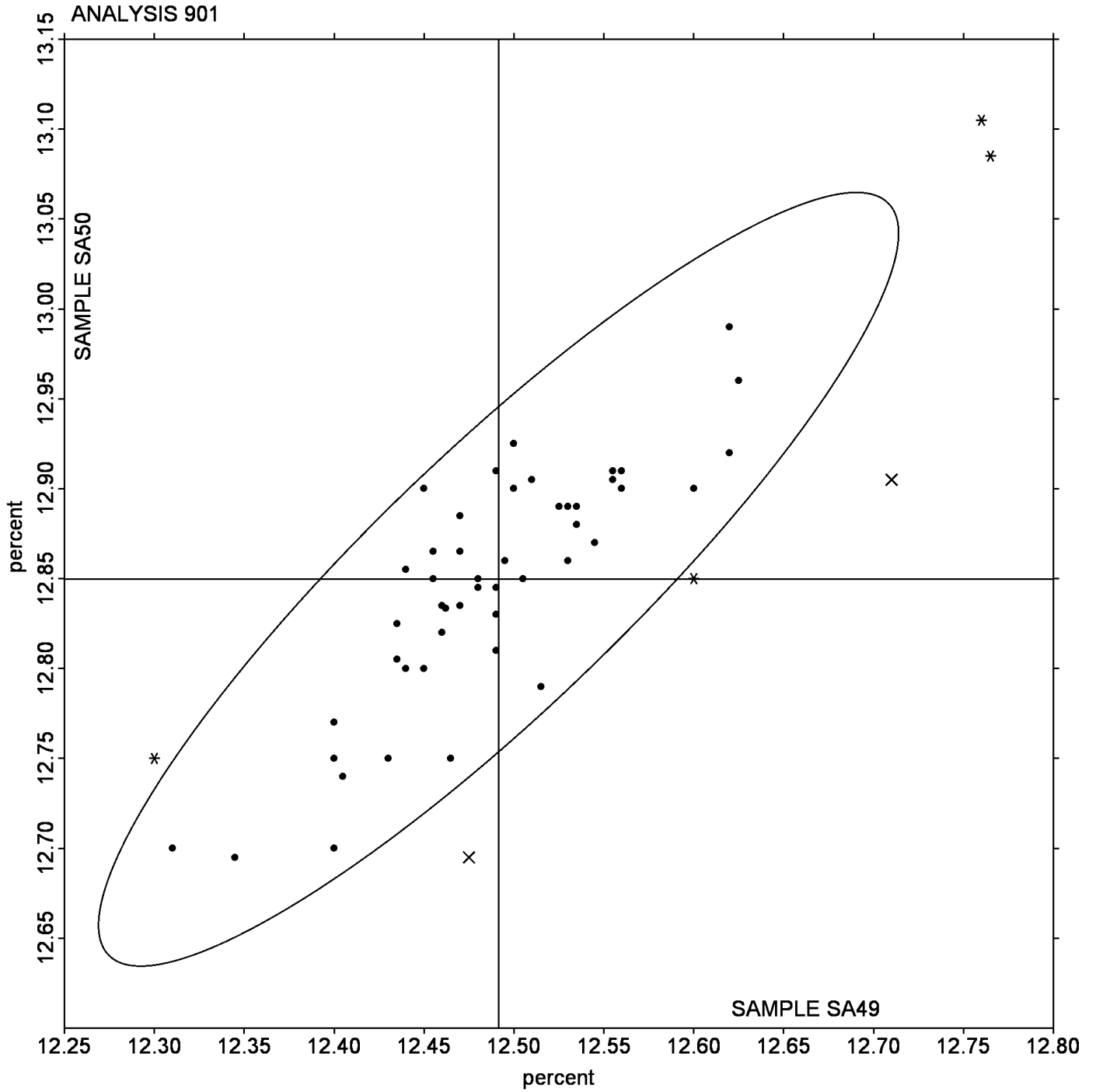
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA49 <i>Burgundy</i>			Sample SA50 <i>Cabernet Sauvignon</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Ebulliometer Method	12.50	0.08	0.01	12.87	0.08	0.02	4	8
Gas Chromatography Method	12.52	0.06	0.03	12.89	0.03	0.04	6	8
Near Infrared Method	12.49	0.06	-0.01	12.85	0.06	0.00	31	32
Dist. / Density Method	12.44	0.07	-0.06	12.78	0.07	-0.07	8	10
FTIR	12.49	0.07	0.00	12.85	0.07	0.00	5	7
Other	12.55	0.11	0.05	12.93	0.09	0.08	2	2

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 901

Ethanol (% of volume)



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 902

Total Sulfur Dioxide

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1BH5FT	X	94.30	39.40	5.27	90.38	-6.26	-0.66
1FJHQJ		65.00	10.11	1.35	111.50	14.87	1.58
1SKCAF		49.50	-5.39	-0.72	92.00	-4.63	-0.49
1UZ22D		56.64	1.75	0.23	96.96	0.33	0.03
2JT5DW		46.00	-8.89	-1.19	92.40	-4.23	-0.45
4BYP5U		50.00	-4.89	-0.65	96.50	-0.13	-0.01
5KVQRS		56.50	1.61	0.21	91.50	-5.13	-0.55
5N3BPB		49.50	-5.39	-0.72	99.00	2.37	0.25
5QV31G		51.96	-2.94	-0.39	92.77	-3.87	-0.41
624B66		51.00	-3.89	-0.52	95.50	-1.13	-0.12
6UDJHE		53.00	-1.89	-0.25	97.00	0.37	0.04
7U6W55		59.00	4.11	0.55	111.00	14.37	1.53
83WVCQ		47.00	-7.89	-1.05	90.00	-6.63	-0.70
879H7V		61.00	6.11	0.82	102.50	5.87	0.62
9FRWZX		58.50	3.61	0.48	95.00	-1.63	-0.17
9SG7CQ		56.00	1.11	0.15	100.00	3.37	0.36
9XKS1Z		54.50	-0.39	-0.05	94.50	-2.13	-0.23
A9PWJU		54.50	-0.39	-0.05	89.00	-7.63	-0.81
BBV2SV		53.00	-1.89	-0.25	91.00	-5.63	-0.60
BZW1PJ		68.50	13.61	1.82	117.00	20.37	2.16
CCYURE		55.00	0.11	0.01	100.00	3.37	0.36
CJ8QC2		55.00	0.11	0.01	105.00	8.37	0.89
CM9LMB		49.00	-5.89	-0.79	80.80	-15.83	-1.68
DA63E9	*	73.60	18.71	2.50	105.60	8.97	0.95
DL4H5S		59.00	4.11	0.55	107.00	10.37	1.10
DNR4VU		58.00	3.11	0.42	96.00	-0.63	-0.07
DS1H37		49.50	-5.39	-0.72	89.00	-7.63	-0.81
EGG98C		63.00	8.11	1.08	105.00	8.37	0.89
FW6XH9		46.50	-8.39	-1.12	93.50	-3.13	-0.33
GKY6XE		61.00	6.11	0.82	102.00	5.37	0.57
H4YQ8E		54.00	-0.89	-0.12	93.50	-3.13	-0.33
H8SEJZ		52.00	-2.89	-0.39	93.00	-3.63	-0.39
JP5LBV		49.00	-5.89	-0.79	96.50	-0.13	-0.01
KC3X2Q		54.50	-0.39	-0.05	94.50	-2.13	-0.23
KYBXS4		51.00	-3.89	-0.52	90.00	-6.63	-0.70

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 902

Total Sulfur Dioxide

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LC8RFH		53.50	-1.39	-0.19	99.00	2.37	0.25
LNH9TV		57.00	2.11	0.28	97.00	0.37	0.04
M6EWWX		51.00	-3.89	-0.52	85.50	-11.13	-1.18
M878VQ		47.00	-7.89	-1.05	95.00	-1.63	-0.17
NTGMHP		59.50	4.61	0.62	108.50	11.87	1.26
P8ERP1		50.40	-4.49	-0.60	80.80	-15.83	-1.68
PEYEJN		63.00	8.11	1.08	90.50	-6.13	-0.65
PPJDXC		37.50	-17.39	-2.32	86.00	-10.63	-1.13
PWDW44	*	45.36	-9.53	-1.27	73.15	-23.48	-2.49
Q8HJNK		42.00	-12.89	-1.72	93.50	-3.13	-0.33
QEQVVJ		55.50	0.61	0.08	96.00	-0.63	-0.07
QZGFY3		47.86	-7.03	-0.94	94.01	-2.63	-0.28
R5VAR4		70.50	15.61	2.09	113.50	16.87	1.79
SDGUP9		59.00	4.11	0.55	91.50	-5.13	-0.55
SKDYU8		64.00	9.11	1.22	107.00	10.37	1.10
SUQ9ND		66.00	11.11	1.48	95.00	-1.63	-0.17
T6M6NQ		56.00	1.11	0.15	96.00	-0.63	-0.07
TBEN49		47.00	-7.89	-1.05	87.00	-9.63	-1.02
TRJMR6		48.50	-6.39	-0.85	85.00	-11.63	-1.24
VEEYDV		49.50	-5.39	-0.72	77.00	-19.63	-2.09
W9ZPJ4		54.50	-0.39	-0.05	106.00	9.37	0.99
WWB61E		64.50	9.61	1.28	93.00	-3.63	-0.39
WYM1NQ		57.00	2.11	0.28	109.50	12.87	1.37
X7UX8Q		53.50	-1.39	-0.19	94.50	-2.13	-0.23
XJKCTW	*	75.00	20.11	2.69	120.00	23.37	2.48
Y65YV3		50.00	-4.89	-0.65	107.00	10.37	1.10
Y8N3GE		49.50	-5.39	-0.72	99.00	2.37	0.25
YRKYUX		67.00	12.11	1.62	114.50	17.87	1.90
ZRRE5V		46.00	-8.89	-1.19	87.00	-9.63	-1.02

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 902

Total Sulfur Dioxide

Grand Means		Summary Statistics	
	54.894 mg/L		96.635 mg/L
Std Dev Btwn Labs			9.415 mg/L
	7.483 mg/L		
Statistics based on 63 of 64 reporting participants			

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

Comments on assigned Data Flags

1BH5FT (X) - Inconsistent in testing between samples, data for Sample SA49 are high.

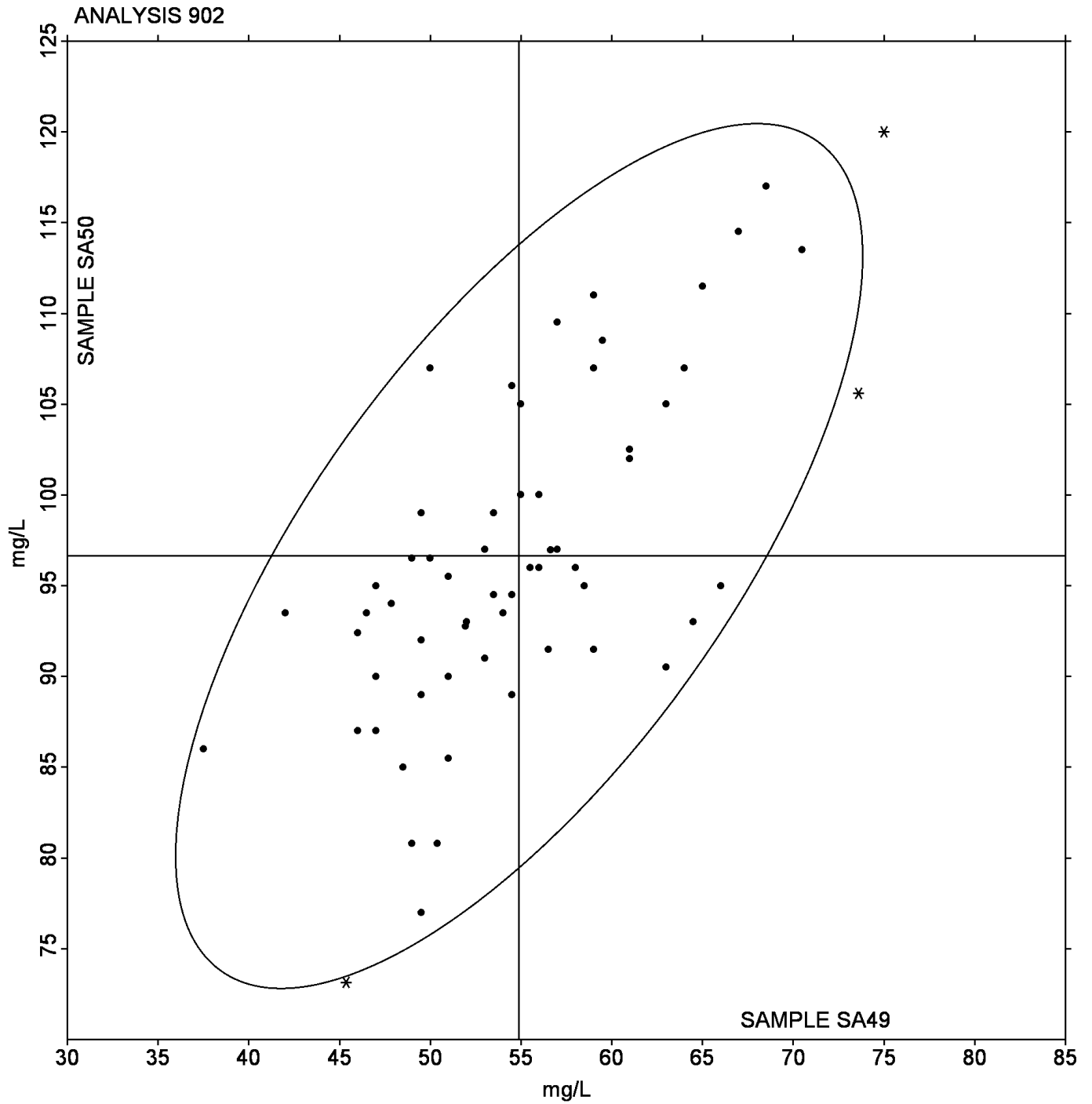
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA49 <i>Burgundy</i>			Sample SA50 <i>Cabernet Sauvignon</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	51.00	2.83	-3.89	85.90	7.21	-10.73	2	2
Ripper Method	58.18	6.27	3.28	99.27	9.04	2.63	27	29
Aeration Oxidation (AO) Method	51.50	6.10	-3.39	94.12	8.59	-2.51	18	19
Segmented Flow Analyzer	52.67	4.93	-2.23	95.33	5.03	-1.30	3	3
Enzymatic Method	51.75	2.47	-3.14	100.75	8.84	4.12	2	2
Colormetric Analyzer	51.00	7.94	-3.89	94.67	2.02	-1.97	3	3
FTIR	46.00	0.00	-8.89	87.00	0.00	-9.63	1	1
Flow Injection Analysis	51.00	3.34	-3.89	96.13	4.97	-0.51	4	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

