

Wine Industry Interlaboratory Program

Summary Report #048- Fall 2014

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About the Wine Industry Interlaboratory Program

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

Participating laboratories were asked to analyze the samples' ten properties in accordance with their normal laboratory procedures and return the results and methodology information to CTS.

About CTS

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

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Key for Web Summary Report (Page 1 of 2)

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

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Fall 2014

Analysis 901

Ethanol (% of volume)

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		8.910	0.045	0.65	8.970	0.026	0.36
2LEYYL	*	8.755	-0.110	-1.56	8.885	-0.060	-0.84
2QY4JA		8.700	-0.165	-2.34	8.800	-0.145	-2.05
3VCCDR		8.875	0.010	0.15	8.980	0.036	0.50
48LBHJ		8.825	-0.040	-0.56	8.895	-0.050	-0.70
4BKP6A		8.865	0.000	0.01	8.945	0.001	0.01
4FEPJ6		8.805	-0.060	-0.85	8.890	-0.055	-0.77
4FUUT3	X	8.625	-0.240	-3.41	8.530	-0.415	-5.87
4GBZF8		8.890	0.025	0.36	8.930	-0.015	-0.21
4W4NKC		8.900	0.035	0.50	9.005	0.061	0.86
4YDKG2		8.835	-0.030	-0.42	8.920	-0.025	-0.35
68Y39F		8.800	-0.065	-0.92	8.850	-0.095	-1.34
6QUMY9	*	8.740	-0.125	-1.77	8.870	-0.075	-1.05
6TWLA2		8.855	-0.010	-0.14	8.945	0.001	0.01
6YLEA8		8.765	-0.100	-1.42	8.810	-0.135	-1.90
88QU76		8.960	0.095	1.36	9.015	0.071	1.00
8E9BN8		8.825	-0.040	-0.56	8.885	-0.060	-0.84
8ZQLP6		8.950	0.085	1.21	9.000	0.056	0.79
98A4KR		8.780	-0.085	-1.20	8.880	-0.065	-0.91
9LNCJB		8.795	-0.070	-0.99	8.845	-0.100	-1.41
AD92GA		8.950	0.085	1.21	8.995	0.051	0.71
BWD4U6	X	8.765	-0.100	-1.42	8.960	0.016	0.22
CCAQN4		8.845	-0.020	-0.28	8.950	0.006	0.08
CKEMH9		8.745	-0.120	-1.70	8.845	-0.100	-1.41
DJHQ96		8.755	-0.110	-1.56	8.845	-0.100	-1.41
DVVQ6Y		8.850	-0.015	-0.21	8.940	-0.005	-0.06



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Analysis 901

Ethanol (% of volume)

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EDC4KV		8.900	0.035	0.50	9.000	0.056	0.79
EGFWGF		8.850	-0.015	-0.21	8.950	0.006	0.08
F7C7DJ		8.855	-0.010	-0.14	8.935	-0.010	-0.13
FUWCXK	X	9.200	0.335	4.77	9.100	0.156	2.20
GYMZ3P	X	8.995	0.130	1.85	8.990	0.046	0.64
HAL3T6		8.950	0.085	1.21	9.000	0.056	0.79
HGLK7V		8.935	0.070	1.00	9.030	0.086	1.21
HM7U6R		8.930	0.065	0.93	8.995	0.051	0.71
J7W9GW		8.935	0.070	1.00	9.020	0.076	1.07
JBBRTC		8.930	0.065	0.93	9.020	0.076	1.07
JC242W		8.855	-0.010	-0.14	8.940	-0.005	-0.06
JFYPRY		8.880	0.015	0.22	8.965	0.021	0.29
JGFTRK		8.900	0.035	0.50	9.000	0.056	0.79
JVWLHC		8.895	0.030	0.43	8.990	0.046	0.64
KAEVJ9		8.880	0.015	0.22	8.965	0.021	0.29
LA68QT	*	8.705	-0.160	-2.27	8.760	-0.185	-2.61
LFHY6Z		8.915	0.050	0.72	9.000	0.056	0.79
M3LDDV		8.780	-0.085	-1.20	8.840	-0.105	-1.48
M8G2Y9		8.835	-0.030	-0.42	8.865	-0.080	-1.13
MCDQFF		8.885	0.020	0.29	8.970	0.026	0.36
MHGU6E		8.935	0.070	1.00	8.980	0.036	0.50
NAGWTW		8.960	0.095	1.36	9.040	0.096	1.35
PNJHX7		8.915	0.050	0.72	9.020	0.076	1.07
PXLU2M	X	9.050	0.185	2.64	9.050	0.106	1.49
R3A6G4		8.935	0.070	1.00	9.015	0.071	1.00
RHKYGR		8.930	0.065	0.93	9.010	0.066	0.93



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Analysis 901

Ethanol (% of volume)

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RXHZJT	X	8.950	0.085	1.21	8.865	-0.080	-1.13
TGQG84	X	8.500	-0.365	-5.19	8.500	-0.445	-6.29
TLW6TR		8.930	0.065	0.93	9.010	0.066	0.93
VNDGC7		8.955	0.090	1.29	9.040	0.096	1.35
VX6W2B		8.805	-0.060	-0.85	8.885	-0.060	-0.84
VYHA4L		8.825	-0.040	-0.56	8.905	-0.040	-0.56
XAANT9		8.865	0.000	0.01	8.950	0.006	0.08
XBJVUG		8.885	0.020	0.29	8.975	0.031	0.43
XUZQYA		8.910	0.045	0.65	8.960	0.016	0.22
XVAVBD	X	8.750	-0.115	-1.63	8.950	0.006	0.08
YEXQAD		8.735	-0.130	-1.84	8.800	-0.145	-2.05
Z8VZ7E		8.880	0.015	0.22	8.980	0.036	0.50
Z9QLXK		8.820	-0.045	-0.63	8.900	-0.045	-0.63
ZK4UNJ		8.898	0.033	0.47	8.980	0.036	0.50
ZN47JJ		8.970	0.105	1.50	9.055	0.111	1.56
ZVKGXJ	X	9.125	0.260	3.70	9.195	0.251	3.55
ZWTJVC		8.935	0.070	1.00	9.025	0.081	1.14
ZZG4Q8	X	8.800	-0.065	-0.92	8.800	-0.145	-2.05

Grand Means	Summary Statistics
8.8646 percent	8.9445 percent
0.0703 percent	0.0707 percent
Statistics based on 60 of 70 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato



Ethanol (% of volume)

Comments on assigned Data Flags

4FUUT3 (X) - Data for both samples are low.