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1P5D1D		16.00	-5.56	-1.17	33.00	-5.81	-1.03
1U5SA3		22.50	0.94	0.20	42.50	3.69	0.65
2LA8KL		20.50	-1.06	-0.22	37.00	-1.81	-0.32
2QL9J5	X	11.50	-10.06	-2.12	18.50	-20.31	-3.60
35YKZC		20.50	-1.06	-0.22	39.50	0.69	0.12
3DBXYP		22.80	1.24	0.26	36.96	-1.85	-0.33
3U73VR		20.80	-0.76	-0.16	42.40	3.59	0.64
3WZYHZ		22.50	0.94	0.20	37.50	-1.31	-0.23
4GEGTN		22.03	0.47	0.10	40.07	1.26	0.22
4ZS6X8	*	35.00	13.44	2.83	47.50	8.69	1.54
5JERY2		22.00	0.44	0.09	39.00	0.19	0.03
5MYJ7J		19.50	-2.06	-0.43	40.50	1.69	0.30
5WNDHL		32.00	10.44	2.20	45.50	6.69	1.18
5XG4LE		17.50	-4.06	-0.86	33.00	-5.81	-1.03
6VEVJU		24.50	2.94	0.62	40.00	1.19	0.21
71BZPT		19.50	-2.06	-0.43	37.00	-1.81	-0.32
74LF4X		20.00	-1.56	-0.33	35.00	-3.81	-0.67
8J5UHN		18.50	-3.06	-0.64	35.00	-3.81	-0.67
99N4YA		17.03	-4.53	-0.96	33.28	-5.53	-0.98
9FK286		24.00	2.44	0.51	32.50	-6.31	-1.12
9PHTSL		22.00	0.44	0.09	39.00	0.19	0.03
A3GZGA		23.00	1.44	0.30	44.00	5.19	0.92
BHSBSL		22.00	0.44	0.09	41.00	2.19	0.39
BRG7CB		13.50	-8.06	-1.70	27.50	-11.31	-2.00
C5R18Y		21.00	-0.56	-0.12	38.00	-0.81	-0.14
D3XNSZ		20.50	-1.06	-0.22	40.50	1.69	0.30
D4Y5LQ		22.50	0.94	0.20	41.50	2.69	0.48
D8AKZ1		20.00	-1.56	-0.33	41.00	2.19	0.39
DDPUAR		19.00	-2.56	-0.54	33.50	-5.31	-0.94
DNWQTG		32.00	10.44	2.20	47.00	8.19	1.45
EQ8DZ7		25.50	3.94	0.83	39.00	0.19	0.03
FH9498		19.20	-2.36	-0.50	29.92	-8.89	-1.57
FMT252		18.00	-3.56	-0.75	36.00	-2.81	-0.50
FPLXRA		23.76	2.20	0.46	42.06	3.24	0.57
FQC6RD		33.00	11.44	2.41	47.50	8.69	1.54

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 903

Free Sulfur Dioxide

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FX2YJD		17.50	-4.06	-0.86	33.50	-5.31	-0.94
GFD1ZW		20.00	-1.56	-0.33	41.00	2.19	0.39
GNK945		20.00	-1.56	-0.33	35.60	-3.21	-0.57
GVTKVQ		21.00	-0.56	-0.12	38.00	-0.81	-0.14
HBKM7N	*	32.50	10.94	2.31	44.00	5.19	0.92
HZ3Y23		18.00	-3.56	-0.75	33.50	-5.31	-0.94
KKZFY8		17.00	-4.56	-0.96	31.00	-7.81	-1.38
KQ87GZ		17.00	-4.56	-0.96	38.50	-0.31	-0.06
LGEPPR		17.50	-4.06	-0.86	34.00	-4.81	-0.85
LSUW7C		18.00	-3.56	-0.75	38.00	-0.81	-0.14
LUDV3U		22.50	0.94	0.20	40.00	1.19	0.21
LW9BX5		25.50	3.94	0.83	42.50	3.69	0.65
MBJXXT		18.50	-3.06	-0.64	37.00	-1.81	-0.32
N65TBJ		15.00	-6.56	-1.38	32.00	-6.81	-1.21
N66JKM	*	31.00	9.44	1.99	40.50	1.69	0.30
PX3EV3	*	30.00	8.44	1.78	54.00	15.19	2.69
QZ7G3J	*	29.00	7.44	1.57	55.00	16.19	2.87
RXFTAF		20.00	-1.56	-0.33	42.50	3.69	0.65
SAPP8C		17.50	-4.06	-0.86	31.00	-7.81	-1.38
TTK42V		19.20	-2.36	-0.50	29.60	-9.21	-1.63
U1FC87		23.00	1.44	0.30	46.50	7.69	1.36
V2P7L4		19.50	-2.06	-0.43	35.00	-3.81	-0.67
VLT2P2		19.50	-2.06	-0.43	40.50	1.69	0.30
VMLYBA	*	15.50	-6.06	-1.28	42.00	3.19	0.56
VNVBSL		20.00	-1.56	-0.33	39.50	0.69	0.12
VQ42XM		24.00	2.44	0.51	46.00	7.19	1.27
W5XUF2		14.00	-7.56	-1.59	26.00	-12.81	-2.27
W61DN4		20.00	-1.56	-0.33	41.00	2.19	0.39
X7S6DL		20.50	-1.06	-0.22	38.00	-0.81	-0.14
XGAFFE		25.00	3.44	0.73	43.50	4.69	0.83

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 903
Free Sulfur Dioxide

Grand Means	Summary Statistics	
21.560 mg/L		38.811 mg/L
Std Dev Btwn Labs		
4.745 mg/L		5.648 mg/L
Statistics based on 64 of 65 reporting participants		

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

Comments on assigned Data Flags

2QL9J5 (X) - Inconsistent in testing between samples, data for Sample SA50 are low.

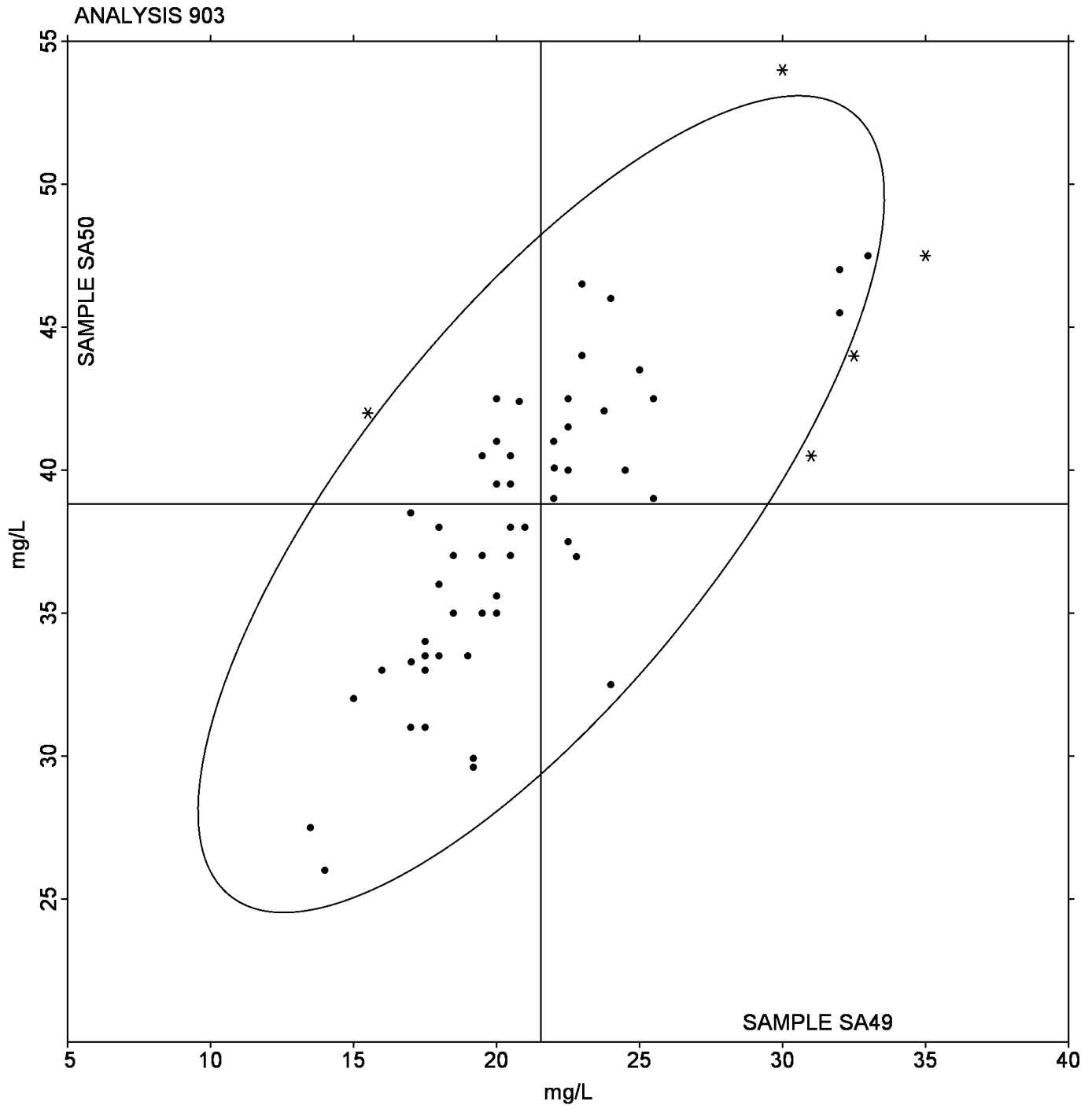
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA49 <i>Burgundy</i>			Sample SA50 <i>Cabernet Sauvignon</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	17.23	2.11	-4.33	31.70	1.97	-7.11	3	3
Ripper Method	24.90	4.84	3.34	40.55	4.84	1.74	12	14
Aeration Oxidation (AO) Method	20.33	2.55	-1.23	38.16	4.46	-0.66	30	33
Segmented Flow Analyzer	21.13	2.53	-0.43	40.50	4.04	1.69	4	4
Enzymatic Method	13.50	0.00	-8.06	27.50	0.00	-11.31	1	2
Colormetric Analyzer	19.17	1.15	-2.39	36.67	1.53	-2.14	3	4
Flow Injection Analysis	18.20	1.79	-3.36	35.00	4.43	-3.81	5	5