BWD4U6 (X) - Inconsistent in testing between samples.

FUWCXK (X) - Inconsistent in testing between samples, data for Sample SA93 are high.

GYMZ3P (X) - Inconsistent in testing between samples.

PXLU2M (X) - Inconsistent in testing between samples.

RXHZJT (X) - Inconsistent in testing between samples.

TGQG84 (X) - Data for both samples are low.

XVAVBD (X) - Inconsistent in testing between samples.

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

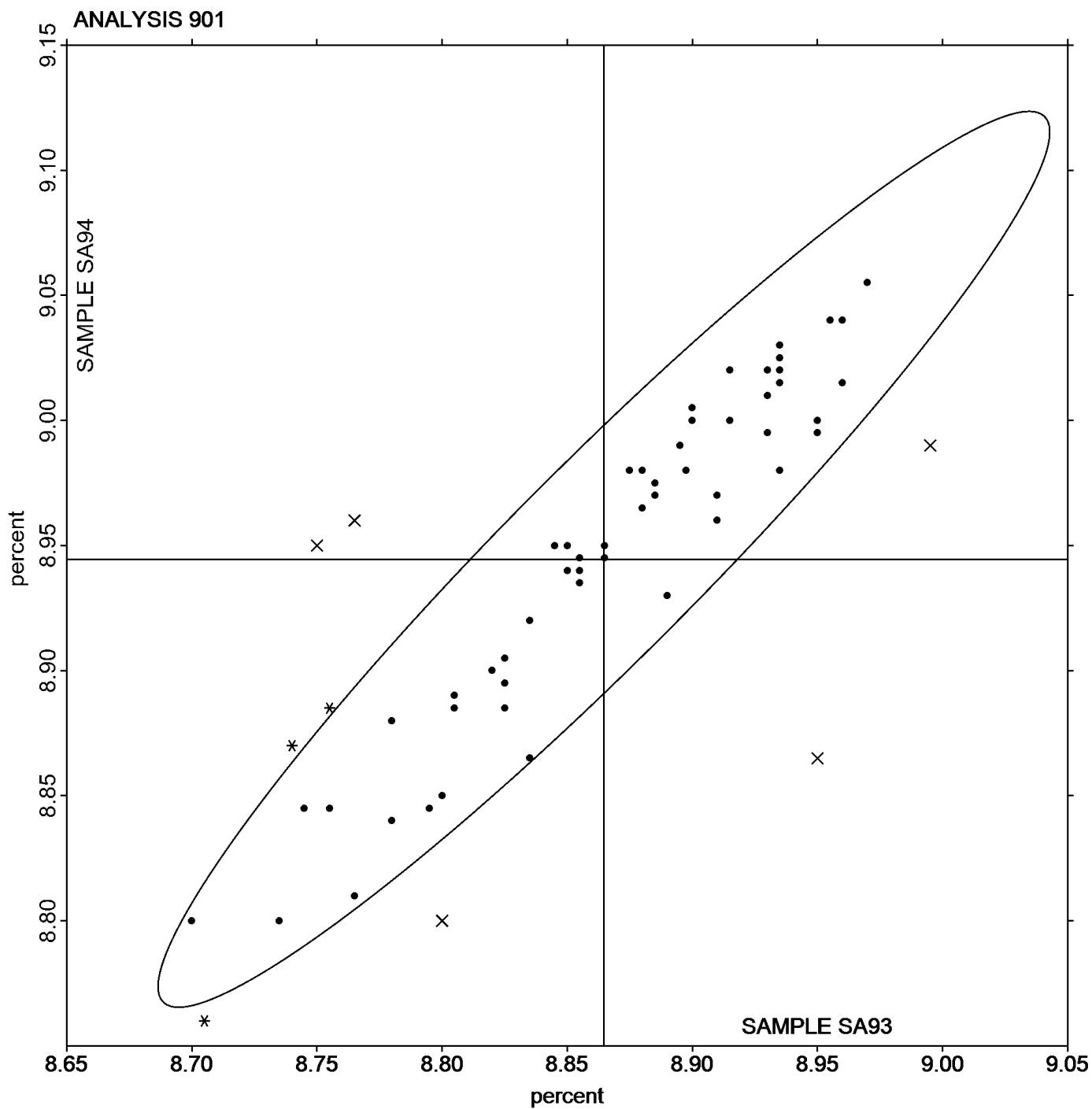
ZZG4Q8 (X) - Inconsistent in testing between samples.