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 903

Free Sulfur Dioxide



ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titratable Acidity

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
13NZMS		7.200	0.713	2.40	6.100	0.598	2.43
1HMWX4		6.285	-0.202	-0.68	5.255	-0.247	-1.01
21KZ3S		6.600	0.113	0.38	5.550	0.048	0.19
293Q2D		6.475	-0.012	-0.04	5.450	-0.052	-0.21
2FQSPP		6.850	0.363	1.22	5.900	0.398	1.62
3A4TUE	*	5.650	-0.837	-2.82	4.750	-0.752	-3.06
5T9YHZ		6.400	-0.087	-0.29	5.400	-0.102	-0.42
5ZNF9E	X	7.000	0.513	1.73	6.450	0.948	3.86
68DF9S		6.600	0.113	0.38	5.550	0.048	0.19
6FVC9F		6.625	0.138	0.46	5.650	0.148	0.60
74MPF8	X	7.030	0.543	1.83	5.555	0.053	0.22
85QNN2		6.550	0.063	0.21	5.550	0.048	0.19
889EXH		6.400	-0.087	-0.29	5.400	-0.102	-0.42
8D5H6V		6.410	-0.077	-0.26	5.430	-0.072	-0.29
AKCNEY		6.600	0.113	0.38	5.600	0.098	0.40
ASUKEM		6.450	-0.037	-0.12	5.350	-0.152	-0.62
AZ16LF		6.300	-0.187	-0.63	5.365	-0.137	-0.56
BB8726		6.560	0.073	0.25	5.555	0.053	0.22
C8LY5Q		7.010	0.523	1.76	6.040	0.538	2.19
E3SYD9		5.990	-0.497	-1.67	5.250	-0.252	-1.03
EAGUJ5		7.010	0.523	1.76	5.810	0.308	1.25
EKZ4RB		6.350	-0.137	-0.46	5.400	-0.102	-0.42
EQFSTF		6.600	0.113	0.38	5.700	0.198	0.81
F33VQK		6.500	0.013	0.04	5.450	-0.052	-0.21
FCBS5W		6.020	-0.467	-1.57	5.030	-0.472	-1.92
FH8SMJ		6.645	0.158	0.53	5.645	0.143	0.58
FK1JZP		6.450	-0.037	-0.12	5.250	-0.252	-1.03
G4MB4Y		6.500	0.013	0.04	5.500	-0.002	-0.01
G8ZYWH		6.650	0.163	0.55	5.500	-0.002	-0.01
GPP9GZ		6.200	-0.287	-0.97	5.450	-0.052	-0.21
JEGQD1		5.850	-0.637	-2.15	5.070	-0.432	-1.76
KCGZF7		5.765	-0.722	-2.43	5.000	-0.502	-2.04
KKY62Q		6.235	-0.252	-0.85	5.440	-0.062	-0.25
KZAZUE		6.350	-0.137	-0.46	5.330	-0.172	-0.70
L73U5H		6.450	-0.037	-0.12	5.450	-0.052	-0.21

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titratable Acidity

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
MA85WZ		6.300	-0.187	-0.63	5.450	-0.052	-0.21
MCJJJD		6.400	-0.087	-0.29	5.450	-0.052	-0.21
N39TK3		6.559	0.072	0.24	5.560	0.058	0.24
N749QM		6.400	-0.087	-0.29	5.400	-0.102	-0.42
P3CN4K		6.600	0.113	0.38	5.700	0.198	0.81
P6VRRW		6.335	-0.152	-0.51	5.360	-0.142	-0.58
P7WR2H		6.569	0.082	0.27	5.561	0.058	0.24
PKAFNS		7.000	0.513	1.73	5.750	0.248	1.01
PQEFNW		6.700	0.213	0.72	5.800	0.298	1.21
Q2H39Y		6.490	0.003	0.01	5.480	-0.022	-0.09
QYYB1G		6.400	-0.087	-0.29	5.500	-0.002	-0.01
R9AXK2		6.550	0.063	0.21	5.550	0.048	0.19
REPKCL		6.500	0.013	0.04	5.600	0.098	0.40
RTDSWM		6.800	0.313	1.05	5.545	0.043	0.17
S35GFL		6.600	0.113	0.38	5.600	0.098	0.40
S6R6AK		6.500	0.013	0.04	5.650	0.148	0.60
SE8ZQA		6.750	0.263	0.89	5.700	0.198	0.81
SGEF1K		6.800	0.313	1.05	5.545	0.043	0.17
SJ516B		6.800	0.313	1.05	5.750	0.248	1.01
SZKQ64		6.715	0.228	0.77	5.605	0.103	0.42
T2CNT3		6.300	-0.187	-0.63	5.350	-0.152	-0.62
UBWJ6N		6.540	0.053	0.18	5.595	0.093	0.38
VEK7KN		6.530	0.043	0.14	5.490	-0.012	-0.05
VUQ9SP	*	5.735	-0.752	-2.53	4.840	-0.662	-2.70
W88T7G		6.300	-0.187	-0.63	5.350	-0.152	-0.62
WJPDFS		6.800	0.313	1.05	5.900	0.398	1.62
WT164Z		6.750	0.263	0.89	5.660	0.158	0.64
XGY27R		6.445	-0.042	-0.14	5.440	-0.062	-0.25
Y4CW18		6.850	0.363	1.22	5.950	0.448	1.82
YK3QYS		6.555	0.068	0.23	5.590	0.088	0.36
ZK6C3H		6.453	-0.035	-0.12	5.447	-0.056	-0.23
ZLLJLV		6.100	-0.387	-1.30	5.300	-0.202	-0.82

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titrateable Acidity

Grand Means		Summary Statistics	
	6.4870 g/L as tartaric acid		5.5021 g/L as tartaric acid
Std Dev Btwn Labs			0.2457 g/L as tartaric acid
	0.2968 g/L as tartaric acid		
Statistics based on 65 of 67 reporting participants			

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

Comments on assigned Data Flags

5ZNFE9 (X) - Inconsistent in testing between samples, data for Sample SA50 are high.

74MPF8 (X) - Inconsistent in testing between samples.

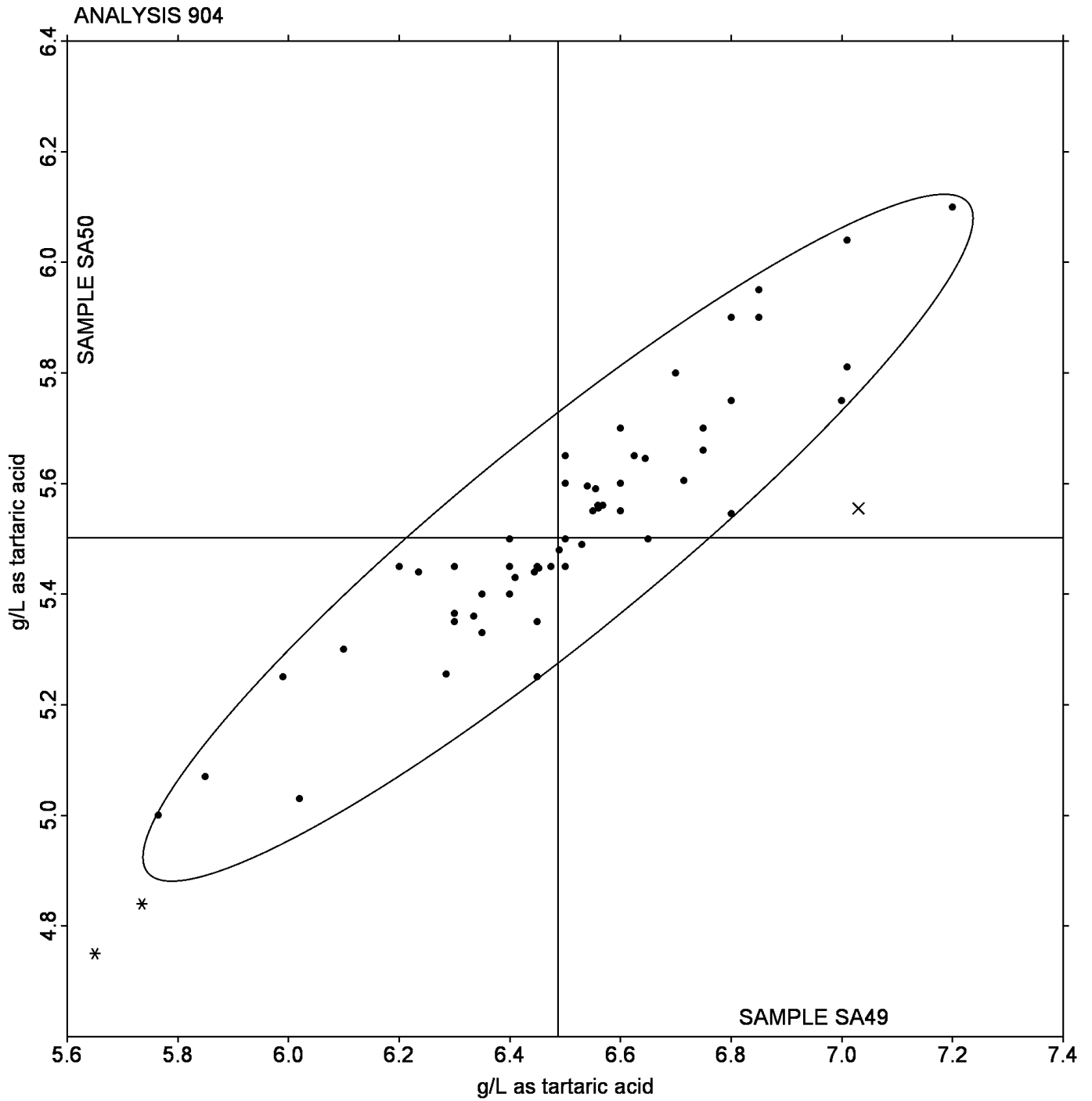
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA49 <i>Burgundy</i>			Sample SA50 <i>Cabernet Sauvignon</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Autotitration	6.462	0.223	-0.025	5.497	0.187	-0.006	33	33
Manual Titration	6.625	0.277	0.138	5.585	0.241	0.083	25	27
FTIR	6.280	0.243	-0.207	5.406	0.177	-0.096	5	6

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 904

Titrateable Acidity



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 905
Volatile Acidity

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
118X1S		0.5600	0.0039	0.06	0.4950	-0.0057	-0.09
17ZPPV		0.4300	-0.1261	-2.01	0.3800	-0.1207	-1.84
1L9XAJ		0.5200	-0.0361	-0.58	0.4650	-0.0357	-0.55
1S61FH		0.4500	-0.1061	-1.69	0.4150	-0.0857	-1.31
2RBL5W		0.5850	0.0289	0.46	0.4800	-0.0207	-0.32
327GHC		0.6350	0.0789	1.25	0.5650	0.0643	0.98
3NR3EY		0.6150	0.0589	0.94	0.5925	0.0918	1.40
44KAKH		0.5700	0.0139	0.22	0.5100	0.0093	0.14
5451JX		0.6100	0.0539	0.86	0.5800	0.0793	1.21
5S3H98		0.5800	0.0239	0.38	0.5000	-0.0007	-0.01
5TTR9B		0.5500	-0.0061	-0.10	0.4750	-0.0257	-0.39
6VP35A		0.5100	-0.0461	-0.73	0.4750	-0.0257	-0.39
7CZWXX		0.5400	-0.0161	-0.26	0.4900	-0.0107	-0.16
7JAPNN		0.5250	-0.0311	-0.50	0.4850	-0.0157	-0.24
7P2JF3		0.5500	-0.0061	-0.10	0.5400	0.0393	0.60
83HUQ9		0.6600	0.1039	1.65	0.6350	0.1343	2.05
8TKPDN		0.5600	0.0039	0.06	0.4900	-0.0107	-0.16
9376KU		0.4900	-0.0661	-1.05	0.4400	-0.0607	-0.93
9K1F16		0.5800	0.0239	0.38	0.5000	-0.0007	-0.01
9LSNYP		0.5950	0.0389	0.62	0.5400	0.0393	0.60
9VH8E8		0.5800	0.0239	0.38	0.5250	0.0243	0.37
A5BJW8	*	0.6150	0.0589	0.94	0.4700	-0.0307	-0.47
APQYGP		0.4750	-0.0811	-1.29	0.4400	-0.0607	-0.93
AQ5T22		0.6450	0.0889	1.41	0.6150	0.1143	1.75
AR61TE		0.4100	-0.1461	-2.32	0.3550	-0.1457	-2.23
AXVFLS		0.5800	0.0239	0.38	0.5300	0.0293	0.45
C8UA5G		0.5350	-0.0211	-0.34	0.4400	-0.0607	-0.93
DGWERH		0.4950	-0.0611	-0.97	0.4500	-0.0507	-0.77
DK464C		0.4830	-0.0731	-1.16	0.4395	-0.0612	-0.94
DQU21V		0.5900	0.0339	0.54	0.4950	-0.0057	-0.09
EERKV6		0.5400	-0.0161	-0.26	0.4850	-0.0157	-0.24
EJAN12		0.5500	-0.0061	-0.10	0.5500	0.0493	0.75
EMURND		0.6800	0.1239	1.97	0.6000	0.0993	1.52
GQCBVE		0.6150	0.0589	0.94	0.5150	0.0143	0.22
GUW8YX	X	0.4100	-0.1461	-2.32	0.4750	-0.0257	-0.39

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 905
Volatile Acidity

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
HW1QKT		0.6800	0.1239	1.97	0.6200	0.1193	1.82
JFLJVS		0.5200	-0.0361	-0.58	0.5000	-0.0007	-0.01
JVMZCE		0.6250	0.0689	1.10	0.5250	0.0243	0.37
JZX5EE		0.5700	0.0139	0.22	0.4800	-0.0207	-0.32
KETQV3		0.5350	-0.0211	-0.34	0.4450	-0.0557	-0.85
L7AC9U		0.5100	-0.0461	-0.73	0.4750	-0.0257	-0.39
LWRQFV		0.5400	-0.0161	-0.26	0.5250	0.0243	0.37
MV7XV4	X	0.6150	0.0589	0.94	0.4200	-0.0807	-1.23
N38GYC		0.4600	-0.0961	-1.53	0.4100	-0.0907	-1.39
PTX3BW		0.5650	0.0089	0.14	0.5350	0.0343	0.52
QN5UM2		0.6900	0.1339	2.13	0.6600	0.1593	2.44
RQN7TH		0.6681	0.1120	1.78	0.6503	0.1496	2.29
S5HY66		0.5300	-0.0261	-0.42	0.5200	0.0193	0.30
SQ1QYV		0.5000	-0.0561	-0.89	0.4550	-0.0457	-0.70
TAJPQN		0.5925	0.0364	0.58	0.5100	0.0093	0.14
TCBHQD		0.5700	0.0139	0.22	0.5200	0.0193	0.30
TPU2KV		0.5350	-0.0211	-0.34	0.5400	0.0393	0.60
UXJ7V8		0.5500	-0.0061	-0.10	0.4900	-0.0107	-0.16
VFFBAU		0.6000	0.0439	0.70	0.5200	0.0193	0.30
VVRB8Z		0.5250	-0.0311	-0.50	0.4700	-0.0307	-0.47
XHZVJV		0.5200	-0.0361	-0.58	0.4400	-0.0607	-0.93
XLHZ57		0.5100	-0.0461	-0.73	0.5100	0.0093	0.14
XRVIJNE	*	0.5350	-0.0211	-0.34	0.4000	-0.1007	-1.54
XX6S6W		0.4440	-0.1121	-1.78	0.3725	-0.1282	-1.96
YTVSXB	X	0.6000	0.0439	0.70	0.6500	0.1493	2.28
YZRSUR		0.5100	-0.0461	-0.73	0.4650	-0.0357	-0.55
ZH4TGR		0.6200	0.0639	1.02	0.5400	0.0393	0.60

Grand Means

0.55615 g/L as acetic acid

Summary Statistics

0.50067 g/L as acetic acid

Std Dev Btwn Labs

0.06286 g/L as acetic acid

0.06541 g/L as acetic acid

Statistics based on 59 of 62 reporting participants

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 905
Volatile Acidity

Comments on assigned Data Flags

G UW8YX (X) - Inconsistent in testing between samples.

M V7XV4 (X) - Inconsistent in testing between samples.

Y TVSXB (X) - Inconsistent in testing between samples.

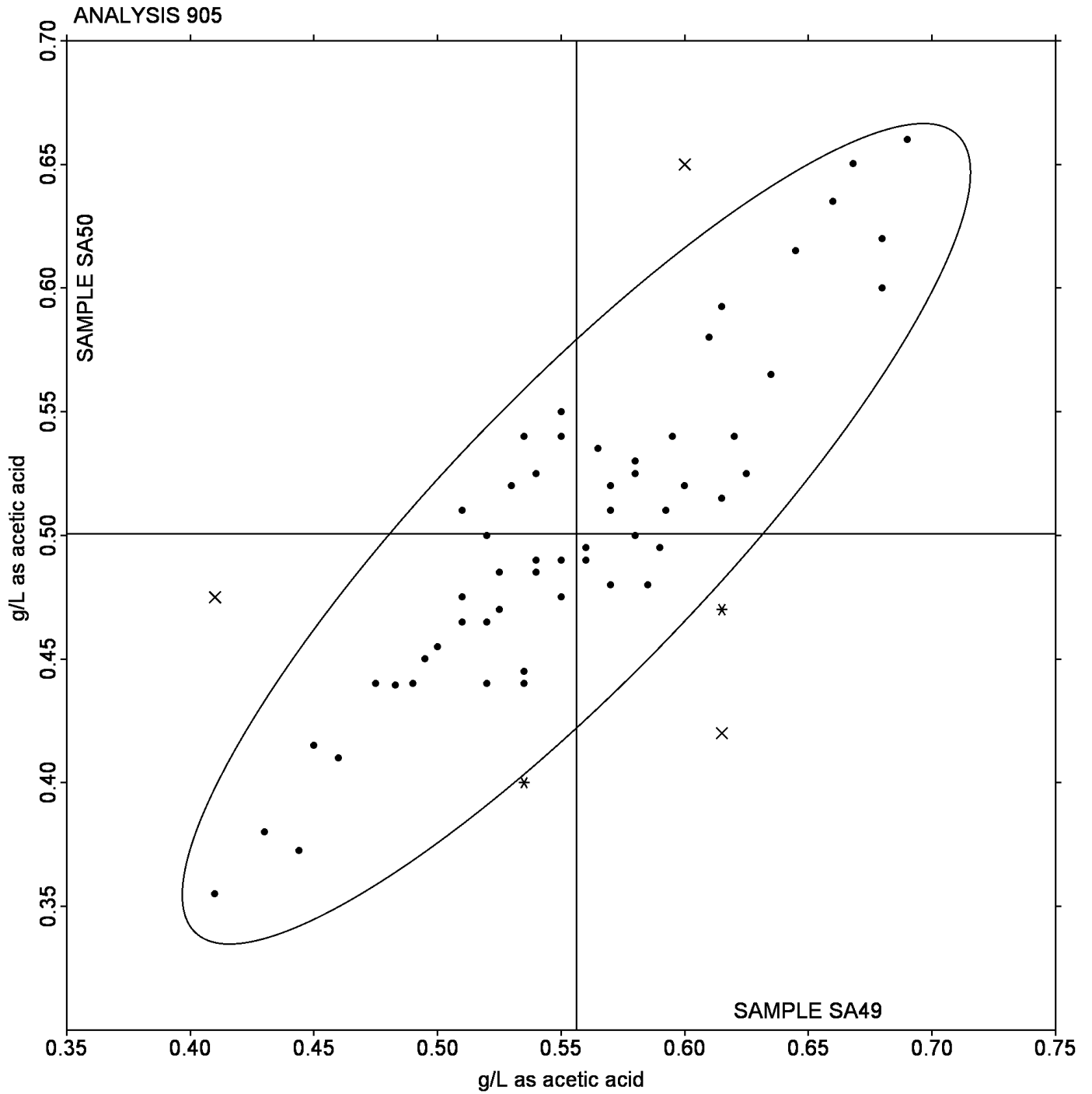
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA49 <i>Burgundy</i>			Sample SA50 <i>Cabernet Sauvignon</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Cash Still Method	0.5772	0.0656	0.0211	0.5261	0.0694	0.0255	31	33
Enzymatic Method	0.5055	0.0382	-0.0506	0.4636	0.0434	-0.0370	15	15
HPLC	0.5200	0.0000	-0.0361	0.4400	0.0000	-0.0607	1	1
GC	0.5500	0.0000	-0.0061	0.4900	0.0000	-0.0107	1	1
Seg. Flow / Colorimetric Analyzer	0.5833	0.0519	0.0272	0.5083	0.0547	0.0077	6	6
FTIR	0.5383	0.0401	-0.0178	0.4750	0.0482	-0.0257	3	5

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 905

Volatile Acidity



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 906
Specific Gravity

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
246S8T	X	0.9956	-0.0031	-3.21	0.9967	0.0015	1.58
2ZFHSP		0.9990	0.0002	0.21	0.9954	0.0002	0.18
32AN1D		0.9990	0.0002	0.21	0.9954	0.0002	0.18
379C3S		1.0012	0.0024	2.45	0.9975	0.0023	2.41
3NGQFV	X	0.9978	-0.0010	-1.02	0.9948	-0.0004	-0.46
3XAXDT		0.9997	0.0009	0.93	0.9961	0.0009	0.91
3YRJE2		0.9972	-0.0016	-1.66	0.9936	-0.0016	-1.69
4KCZPU		0.9988	0.0000	0.01	0.9953	0.0001	0.07
4MBT95		0.9990	0.0002	0.21	0.9955	0.0002	0.23
5LTRZ5		0.9989	0.0001	0.15	0.9954	0.0001	0.15
628KQS		0.9990	0.0002	0.19	0.9954	0.0002	0.20
68TCNS		0.9990	0.0002	0.21	0.9954	0.0002	0.18
6H6H2P	X	1.0029	0.0041	4.14	0.9988	0.0036	3.73
6WTCKE		0.9970	-0.0018	-1.82	0.9935	-0.0018	-1.86
6ZCF6R		0.9990	0.0002	0.19	0.9954	0.0002	0.17
76RWL1		1.0004	0.0016	1.64	0.9968	0.0016	1.64
7WV6CL		0.9981	-0.0007	-0.70	0.9946	-0.0006	-0.66
86BDCU	X	0.9938	-0.0050	-5.08	0.9919	-0.0033	-3.48
9E6SVY		0.9992	0.0004	0.42	0.9957	0.0005	0.49
9E86XZ	X	1.0025	0.0037	3.78	0.9970	0.0018	1.85
AR9JZR	*	0.9962	-0.0026	-2.64	0.9927	-0.0025	-2.64
B4BB2M	X	0.9978	-0.0010	-1.02	0.9939	-0.0013	-1.40
C8WGQ3		0.9988	0.0000	0.01	0.9953	0.0001	0.07
CY39S5		0.9989	0.0001	0.11	0.9954	0.0001	0.13
F5GMBV		0.9989	0.0001	0.14	0.9954	0.0001	0.12
FFE4PV		0.9989	0.0001	0.11	0.9954	0.0002	0.18
FUC7CU		0.9990	0.0002	0.24	0.9953	0.0001	0.10
G2BXNX		0.9996	0.0008	0.83	0.9959	0.0007	0.70
G5KEAD		0.9989	0.0001	0.13	0.9954	0.0002	0.17
GFHYB1		0.9988	0.0000	0.01	0.9951	-0.0001	-0.14
GH6WL5		0.9970	-0.0018	-1.82	0.9935	-0.0017	-1.81
HN7KP5		0.9989	0.0001	0.11	0.9954	0.0002	0.18
HQESXR	X	1.0004	0.0016	1.59	0.9964	0.0011	1.17
J2JEG8		1.0000	0.0012	1.23	0.9965	0.0013	1.32
K7BDH2		0.9989	0.0001	0.14	0.9954	0.0002	0.17

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 906
Specific Gravity

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
M2DZ3Y	X	0.9900	-0.0088	-8.96	0.9955	0.0002	0.23
M6DM1D		0.9990	0.0002	0.18	0.9955	0.0002	0.25
NCWRB8		0.9989	0.0001	0.15	0.9954	0.0002	0.17
PKPLLB		0.9965	-0.0022	-2.29	0.9930	-0.0022	-2.29
PNPS31		0.9989	0.0002	0.15	0.9954	0.0002	0.17
Q3LQ2X	M	0.9991	0.0003	0.27	No data reported for this sample		
Q7M3BN		0.9972	-0.0016	-1.62	0.9937	-0.0016	-1.65
R2K86M	X	0.9955	-0.0033	-3.35	0.9925	-0.0027	-2.85
RDXGY6		0.9996	0.0008	0.83	0.9961	0.0009	0.91
SV8TTF		0.9972	-0.0016	-1.62	0.9937	-0.0016	-1.65
T1NDX9		0.9990	0.0002	0.24	0.9955	0.0002	0.23
T329RY	X	0.9976	-0.0012	-1.21	0.9937	-0.0015	-1.60
T5LDCA	X	0.9982	-0.0006	-0.61	0.9953	0.0001	0.06
TZ7UNQ	*	1.0003	0.0015	1.49	0.9965	0.0013	1.32
VDJEBT		0.9989	0.0001	0.15	0.9954	0.0002	0.19
WDXPXM	X	0.9835	-0.0153	-15.58	0.9832	-0.0121	-12.59
WWWFYT	X	0.9990	0.0002	0.21	0.9949	-0.0003	-0.36
X3RQJY		0.9990	0.0002	0.16	0.9954	0.0002	0.17
XXFX8Z		0.9989	0.0001	0.11	0.9954	0.0001	0.12
YUQU2L	X	1.0011	0.0024	2.40	0.9977	0.0025	2.57
Z7UGL2		0.9990	0.0002	0.21	0.9955	0.0003	0.28
Z8YR27		0.9991	0.0003	0.29	0.9955	0.0003	0.32
ZQGMG1		0.9989	0.0002	0.16	0.9954	0.0002	0.16
ZVA5XK		0.9990	0.0002	0.16	0.9954	0.0002	0.18