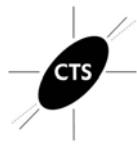
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>				Sample SA94 <i>Moscato</i>				Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM			
Ebulliometer Method	8.950	0.000	0.085	9.000	0.000	0.056	1	5	
Gas Chromatography Method	8.963	0.011	0.098	9.048	0.011	0.103	2	3	
Near Infrared Method	8.879	0.059	0.014	8.959	0.061	0.015	40	44	
Dist. / Density Method	8.797	0.063	-0.068	8.881	0.066	-0.064	5	8	
FTIR	8.851	0.065	-0.014	8.919	0.066	-0.026	8	8	
Other _____	8.855	0.000	-0.010	8.935	0.000	-0.010	1	2	



Ethanol (% of volume)





ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 902

Total Sulfur Dioxide

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		160.0	12.2	1.16	164.5	12.9	1.23
2LEYYL		148.5	0.7	0.07	151.0	-0.6	-0.06
2QY4JA		152.5	4.7	0.45	156.5	4.9	0.47
3VCCDR		147.0	-0.8	-0.07	150.0	-1.6	-0.15
48LBHJ		131.5	-16.3	-1.55	137.0	-14.6	-1.39
4BKP6A	*	126.5	-21.3	-2.02	125.5	-26.1	-2.49
4FUUT3		153.0	5.2	0.50	162.5	10.9	1.04
4GBZF8		157.0	9.2	0.88	157.0	5.4	0.52
4W4NKC		146.0	-1.8	-0.17	150.0	-1.6	-0.15
4YDKG2		126.5	-21.3	-2.02	133.0	-18.6	-1.78
68Y39F		152.5	4.7	0.45	162.5	10.9	1.04
6QUMY9		140.0	-7.8	-0.74	144.5	-7.1	-0.68
6TWLA2		164.5	16.7	1.59	168.0	16.4	1.57
6YLEA8	*	170.5	22.7	2.16	165.0	13.4	1.28
88QU76		141.5	-6.3	-0.60	147.0	-4.6	-0.44
8E9BN8		140.5	-7.3	-0.69	144.0	-7.6	-0.72
8ZQLP6		158.0	10.2	0.97	158.0	6.4	0.61
98A4KR		147.0	-0.8	-0.07	144.0	-7.6	-0.72
9LNCJB		163.0	15.2	1.45	167.5	15.9	1.52
AD92GA		142.3	-5.5	-0.52	143.7	-7.9	-0.75
BWD4U6	X	138.0	-9.8	-0.93	115.0	-36.6	-3.50
CCAQN4		172.5	24.7	2.35	177.0	25.4	2.43
CKEMH9		151.5	3.7	0.35	153.5	1.9	0.18
DJHQ96		147.0	-0.8	-0.07	146.5	-5.1	-0.49
DVVQ6Y		137.5	-10.3	-0.98	142.0	-9.6	-0.92
EDC4KV		154.0	6.2	0.59	158.0	6.4	0.61



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 902

Total Sulfur Dioxide

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EGFWGF		133.0	-14.8	-1.41	142.5	-9.1	-0.87
F7C7DJ		172.0	24.2	2.30	175.0	23.4	2.24
FUWCXK		150.0	2.2	0.21	146.0	-5.6	-0.53
GYMZ3P		148.0	0.2	0.02	150.0	-1.6	-0.15
HAL3T6		159.0	11.2	1.07	166.0	14.4	1.38
HGLK7V		158.0	10.2	0.97	159.5	7.9	0.76
HM7U6R	X	181.0	33.2	3.16	171.0	19.4	1.86
J7W9GW		146.0	-1.8	-0.17	149.5	-2.1	-0.20
JBBRTC		137.6	-10.2	-0.97	144.0	-7.6	-0.72
JC242W		142.5	-5.3	-0.50	145.0	-6.6	-0.63
JFYPRY		150.0	2.2	0.21	154.0	2.4	0.23
JGFTRK		140.0	-7.8	-0.74	150.0	-1.6	-0.15
JVWLHC		163.5	15.7	1.50	167.0	15.4	1.47
KAEVJ9		136.0	-11.8	-1.12	140.0	-11.6	-1.11
LA68QT	X	89.5	-58.3	-5.54	86.5	-65.1	-6.22
LFHY6Z		152.5	4.7	0.45	159.5	7.9	0.76
M3LDDV		154.5	6.7	0.64	162.0	10.4	1.00
M8G2Y9		163.5	15.7	1.50	166.0	14.4	1.38
MCDQFF		148.0	0.2	0.02	152.5	0.9	0.09
MHGU6E		140.0	-7.8	-0.74	137.5	-14.1	-1.35
NAGWTW	X	127.5	-20.3	-1.93	113.0	-38.6	-3.69
PNJHX7		139.0	-8.8	-0.83	143.0	-8.6	-0.82
PXLU2M		122.0	-25.8	-2.45	128.5	-23.1	-2.21
R3A6G4		139.5	-8.3	-0.79	144.5	-7.1	-0.68
RHKYGR		148.0	0.2	0.02	149.5	-2.1	-0.20
RXHZJT		141.5	-6.3	-0.60	154.0	2.4	0.23



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Analysis 902

Total Sulfur Dioxide

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TGQG84		140.2	-7.6	-0.72	150.9	-0.7	-0.07
TLW6TR		150.0	2.2	0.21	159.0	7.4	0.71
V99RKF	X	102.0	-45.8	-4.35	86.5	-65.1	-6.22
VNDGC7		156.2	8.4	0.80	160.7	9.1	0.87
VX6W2B		149.0	1.2	0.12	148.0	-3.6	-0.34
VYHA4L		151.0	3.2	0.31	153.0	1.4	0.14
XAANT9		150.5	2.7	0.26	156.5	4.9	0.47
XBJVUG		140.0	-7.8	-0.74	147.0	-4.6	-0.44
XUZQYA		152.0	4.2	0.40	154.0	2.4	0.23
XVAVBD		145.0	-2.8	-0.26	145.0	-6.6	-0.63
YEXQAD		133.0	-14.8	-1.41	134.5	-17.1	-1.63
Z8VZ7E		152.0	4.2	0.40	160.5	8.9	0.85
Z9QLXK		145.5	-2.3	-0.22	147.5	-4.1	-0.39
ZK4UNJ		143.8	-4.0	-0.38	147.0	-4.6	-0.44
ZN47JJ		145.0	-2.8	-0.26	146.5	-5.1	-0.49
ZVKGXJ		139.5	-8.3	-0.79	144.0	-7.6	-0.72
ZWTJVC		142.5	-5.3	-0.50	145.5	-6.1	-0.58
ZZG4Q8		155.4	7.7	0.73	159.4	7.9	0.75

Grand Means	Summary Statistics
147.78 mg/L	151.58 mg/L
Stnd Dev Btwn Labs	10.52 mg/L 10.46 mg/L
Statistics based on 65 of 70 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato



Total Sulfur Dioxide

Comments on assigned Data Flags

BWD4U6 (X) - Inconsistent in testing between samples, data for Sample SA94 are low.