Grand Means

0.99879 sp gr 20/20 C

Summary Statistics

0.99523 sp gr 20/20 C

Std Dev Btwn Labs

0.00098 sp gr 20/20 C

0.00096 sp gr 20/20 C

Statistics based on 44 of 59 reporting participants

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 906
Specific Gravity

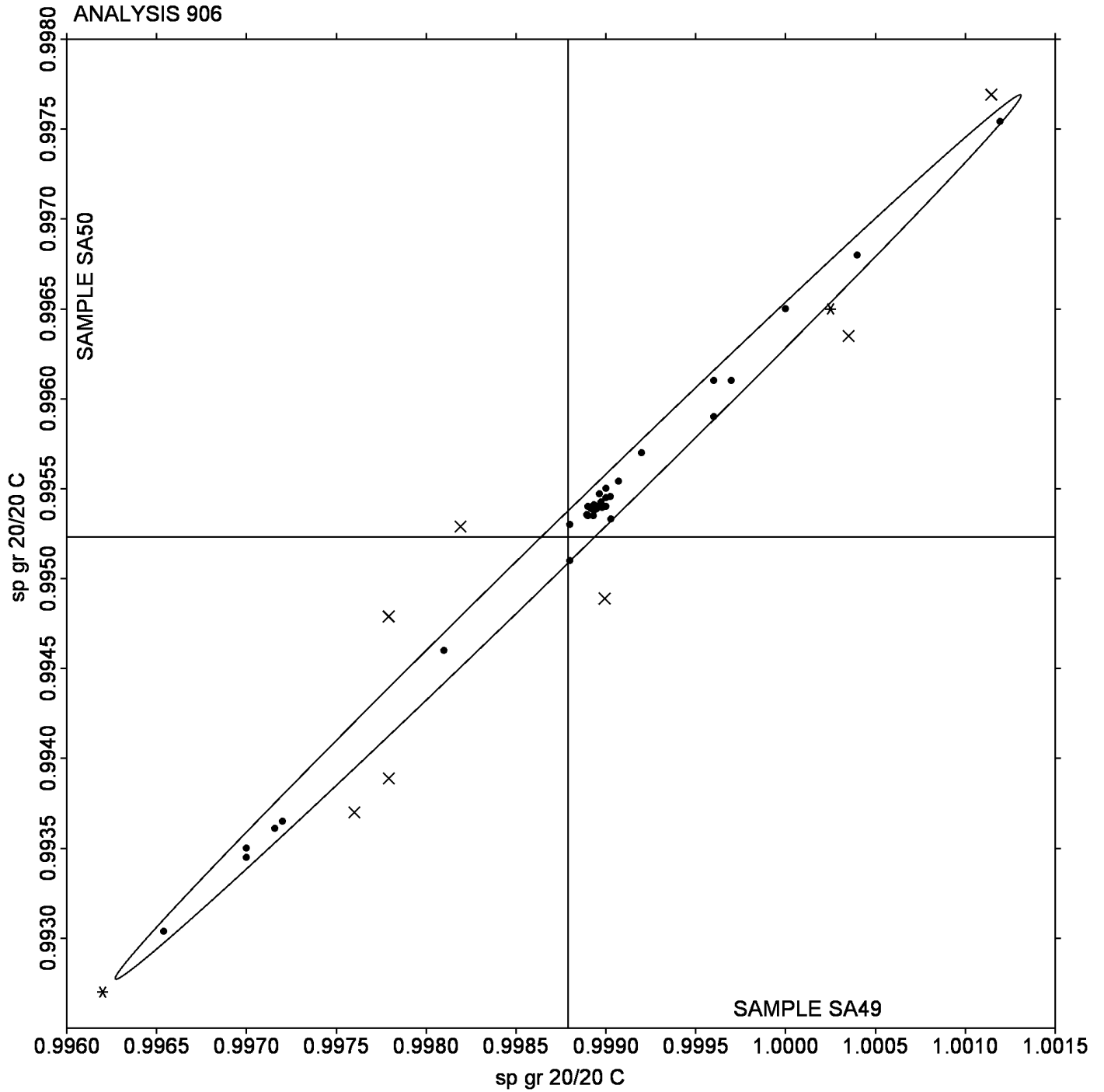
Comments on assigned Data Flags

- 246S8T (X) - Inconsistent in testing between samples, data for Sample SA49 are low.
- 3NGQFV (X) - Inconsistent in testing between samples.
- 6H6H2P (X) - Data for both samples are high.
- 86BDCU (X) - Data for both samples are low.
- 9E86XZ (X) - Inconsistent in testing between samples, data for Sample SA49 are high.
- B4BB2M (X) - Inconsistent in testing between samples and inconsistent within the determinations for Sample SA49.
- HQESXR (X) - Inconsistent in testing between samples.
- M2DZ3Y (X) - Inconsistent in testing between samples, data for Sample SA49 are low.
- Q3LQ2X (M) - Laboratory did not submit data for Sample SA50.
- R2K86M (X) - Data for both samples are low. Also inconsistent in testing within both sample sets.
- T329RY (X) - Inconsistent in testing between samples.
- T5LDCA (X) - Inconsistent in testing between samples.
- WDXPXM (X) - Data for both samples are low.
- WWWFYT (X) - Inconsistent in testing between samples.
- YUQU2L (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

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1RGFAX		3.480	-0.026	-0.64	3.550	-0.013	-0.31
28PCMG		3.500	-0.006	-0.16	3.560	-0.003	-0.06
2FCFT5		3.490	-0.016	-0.40	3.550	-0.013	-0.31
3494SQ	*	3.590	0.084	2.02	3.595	0.032	0.80
49L6VW		3.430	-0.076	-1.85	3.480	-0.083	-2.03
4T33T4		3.415	-0.091	-2.21	3.475	-0.088	-2.15
4V VWST		3.480	-0.026	-0.64	3.580	0.017	0.43
5E7Z6H		3.550	0.044	1.05	3.620	0.057	1.41
5FZVTR		3.475	-0.031	-0.76	3.550	-0.013	-0.31
5ZDAC6		3.515	0.009	0.21	3.580	0.017	0.43
6GP1S8		3.470	-0.036	-0.88	3.515	-0.048	-1.17
6QYGB4		3.460	-0.046	-1.12	3.510	-0.053	-1.29
7JZALJ		3.460	-0.046	-1.12	3.490	-0.073	-1.78
7MMWBL		3.560	0.054	1.30	3.620	0.057	1.41
7Q7L7K		3.495	-0.011	-0.28	3.560	-0.003	-0.06
7SZE69		3.500	-0.006	-0.16	3.555	-0.008	-0.19
81VFGL		3.430	-0.076	-1.85	3.480	-0.083	-2.03
8EESUM		3.510	0.004	0.09	3.560	-0.003	-0.06
8GH1X6		3.495	-0.011	-0.28	3.545	-0.018	-0.43
9PVTMQ		3.570	0.064	1.54	3.595	0.032	0.80
9QFUZY		3.485	-0.021	-0.52	3.540	-0.023	-0.55
9QQJRJ		3.555	0.049	1.18	3.605	0.042	1.04
AP5QFD		3.520	0.014	0.33	3.560	-0.003	-0.06
AXLRXV		3.560	0.054	1.30	3.600	0.037	0.92
BHYGDQ		3.475	-0.031	-0.76	3.560	-0.003	-0.06
BTQVRM		3.530	0.024	0.57	3.600	0.037	0.92
C29BT8		3.485	-0.021	-0.52	3.550	-0.013	-0.31
CLJR9M		3.490	-0.016	-0.40	3.540	-0.023	-0.55
CMVU37		3.445	-0.061	-1.49	3.510	-0.053	-1.29
CNBMWV		3.540	0.034	0.81	3.590	0.027	0.67
E4NYHS		3.535	0.029	0.69	3.580	0.017	0.43
ERLE4Z		3.520	0.014	0.33	3.580	0.017	0.43
EXB96K		3.470	-0.036	-0.88	3.515	-0.048	-1.17
F6EBXH		3.525	0.019	0.45	3.585	0.022	0.55
FRA6YR	*	3.560	0.054	1.30	3.570	0.007	0.18

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 907

pH

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
G7E16R		3.550	0.044	1.05	3.605	0.042	1.04
GKN6K4		3.480	-0.026	-0.64	3.540	-0.023	-0.55
J9C325		3.510	0.004	0.09	3.570	0.007	0.18
JDKWGA	X	3.476	-0.030	-0.74	3.607	0.044	1.08
JWXKMV		3.490	-0.016	-0.40	3.540	-0.023	-0.55
JY7WRX		3.505	-0.001	-0.03	3.565	0.002	0.06
K3B3M2		3.520	0.014	0.33	3.580	0.017	0.43
KNHKPR		3.453	-0.053	-1.29	3.526	-0.037	-0.90
LMP2N3		3.580	0.074	1.78	3.640	0.077	1.90
MYEJWW		3.455	-0.051	-1.25	3.495	-0.068	-1.66
N1FJEK	*	3.625	0.119	2.87	3.675	0.112	2.76
NE7P2U		3.545	0.039	0.93	3.585	0.022	0.55
QN4VAF		3.515	0.009	0.21	3.580	0.017	0.43
RNMM1Z		3.510	0.004	0.09	3.570	0.007	0.18
SPMN82		3.540	0.034	0.81	3.600	0.037	0.92
TJ8EDB		3.450	-0.056	-1.37	3.520	-0.043	-1.05
TKA6LJ		3.495	-0.011	-0.28	3.565	0.002	0.06
TL1A1K		3.530	0.024	0.57	3.580	0.017	0.43
TMRH1M	X	3.450	-0.056	-1.37	3.600	0.037	0.92
U7J4X5	*	3.485	-0.021	-0.52	3.590	0.027	0.67
WCK2DM	*	3.560	0.054	1.30	3.660	0.097	2.40
WGDPZ1		3.500	-0.006	-0.16	3.550	-0.013	-0.31
WMHKF2		3.500	-0.006	-0.16	3.560	-0.003	-0.06
XZSENY		3.475	-0.031	-0.76	3.530	-0.033	-0.80
Y6NQ4M		3.515	0.009	0.21	3.570	0.007	0.18
Y8C4M5	X	3.460	-0.046	-1.12	3.600	0.037	0.92
Y98FM5	X	3.650	0.144	3.48	3.680	0.117	2.89
YMHBL1		3.510	0.004	0.09	3.530	-0.033	-0.80
YNH1J4		3.510	0.004	0.09	3.565	0.002	0.06
Z75JVW		3.515	0.009	0.21	3.570	0.007	0.18

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 907

pH

Grand Means		Summary Statistics	
	3.5064 pH		3.5626 pH
Std Dev Btwn Labs			0.0407 pH
	0.0413 pH		
Statistics based on 61 of 65 reporting participants			

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

Comments on assigned Data Flags

JDKWGA (X) - Inconsistent in testing between samples.