HM7U6R (X) - Inconsistent in testing between samples, data for Sample SA93 are high.

LA68QT (X) - Data for both samples are low.

NAGWTV (X) - Inconsistent in testing between samples, data for Sample SA94 are low. Also inconsistent in testing within Sample SA93.

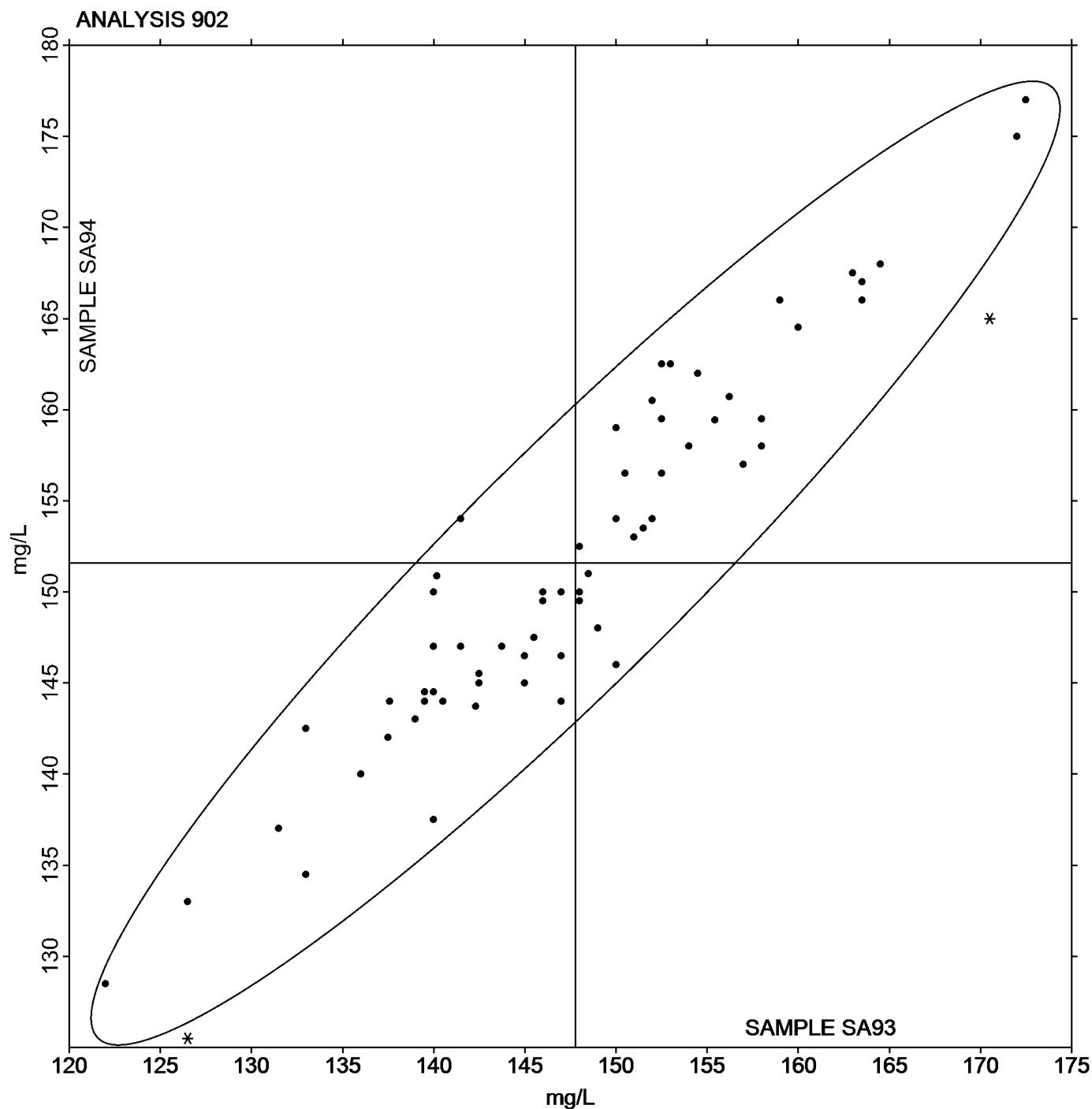
V99RKF (X) - Data for both samples are low.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	139.0	0.0	-8.8	143.0	0.0	-8.6	1 1
Ripper Method	143.1	8.7	-4.7	147.2	8.5	-4.4	21 25
Aeration Oxidation (AO) Method	147.5	6.1	-0.2	150.0	7.4	-1.6	12 12
Segemented Flow Analyzer	147.7	12.7	-0.1	152.2	12.2	0.6	12 14
Enzymatic Method	153.2	9.7	5.4	158.0	6.9	6.4	4 5
Colormetric Analyzer	154.8	12.4	7.0	157.8	11.7	6.2	2 2
FTIR	161.3	13.0	13.6	165.0	13.7	13.4	3 3
Flow Injection Analysis	151.9	5.5	4.1	157.5	5.7	5.9	8 8