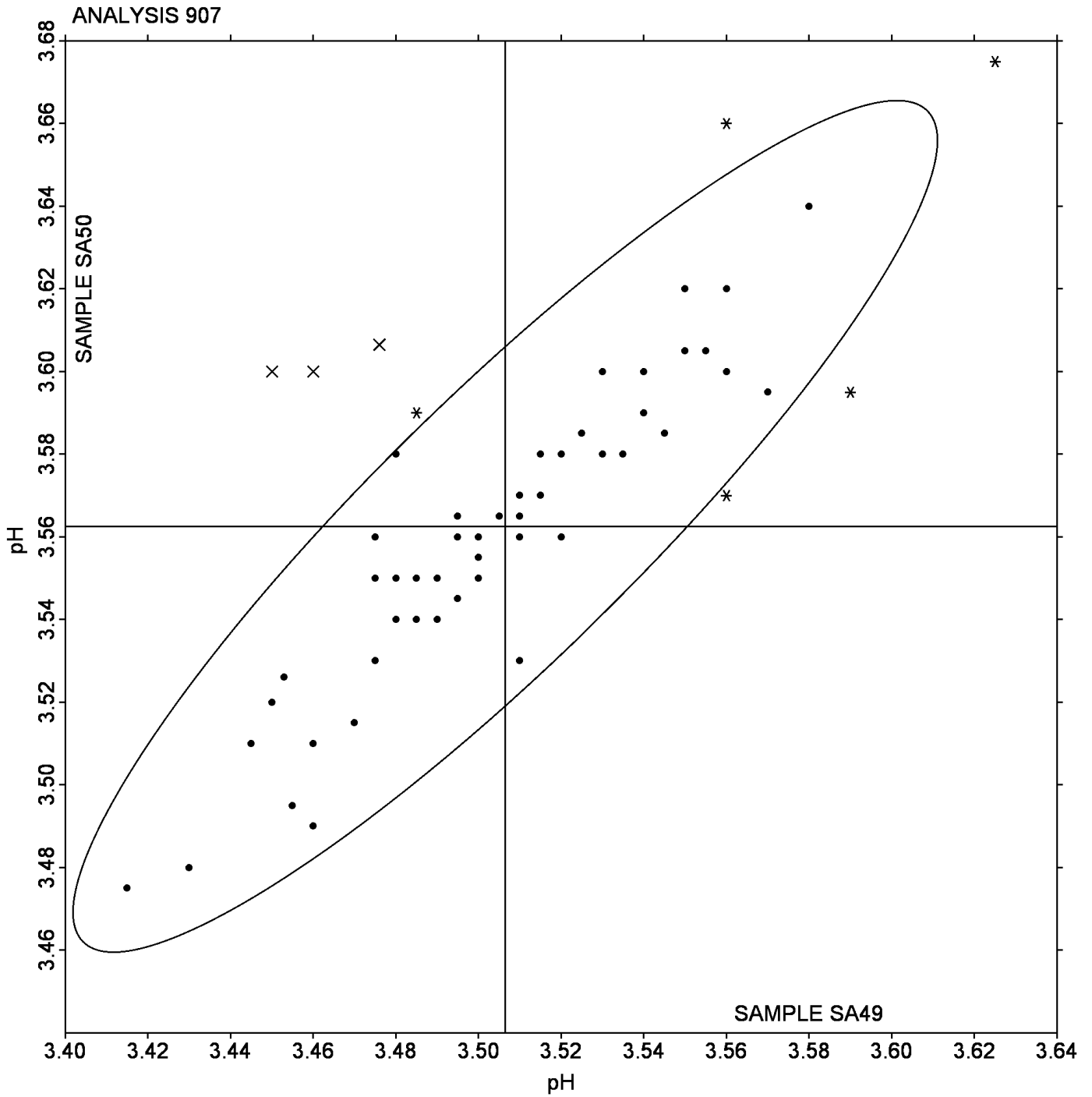
TMRH1M (X) - Inconsistent in testing between samples and inconsistent within the determinations for both samples.

Y8C4M5 (X) - Inconsistent in testing between samples.

Y98FM5 (X) - Data for both sample sets are high. Also inconsistent in testing within both sample sets.

Analysis 907

pH



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 908
Residual Sugar

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
42LE59		9.30	-0.80	-0.56	3.000	-0.854	-0.61
4UWJZD		9.60	-0.50	-0.35	2.515	-1.339	-0.95
59BC9N		9.50	-0.60	-0.42	3.400	-0.454	-0.32
64G78L		8.84	-1.26	-0.88	2.645	-1.209	-0.86
6VYF9Z		10.00	-0.10	-0.07	5.000	1.146	0.81
79MD99		11.70	1.60	1.11	3.715	-0.139	-0.10
8THHX8		10.23	0.12	0.09	4.285	0.431	0.31
9ZQ995		10.81	0.71	0.49	3.990	0.136	0.10
BLLKEG		11.50	1.40	0.97	3.585	-0.269	-0.19
CZVGKF		10.12	0.01	0.01	3.785	-0.069	-0.05
F5Z53Z		9.85	-0.25	-0.17	4.000	0.146	0.10
HRPAS9		8.60	-1.50	-1.04	1.800	-2.054	-1.46
L8VRJR		13.23	3.12	2.17	6.240	2.386	1.69
N83AXZ		10.40	0.30	0.21	3.740	-0.114	-0.08
NTQDYB	*	13.70	3.60	2.50	8.600	4.746	3.37
RLASE7		10.45	0.35	0.24	3.250	-0.604	-0.43
RP5F3K		10.40	0.30	0.21	4.800	0.946	0.67
T198X4		8.19	-1.92	-1.33	2.490	-1.364	-0.97
TJ117V		9.10	-1.00	-0.70	3.250	-0.604	-0.43
TZHBLG		9.92	-0.18	-0.13	4.010	0.156	0.11
VZKAHP	M	No data reported for this sample			0.400	-3.454	-2.45
WXHAYN		10.50	0.40	0.28	4.050	0.196	0.14
YK7JK7		8.50	-1.60	-1.11	4.000	0.146	0.10
ZEVQ98		7.90	-2.20	-1.53	2.500	-1.354	-0.96

Grand Means

10.101 g/L

Summary Statistics

3.8543 g/L

Std Dev Btwn Labs

1.438 g/L

1.4090 g/L

Statistics based on 23 of 24 reporting participants

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 908
Residual Sugar

Comments on assigned Data Flags

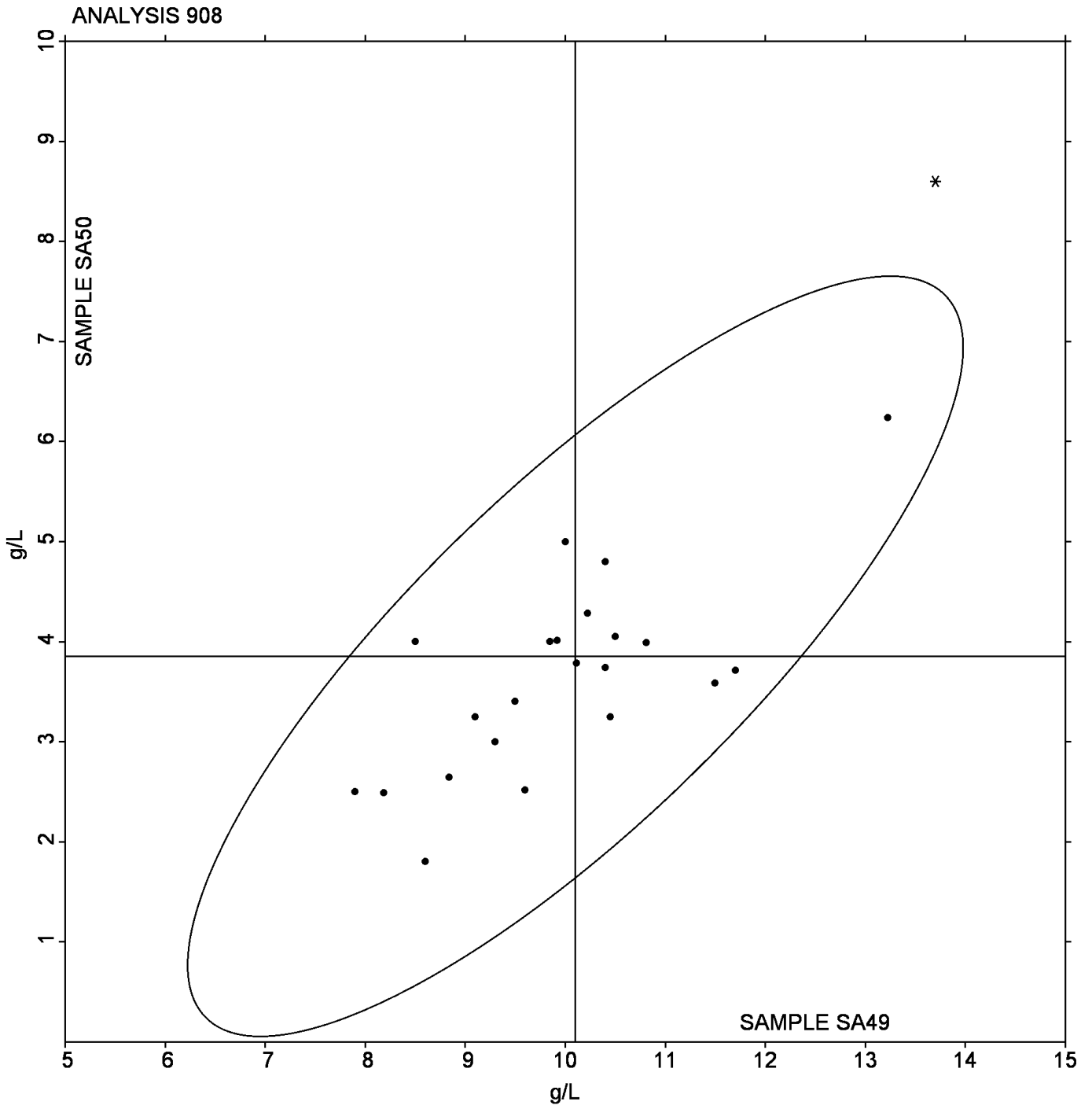
VZKAHP (M) - Laboratory did not submit data for Sample SA50.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA49 <i>Burgundy</i>			Sample SA50 <i>Cabernet Sauvignon</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Cu Reduction Method	10.34	1.14	0.24	4.00	0.87	0.15	15	15
Segmented Flow	9.34	1.64	-0.76	3.27	1.10	-0.58	2	3
FTIR	9.30	1.01	-0.80	2.57	0.73	-1.29	3	3
Other	8.50	0.85	-1.60	2.88	0.53	-0.98	2	3

Analysis 908

Residual Sugar



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 909
L-Malic Acid

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2XKQ93		0.2000	-0.0181	-0.24	0.1000	-0.0100	-0.16
59LGAZ		0.2450	0.0269	0.35	0.1450	0.0350	0.56
6MTP44		0.1950	-0.0231	-0.30	0.0450	-0.0650	-1.04
6NSMH6		0.1400	-0.0781	-1.03	0.0900	-0.0200	-0.32
6QCFCL		0.3235	0.1054	1.38	0.2270	0.1170	1.88
6XW2JR	*	0.4500	0.2319	3.05	0.3000	0.1900	3.05
89CDFC		0.3010	0.0829	1.09	0.1120	0.0020	0.03
8A5A2L		0.2950	0.0769	1.01	0.1200	0.0100	0.16
8CWH2P	*	0.4250	0.2069	2.72	0.2950	0.1850	2.97
8DNDPW		0.1800	-0.0381	-0.50	0.0800	-0.0300	-0.48
9G7YWY		0.1710	-0.0471	-0.62	0.0395	-0.0705	-1.13
9U1KX8	X	0.5700	0.3519	4.62	0.4650	0.3550	5.69
AEF3AQ		0.2500	0.0319	0.42	0.1350	0.0250	0.40
BDJVUJ		0.1700	-0.0481	-0.63	0.0900	-0.0200	-0.32
C9KLW9		0.1250	-0.0931	-1.22	0.0800	-0.0300	-0.48
CEKZ7K		0.1350	-0.0831	-1.09	0.0300	-0.0800	-1.28
CFCVUT		0.2480	0.0299	0.39	0.1335	0.0235	0.38
E4RR3L		0.2100	-0.0081	-0.11	0.1050	-0.0050	-0.08
E6BKX1	X	0.1810	-0.0371	-0.49	0.8450	0.7350	11.79
FE976D		0.1400	-0.0781	-1.03	0.0700	-0.0400	-0.64
FJJNXP		0.2100	-0.0081	-0.11	0.1200	0.0100	0.16
FK5EN8		0.2850	0.0669	0.88	0.1850	0.0750	1.20
FPC83D		0.1280	-0.0901	-1.18	0.1100	0.0000	0.00
JN8LFH		0.1420	-0.0761	-1.00	0.0660	-0.0440	-0.71
LE4GC5	X	0.8450	0.6269	8.24	0.5800	0.4700	7.54
LFMWN7		0.2070	-0.0111	-0.15	0.1110	0.0010	0.02
MFF3CB		0.1630	-0.0551	-0.72	0.0695	-0.0405	-0.65
P25E87	*	0.3150	0.0969	1.27	0.0850	-0.0250	-0.40
PC9NDS		0.3550	0.1369	1.80	0.2080	0.0980	1.57
Q5ADNT		0.2090	-0.0091	-0.12	0.0905	-0.0195	-0.31
QSNM4V		0.1530	-0.0651	-0.86	0.0465	-0.0635	-1.02
QZCL9G		0.1950	-0.0231	-0.30	0.0800	-0.0300	-0.48
R4V41R	X	0.4285	0.2104	2.76	0.4970	0.3870	6.21
RLGHMW	X	0.4700	0.2519	3.31	0.1500	0.0400	0.64
RM8D95		0.1850	-0.0331	-0.43	0.0600	-0.0500	-0.80

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 909
L-Malic Acid

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RX4ATC		0.2070	-0.0111	-0.15	0.0745	-0.0355	-0.57
S2UREH	X	0.1100	-0.1081	-1.42	0.1650	0.0550	0.88
SX9ZVE		0.1874	-0.0307	-0.40	0.1472	0.0372	0.60
TZM9XL		0.2450	0.0269	0.35	0.1400	0.0300	0.48
UPHTWZ		0.1800	-0.0381	-0.50	0.0750	-0.0350	-0.56
UW2E36	X	1.9700	1.7519	23.02	0.6900	0.5800	9.30
VWD8WS		0.1700	-0.0481	-0.63	0.0500	-0.0600	-0.96
VXZXZR		0.2700	0.0519	0.68	0.1400	0.0300	0.48
W7WTC7		0.1390	-0.0791	-1.04	0.0425	-0.0675	-1.08
WJDLR9		0.1865	-0.0316	-0.42	0.0830	-0.0270	-0.43
WR2MNK		0.2050	-0.0131	-0.17	0.1050	-0.0050	-0.08
XT7SY7		0.2705	0.0524	0.69	0.1145	0.0045	0.07
Y51PEX		0.1420	-0.0761	-1.00	0.0660	-0.0440	-0.71
Z363KL		0.1600	-0.0581	-0.76	0.0550	-0.0550	-0.88
Z4UJYF		0.2650	0.0469	0.62	0.2100	0.1000	1.60
ZD2FDS	X	0.4000	0.1819	2.39	0.4000	0.2900	4.65

Grand Means

0.21809 g/L

Summary Statistics

0.11003 g/L

Std Dev Btwn Labs

0.07611 g/L

0.06236 g/L

Statistics based on 43 of 51 reporting participants

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 909
L-Malic Acid

Comments on assigned Data Flags

9U1KX8 (X) - Data for both samples are high.