Total Sulfur Dioxide





ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 903

Free Sulfur Dioxide

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		23.00	-0.25	-0.09	24.00	-0.11	-0.04
2LEYYL		24.00	0.75	0.28	25.00	0.89	0.31
2QY4JA		24.00	0.75	0.28	26.50	2.39	0.82
33BTX6		22.40	-0.85	-0.31	22.80	-1.31	-0.45
3VCCDR		27.00	3.75	1.38	27.50	3.39	1.17
48LBHJ		26.50	3.25	1.20	29.00	4.89	1.69
4BKP6A	X	13.00	-10.25	-3.77	12.00	-12.11	-4.17
4FUUT3	X	16.50	-6.75	-2.48	27.00	2.89	1.00
4GBZF8		28.50	5.25	1.93	27.50	3.39	1.17
4W4NKC		23.00	-0.25	-0.09	23.50	-0.61	-0.21
4YDKG2		22.25	-1.00	-0.37	23.90	-0.21	-0.07
6QUMY9		20.00	-3.25	-1.19	23.00	-1.11	-0.38
6TWLA2		25.50	2.25	0.83	27.00	2.89	1.00
6YLEA8		23.15	-0.10	-0.04	24.85	0.74	0.26
88QU76		20.00	-3.25	-1.19	22.00	-2.11	-0.73
8E9BN8		21.00	-2.25	-0.83	22.50	-1.61	-0.55
8ZQLP6		24.00	0.75	0.28	24.00	-0.11	-0.04
98A4KR		28.00	4.75	1.75	28.00	3.89	1.34
9LNCJB		28.50	5.25	1.93	29.50	5.39	1.86
AD92GA		22.65	-0.60	-0.22	21.75	-2.36	-0.81
BWD4U6		22.00	-1.25	-0.46	24.00	-0.11	-0.04
CCAQN4		18.50	-4.75	-1.75	19.00	-5.11	-1.76
CKEMH9		29.50	6.25	2.30	29.50	5.39	1.86
DJHQ96		24.00	0.75	0.28	25.50	1.39	0.48
DVVQ6Y		21.00	-2.25	-0.83	23.00	-1.11	-0.38
EDC4KV		21.00	-2.25	-0.83	21.50	-2.61	-0.90



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 903

Free Sulfur Dioxide

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EGFWGF		25.00	1.75	0.64	23.00	-1.11	-0.38
F7C7DJ		24.50	1.25	0.46	23.50	-0.61	-0.21
FUWCXK	*	24.00	0.75	0.28	21.50	-2.61	-0.90
GYMZ3P		21.00	-2.25	-0.83	24.00	-0.11	-0.04
HAL3T6		23.00	-0.25	-0.09	26.00	1.89	0.65
HGLK7V		26.50	3.25	1.20	25.00	0.89	0.31
HM7U6R		23.44	0.19	0.07	22.88	-1.23	-0.42
J7W9GW		21.00	-2.25	-0.83	20.00	-4.11	-1.42
JBBRTC		24.00	0.75	0.28	25.60	1.49	0.51
JC242W		21.50	-1.75	-0.64	22.00	-2.11	-0.73
JFYPRY		28.50	5.25	1.93	30.00	5.89	2.03
JGFTRK		21.50	-1.75	-0.64	21.50	-2.61	-0.90
JVWLHC		26.50	3.25	1.20	26.50	2.39	0.82
KAEVJ9		20.00	-3.25	-1.19	21.00	-3.11	-1.07
LA68QT		22.03	-1.22	-0.45	24.63	0.52	0.18
LFHY6Z		25.00	1.75	0.64	27.50	3.39	1.17
M3LDDV		22.00	-1.25	-0.46	23.50	-0.61	-0.21
M8G2Y9		29.50	6.25	2.30	30.00	5.89	2.03
MCDQFF		21.00	-2.25	-0.83	23.00	-1.11	-0.38
MHGU6E		22.00	-1.25	-0.46	24.00	-0.11	-0.04
NAGWTW		24.00	0.75	0.28	25.00	0.89	0.31
PNJHX7		25.50	2.25	0.83	27.00	2.89	1.00
PXLU2M		19.00	-4.25	-1.56	20.00	-4.11	-1.42
R3A6G4		19.85	-3.40	-1.25	20.00	-4.11	-1.42
RHKYGR		21.00	-2.25	-0.83	22.00	-2.11	-0.73
RXHZJT	X	27.00	3.75	1.38	34.00	9.89	3.41



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Free Sulfur Dioxide

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TGQG84	X	32.10	8.85	3.25	36.38	12.27	4.23
TLW6TR		23.50	0.25	0.09	23.00	-1.11	-0.38
V99RKF		21.00	-2.25	-0.83	20.00	-4.11	-1.42
VNDGC7		20.24	-3.01	-1.11	21.15	-2.97	-1.02
VX6W2B		24.00	0.75	0.28	24.50	0.39	0.13
VYHA4L		23.00	-0.25	-0.09	21.50	-2.61	-0.90
XAANT9		18.50	-4.75	-1.75	20.00	-4.11	-1.42
XBJVUG		22.00	-1.25	-0.46	24.00	-0.11	-0.04
XUZQYA		20.50	-2.75	-1.01	20.00	-4.11	-1.42
XVAVBD		28.00	4.75	1.75	30.00	5.89	2.03
YEXQAD		25.00	1.75	0.64	27.00	2.89	1.00
Z8VZ7E		23.00	-0.25	-0.09	24.00	-0.11	-0.04
Z9QLXK		23.00	-0.25	-0.09	23.00	-1.11	-0.38
ZK4UNJ		21.75	-1.50	-0.55	22.75	-1.36	-0.47
ZN47JJ		21.00	-2.25	-0.83	22.00	-2.11	-0.73
ZVKGXJ		23.50	0.25	0.09	24.50	0.39	0.13
ZWTJVC		20.00	-3.25	-1.19	20.00	-4.11	-1.42
ZZG4Q8	*	25.68	2.43	0.89	29.96	5.85	2.02

Grand Means	Summary Statistics
23.249 mg/L	24.110 mg/L
Stnd Dev Btwn Labs	2.720 mg/L 2.902 mg/L
Statistics based on 66 of 70 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 903

Fall 2014

Free Sulfur Dioxide

Comments on assigned Data Flags

4BKP6A (X) - Data for both samples are low.