E6BKX1 (X) - High data for Sample SA50. Also inconsistent in testing within Sample SA50.

LE4GC5 (X) - Data for both samples are high.

R4V41R (X) - Data for both samples are high. Also inconsistent in testing within Sample SA50.

RLGHMW (X) - Data for Sample SA49 are high.

S2UREH (X) - Inconsistent in testing between samples.

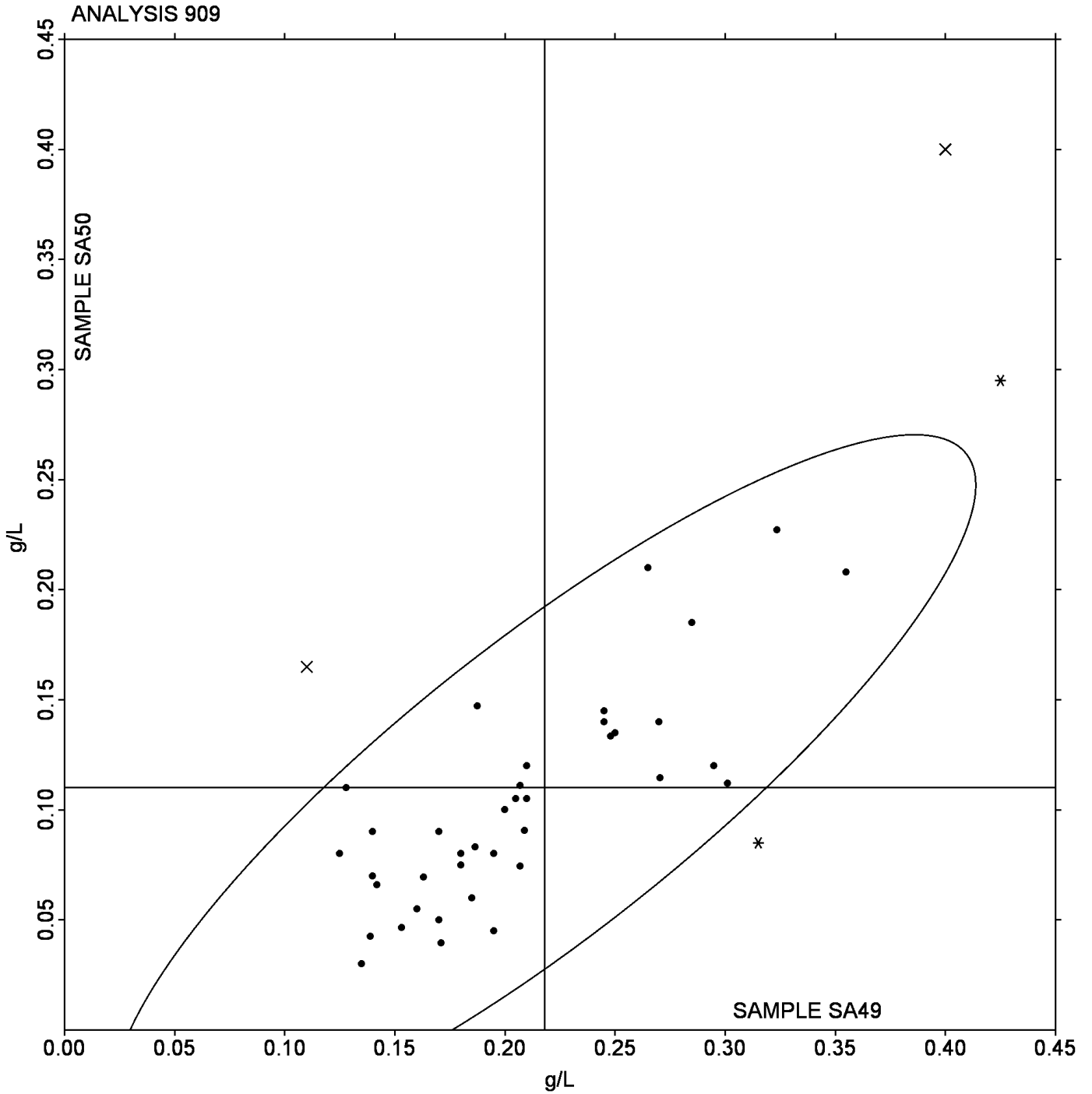
UW2E36 (X) - Data for both samples are high.

ZD2FDS (X) - Inconsistent in testing between samples, data for Sample SA50 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

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
1EV1PB		7.250	-0.959	-1.80	2.200	-0.196	-1.08
1SAX51		8.450	0.241	0.45	2.350	-0.046	-0.25
31F252		7.850	-0.359	-0.67	2.350	-0.046	-0.25
3ZZ2B7	X	7.430	-0.779	-1.46	1.190	-1.206	-6.65
4A1NWG		8.230	0.021	0.04	2.420	0.024	0.13
4M29WA		8.900	0.691	1.30	2.500	0.104	0.57
6JL7UM	*	6.740	-1.469	-2.76	2.325	-0.071	-0.39
6VN2EK	X	70.000	61.791	115.98	63.000	60.604	334.05
6YHGGT		7.850	-0.359	-0.67	2.020	-0.376	-2.07
8316H9		8.950	0.741	1.39	2.450	0.054	0.30
8RNXPQ		8.450	0.241	0.45	2.350	-0.046	-0.25
9GKHV9	M	8.400	0.191	0.36	No data reported for this sample		
A2EX7R		8.350	0.141	0.27	2.400	0.004	0.02
A3WGF9		8.585	0.376	0.71	2.595	0.199	1.10
AFW7WU		8.000	-0.209	-0.39	2.550	0.154	0.85
B8YTVT		8.215	0.006	0.01	2.455	0.059	0.33
BXG7MH		8.025	-0.184	-0.34	2.190	-0.206	-1.13
ELL77R	X	8.205	-0.004	-0.01	3.175	0.779	4.30
FTR55N		8.110	-0.099	-0.18	2.230	-0.166	-0.91
FX2FKA	*	8.020	-0.189	-0.35	2.805	0.409	2.26
GWPH8J		7.900	-0.309	-0.58	2.350	-0.046	-0.25
H29F1Y		8.950	0.741	1.39	2.750	0.354	1.95
H71BVY		9.500	1.291	2.42	2.630	0.234	1.29
JT7PUP		8.450	0.241	0.45	2.150	-0.246	-1.35
KPLGW8		8.400	0.191	0.36	2.650	0.254	1.40
L7VVE3	X	10.293	2.084	3.91	3.893	1.497	8.25
MD8N66		7.900	-0.309	-0.58	2.300	-0.096	-0.53
MN2V2H		7.980	-0.229	-0.43	2.395	-0.001	0.00
NXLPT5		7.800	-0.409	-0.77	2.300	-0.096	-0.53
P3FYCA		7.300	-0.909	-1.71	2.200	-0.196	-1.08
PY3BLR		8.070	-0.139	-0.26	2.245	-0.151	-0.83
Q1CZZ4	X	0.825	-7.384	-13.86	2.272	-0.124	-0.68
Q8NZVJ		8.835	0.626	1.18	2.490	0.094	0.52
QJT3KA		7.210	-0.999	-1.87	2.125	-0.271	-1.49
R49GD3		8.420	0.211	0.40	2.390	-0.006	-0.03

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 910

Glucose + Fructose

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RDFML6	X	9.950	1.741	3.27	3.500	1.104	6.09
S7QQDS		8.465	0.256	0.48	2.465	0.069	0.38
TCA65A	X	0.820	-7.389	-13.87	0.250	-2.146	-11.83
TQWYGR		8.765	0.556	1.04	2.480	0.084	0.46
TSF343		8.185	-0.024	-0.04	2.490	0.094	0.52
UB68W8		7.920	-0.289	-0.54	2.225	-0.171	-0.94
UKM71R		8.515	0.306	0.58	2.365	-0.031	-0.17
W3XTJ4		8.300	0.091	0.17	2.400	0.004	0.02
WFPSMN		7.750	-0.459	-0.86	2.050	-0.346	-1.91
WNXX6J		8.410	0.201	0.38	2.400	0.004	0.02
X3Z2M3		7.900	-0.309	-0.58	2.350	-0.046	-0.25
XQ9DBH		8.100	-0.109	-0.20	2.700	0.304	1.68
Y5KZ7Y	X	10.235	2.026	3.80	3.025	0.629	3.47
ZA42R3		8.899	0.690	1.30	2.487	0.091	0.50
ZE6B5W		8.650	0.441	0.83	2.650	0.254	1.40

Grand Means

8.2085 g/L

Summary Statistics

2.3958 g/L

Std Dev Btwn Labs

0.5328 g/L

0.1814 g/L

Statistics based on 41 of 50 reporting participants

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 910

Glucose + Fructose

Comments on assigned Data Flags

3ZZ2B7 (X) - Data for Sample SA50 are low.

6VN2EK (X) - Extreme data. Data appear to be off by a factor of 10.

9GKHV9 (M) - Laboratory did not submit data for Sample SA50.

ELL77R (X) - Data for Sample SA50 are high.

L7VE3 (X) - Data for both samples are high.

Q1CZZ4 (X) - Extreme data. Lab indicated reporting in g/L, but data appear to be in g/100mL.

RDFML6 (X) - Data for both samples are high.

TCA65A (X) - Extreme data. Lab indicated reporting in g/L, but data appear to be in g/100mL.

Y5KZ7Y (X) - Data for both samples are high.