4FUUT3 (X) - Inconsistent in testing between samples and inconsistent within the determinations for Sample SA94.

RXHZJT (X) - Inconsistent in testing between samples, data for Sample SA94 are high.

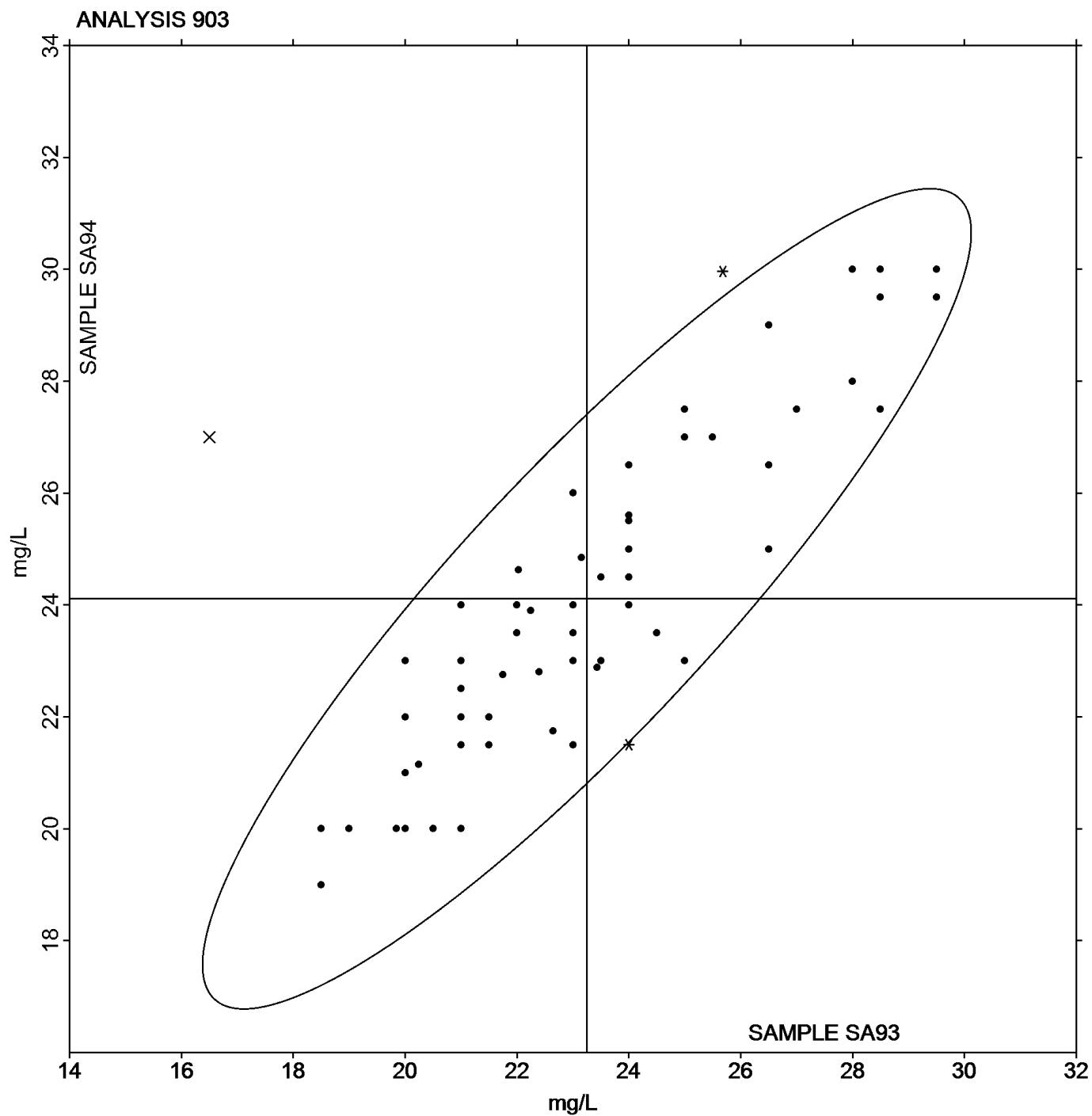
TGQQ84 (X) - Data for both samples are high. Possible Systematic Error.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	23.95	2.19	0.70	24.90	2.97	0.79	2	2
Ripper Method	22.49	2.32	-0.76	23.52	2.44	-0.59	18	19
Aeration Oxidation (AO) Method	23.37	2.68	0.12	23.94	2.69	-0.17	23	28
Segmented Flow Analyzer	22.85	3.20	-0.40	23.98	3.52	-0.13	5	5
Enzymatic Method	28.50	0.00	5.25	29.50	0.00	5.39	1	1
Colormetric Analyzer	24.33	5.53	1.08	25.50	5.77	1.39	3	3
Flow Injection Analysis	22.21	2.08	-1.04	22.94	1.66	-1.17	9	9
FTIR	26.33	0.76	3.08	27.83	1.04	3.72	3	3



Free Sulfur Dioxide





ASEV-CTS Wine Industry Interlaboratory Testing Program

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Fall 2014

Analysis 904

Titratable Acidity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		6.785	-0.068	-0.23	6.820	-0.036	-0.13
2LEYYL		6.940	0.087	0.29	6.940	0.084	0.29
2QY4JA		6.340	-0.513	-1.73	6.340	-0.516	-1.80
33BTX6		7.208	0.355	1.20	7.340	0.484	1.69
3VCCDR		6.440	-0.413	-1.39	6.495	-0.361	-1.26
48LBHJ		6.910	0.057	0.19	6.950	0.094	0.33
4BKP6A		7.215	0.362	1.22	6.990	0.134	0.47
4FEPJ6		6.900	0.047	0.16	7.000	0.144	0.50
4FUUT3	*	7.500	0.647	2.18	7.125	0.269	0.94
4GBZF8	X	8.840	1.987	6.69	8.850	1.994	6.98
4W4NKC		6.500	-0.353	-1.19	6.500	-0.356	-1.24
4YDKG2		6.575	-0.278	-0.93	6.565	-0.291	-1.02
68Y39F		7.050	0.197	0.66	7.050	0.194	0.68
6QUMY9		7.035	0.182	0.61	6.820	-0.036	-0.13
6TWLA2		6.590	-0.263	-0.88	6.625	-0.231	-0.81
6YLEA8		6.680	-0.173	-0.58	6.710	-0.146	-0.51
88QU76		7.000	0.147	0.50	7.150	0.294	1.03
8E9BN8		6.890	0.037	0.13	7.055	0.199	0.70
8ZQLP6		7.335	0.482	1.62	7.410	0.554	1.94
98A4KR		6.800	-0.053	-0.18	6.930	0.074	0.26
9LNCJB		6.500	-0.353	-1.19	6.600	-0.256	-0.89
AD92GA		6.980	0.127	0.43	6.685	-0.171	-0.60
BWD4U6	*	7.000	0.147	0.50	7.300	0.444	1.55
CCAQN4	X	8.925	2.072	6.98	8.785	1.929	6.75
DJHQ96		6.810	-0.043	-0.14	6.855	-0.001	0.00
DVVQ6Y		7.300	0.447	1.51	7.450	0.594	2.08



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Fall 2014Analysis 904
Titratable Acidity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EDC4KV		6.500	-0.353	-1.19	6.600	-0.256	-0.89
EGFWGF		7.045	0.192	0.65	7.070	0.214	0.75
F7C7DJ		6.950	0.097	0.33	6.900	0.044	0.15
FUWCXK		6.600	-0.253	-0.85	6.700	-0.156	-0.54
GYMZ3P		6.700	-0.153	-0.51	6.750	-0.106	-0.37
HAL3T6		6.600	-0.253	-0.85	6.650	-0.206	-0.72
HGLK7V		6.600	-0.253	-0.85	6.650	-0.206	-0.72
HM7U6R		6.600	-0.253	-0.85	6.650	-0.206	-0.72
J7W9GW		7.200	0.347	1.17	7.250	0.394	1.38
JBBRTC		6.200	-0.653	-2.20	6.300	-0.556	-1.94
JC242W		6.560	-0.293	-0.99	6.495	-0.361	-1.26
JFYPRY		7.000	0.147	0.50	7.000	0.144	0.50
JGFTRK		6.650	-0.203	-0.68	6.650	-0.206	-0.72
JVWLHC		6.905	0.052	0.18	6.905	0.049	0.17
KAEVJ9		7.450	0.597	2.01	7.500	0.644	2.25
LA68QT		7.010	0.157	0.53	6.935	0.079	0.28
LFHY6Z		6.670	-0.183	-0.61	6.725	-0.131	-0.46
M3LDDV		6.800	-0.053	-0.18	6.800	-0.056	-0.20
M8G2Y9		7.025	0.172	0.58	7.030	0.174	0.61
MCDQFF		6.500	-0.353	-1.19	6.500	-0.356	-1.24
MHGU6E		6.650	-0.203	-0.68	6.600	-0.256	-0.89
NAGWTW		7.070	0.217	0.73	6.975	0.119	0.42
PXLU2M		6.900	0.047	0.16	6.800	-0.056	-0.20
R3A6G4	*	7.450	0.597	2.01	7.100	0.244	0.85
RHKYGR		7.450	0.597	2.01	7.250	0.394	1.38
RXHZJT	*	7.250	0.397	1.34	6.900	0.044	0.15



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 904

Titratable Acidity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TGQG84		6.825	-0.028	-0.09	6.825	-0.031	-0.11
TLW6TR		6.975	0.122	0.41	7.200	0.344	1.20
V99RKF		7.180	0.327	1.10	7.425	0.569	1.99
VNDGC7		7.110	0.257	0.87	7.150	0.294	1.03
VX6W2B		7.295	0.442	1.49	7.290	0.434	1.52
VYHA4L		6.680	-0.173	-0.58	6.755	-0.101	-0.35
XAANT9		6.800	-0.053	-0.18	6.900	0.044	0.15
XBJVUG	*	6.750	-0.103	-0.35	6.400	-0.456	-1.59
XUZQYA		6.350	-0.503	-1.69	6.400	-0.456	-1.59
XVAVBD		6.820	-0.033	-0.11	6.760	-0.096	-0.34
YEXQAD		6.950	0.097	0.33	6.950	0.094	0.33
Z8VZ7E		6.815	-0.038	-0.13	6.810	-0.046	-0.16
Z9QLXK		6.595	-0.258	-0.87	6.600	-0.256	-0.89
ZK4UNJ		6.800	-0.053	-0.18	6.758	-0.098	-0.34
ZN47JJ		6.400	-0.453	-1.52	6.450	-0.406	-1.42
ZVKGXJ		6.805	-0.048	-0.16	6.740	-0.116	-0.41
ZWTJVC		6.680	-0.173	-0.58	6.695	-0.161	-0.56
ZZG4Q8		6.525	-0.328	-1.10	6.694	-0.162	-0.57

Grand Means	Summary Statistics
6.8525 g/L as tartaric acid	6.8558 g/L as tartaric acid
0.2970 g/L as tartaric acid	0.2858 g/L as tartaric acid
Statistics based on 68 of 70 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 904

Titratable Acidity

Comments on assigned Data Flags

4GBZF8 (X) - Data for both samples are high.