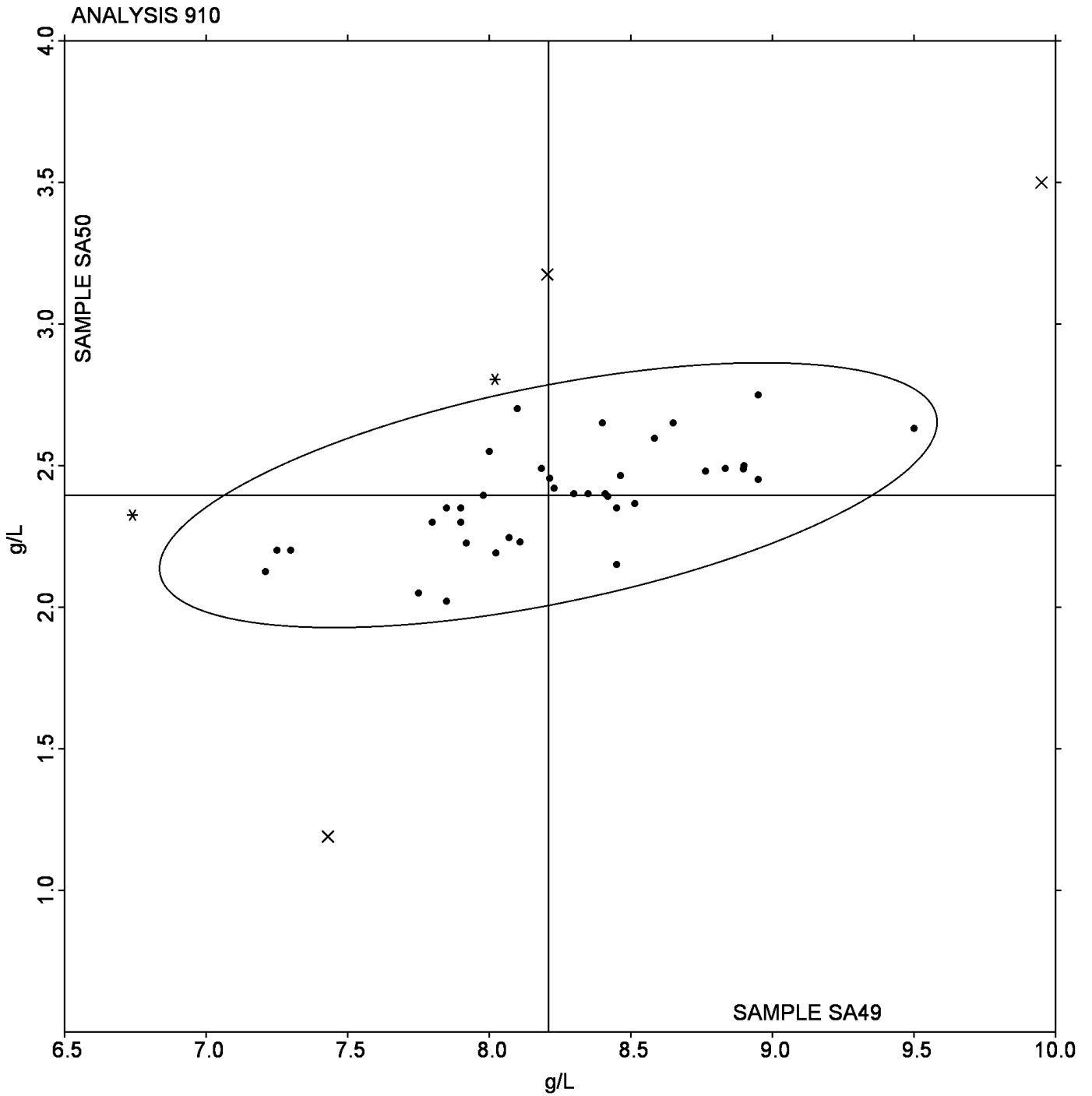
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA49 <i>Burgundy</i>			Sample SA50 <i>Cabernet Sauvignon</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Enzymatic/Spectrophotoscopic	8.201	0.463	-0.007	2.376	0.165	-0.020	33	40
Segmented Flow	8.298	0.159	0.089	2.445	0.064	0.049	2	2
FTIR	8.950	0.000	0.741	2.750	0.000	0.354	1	3
Other	8.532	0.839	0.323	2.355	0.240	-0.041	3	3

ASEV-CTS Wine Industry Interlaboratory Testing Program

Analysis 910

Glucose + Fructose



ASEV-CTS Wine Industry Interlaboratory Testing Program

Research Property 950

Research Property - Copper (Cu) Content

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
11WJUR		0.0900	0.0121	15.5%	0.1200	0.0167	16.2%
1REVEG		0.0670	-0.0109	-14.0%	0.0960	-0.0073	-7.1%
2VKYLJ		0.1950	0.1171	150.3%	0.2300	0.1267	122.7%
3CMF6T		0.0550	-0.0229	-29.4%	0.0500	-0.0533	-51.6%
3GSAQ4		0.0010	-0.0769	-98.7%	0.0155	-0.0878	-85.0%
6EWRHM		0.0650	-0.0129	-16.6%	0.0900	-0.0133	-12.9%
7HF26J		0.0470	-0.0309	-39.7%	0.0750	-0.0283	-27.4%
9B24DN		0.1000	0.0221	28.4%	0.1500	0.0467	45.2%
9W8G5A		0.0900	0.0121	15.5%	0.1200	0.0167	16.2%
A322DW		0.1300	0.0521	66.9%	0.1400	0.0367	35.5%
A6PJ5G		0.0800	0.0021	2.7%	0.1100	0.0067	6.5%
EAYXF5		0.0700	-0.0079	-10.1%	0.1000	-0.0033	-3.2%
LM4WZS		0.1300	0.0521	66.9%	0.0060	-0.0973	-94.2%
PU7RAF		0.0950	0.0171	22.0%	0.1250	0.0217	21.0%
R46K15		0.0100	-0.0679	-87.2%	0.0100	-0.0933	-90.3%
R7QGMA		0.0800	0.0021	2.7%	0.1150	0.0117	11.3%
RY9FU7		0.0700	-0.0079	-10.1%	0.1000	-0.0033	-3.2%
X52M71		0.0800	0.0021	2.7%	0.1100	0.0067	6.5%

Research Property Target Value

Target Value

0.07790 mg/L

0.10330 mg/L

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 a single laboratory accredited for this property under ISO 17025.

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

Consensus Average

(may differ from target value)

0.07794 mg/L

0.10332 mg/L

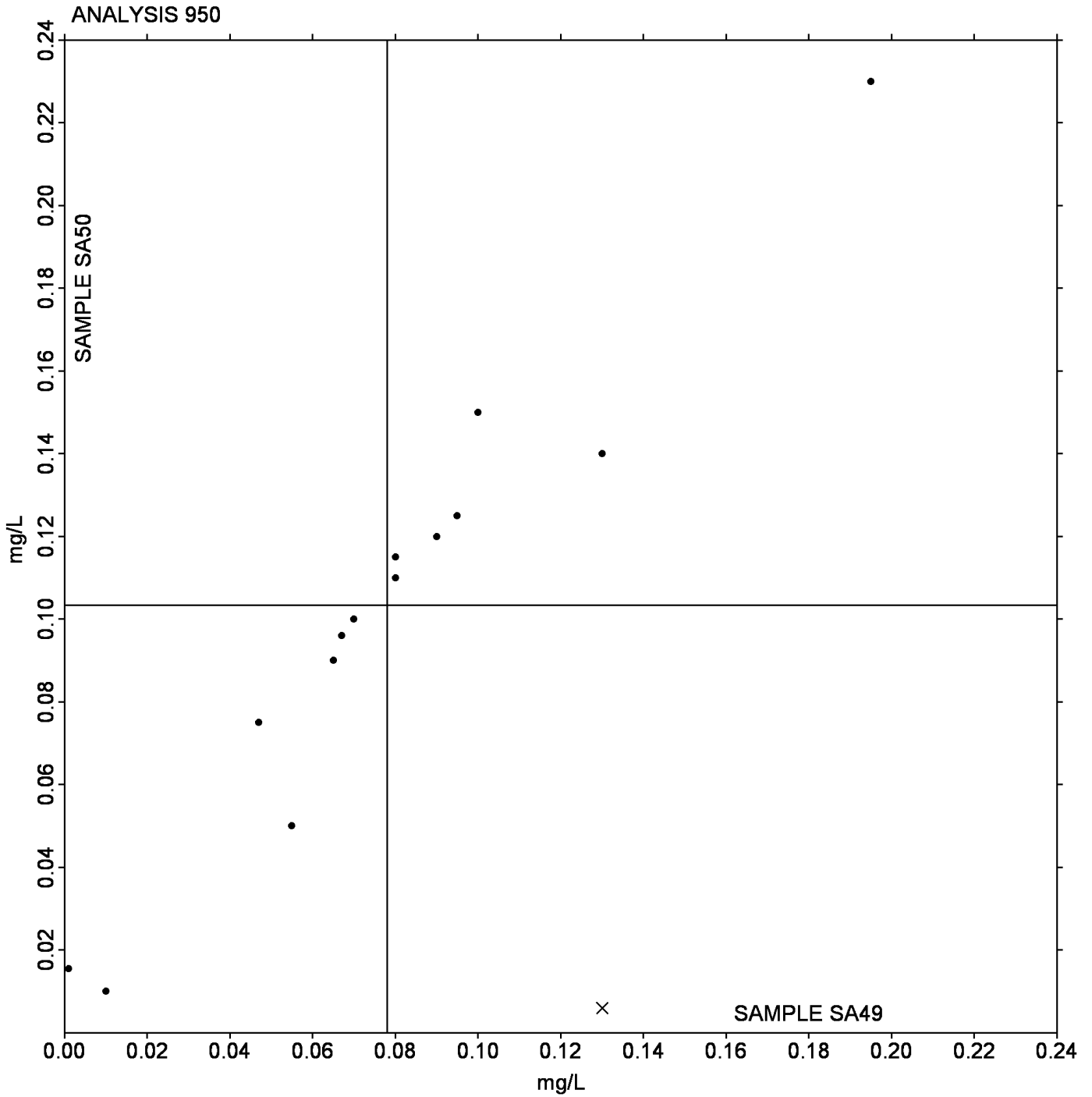
This consensus average is based on 17 reporting participants.

Comments on assigned Data Flags

LM4WZS (X) - Inconsistent in testing between samples.

Research Property 950

Research Property - Copper (Cu) 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: A520nm (1cm path)

WebCode	Data Flag	Sample SA49			Sample SA50		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
1NKTW2		3.795	0.258	7.3%	2.520	0.070	2.9%
1R4R8K		3.120	-0.417	-11.8%	2.302	-0.148	-6.0%
2D1NSA		2.261	-1.276	-36.1%	1.962	-0.488	-19.9%
6NGMYH		3.685	0.148	4.2%	2.435	-0.015	-0.6%
7797Q6		3.203	-0.334	-9.5%	2.352	-0.098	-4.0%
8U71P8		3.655	0.118	3.3%	2.355	-0.095	-3.9%
BPM73J		2.794	-0.743	-21.0%	2.285	-0.165	-6.7%
EV5QGP		4.040	0.503	14.2%	2.735	0.285	11.7%
FE8YWN		3.830	0.293	8.3%	2.400	-0.050	-2.0%
GMZ19J		3.735	0.198	5.6%	2.605	0.155	6.3%
H1WJGU		3.720	0.183	5.2%	2.396	-0.054	-2.2%
HZ3LB9		3.710	0.173	4.9%	2.495	0.045	1.9%
JR662V		3.860	0.323	9.1%	2.470	0.020	0.8%
KBJY7U		3.845	0.308	8.7%	2.410	-0.040	-1.6%
KRPV4T		3.240	-0.297	-8.4%	2.425	-0.025	-1.0%
LX4MJE		3.020	-0.517	-14.6%	2.308	-0.142	-5.8%
MB2TGF		0.772	-2.765	-78.2%	0.528	-1.922	-78.5%
NWEJVQ		3.546	0.009	0.2%	2.505	0.055	2.3%
P8R394		4.165	0.628	17.7%	2.575	0.125	5.1%
QHAYMP		4.000	0.463	13.1%	2.498	0.048	2.0%
T3RVWJ		3.670	0.133	3.7%	3.640	1.190	48.6%
UCS27Q		3.165	-0.372	-10.5%	2.379	-0.071	-2.9%
UNC5SW		3.710	0.173	4.9%	2.760	0.310	12.7%
VVLSUQ		3.730	0.193	5.4%	2.425	-0.025	-1.0%
WQ1BD5		3.620	0.083	2.3%	2.465	0.015	0.6%
X16FSR		2.480	-1.057	-29.9%	3.840	1.390	56.8%
XBMLRU		3.735	0.198	5.6%	2.445	-0.005	-0.2%
Y9BL3M		2.995	-0.542	-15.3%	2.415	-0.035	-1.4%
YRTUV9		3.795	0.258	7.3%	2.765	0.315	12.9%
Z749XA		4.850	1.313	37.1%	3.350	0.900	36.8%

ASEV-CTS Wine Industry Interlaboratory Testing Program**Research Property 951****Research Property: A520nm (1cm path)****Research Property Target Value****Target Value**

3.5375 Absorbance Units

2.4495 Absorbance Units

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 three laboratories accredited for this property under ISO 17025, with the difference between those laboratories being less than 10% of the target value.

Wines tested: SA49: Burgundy; SA50: Cabernet Sauvignon

Consensus Average

(may differ from target value)

3.5375 Absorbance Units

2.4495 Absorbance Units

This consensus average is based on 26 reporting participants.

Notes on Analysis 951

Some laboratories appeared to have data that was off by a factor of 10 due to either dilutions or the use of 1mm path during testing. The data for these labs was converted by the CTS Analyst.

Comments on assigned Data Flags

MB2TGF (X) - Data for both samples are low.

T3RVWJ (X) - Inconsistent in testing between samples. Data for Sample Set SA50 are high.

X16FSR (X) - Data for Sample SA50 are high.

Z749XA (X) - Data for both samples are high.

ASEV-CTS Wine Industry Interlaboratory Testing Program

Research Property 951

Research Property: A520nm (1cm path)