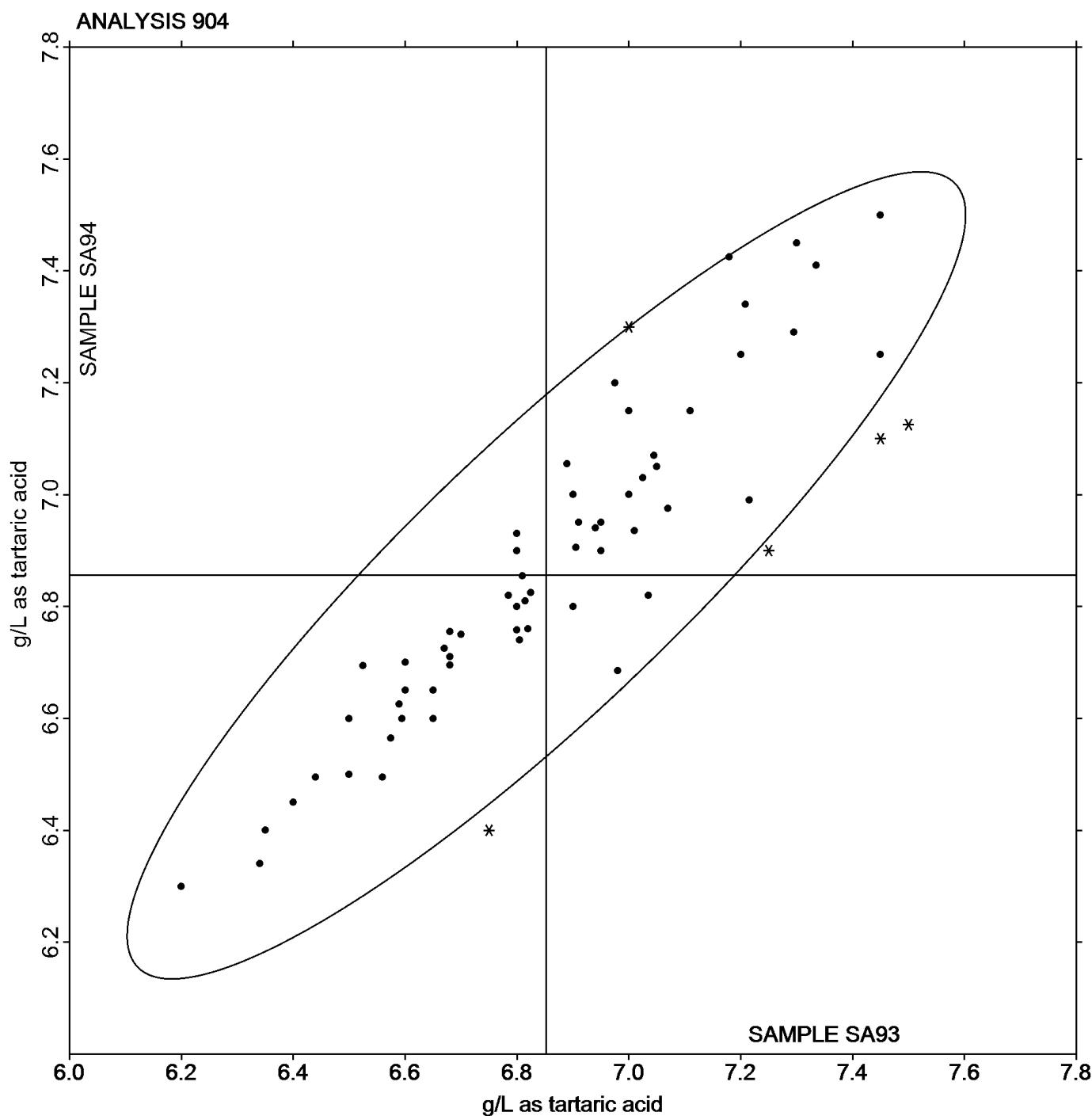
CCAQN4 (X) - Data for both samples are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 Moscato				Sample SA94 Moscato				Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM			
Autotitration	6.847	0.280	-0.006	6.847	0.270	-0.009	40	44	
Manual Titration	6.780	0.324	-0.073	6.855	0.360	-0.001	16	18	
FTIR	6.838	0.194	-0.014	6.863	0.143	0.007	6	7	
Segmented Flow Analyzer	6.650	0.000	-0.203	6.650	0.000	-0.206	1	1	



Titratable Acidity





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Analysis 905

Volatile Acidity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		0.2200	-0.0753	-0.78	0.2200	-0.0743	-0.78
2LEYYL		0.2850	-0.0103	-0.11	0.2650	-0.0293	-0.31
2QY4JA		0.2850	-0.0103	-0.11	0.2950	0.0007	0.01
33BTX6		0.1650	-0.1303	-1.35	0.1500	-0.1443	-1.52
3VCCDR		0.3350	0.0397	0.41	0.3250	0.0307	0.32
48LBHJ		0.2850	-0.0103	-0.11	0.2750	-0.0193	-0.20
4BKP6A	X	0.5925	0.2972	3.07	0.6150	0.3207	3.37
4FEPJ6	M	0.4000	0.1047	1.08	No data reported for this sample		
4FUUT3	X	0.4400	0.1447	1.50	0.5400	0.2457	2.59
4GBZF8		0.2350	-0.0603	-0.62	0.2450	-0.0493	-0.52
4W4NKC		0.3450	0.0497	0.51	0.3650	0.0707	0.74
6QUMY9		0.1900	-0.1053	-1.09	0.1850	-0.1093	-1.15
6TWLA2		0.3050	0.0097	0.10	0.3050	0.0107	0.11
6YLEA8		0.4350	0.1397	1.44	0.4550	0.1607	1.69
88QU76		0.3850	0.0897	0.93	0.3600	0.0657	0.69
8E9BN8		0.3440	0.0487	0.50	0.3395	0.0452	0.48
8ZQLP6	*	0.5400	0.2447	2.53	0.5100	0.2157	2.27
98A4KR		0.2400	-0.0553	-0.57	0.2300	-0.0643	-0.68
9LNCJB		0.2400	-0.0553	-0.57	0.2300	-0.0643	-0.68
AD92GA		0.2100	-0.0853	-0.88	0.2150	-0.0793	-0.83
BWD4U6		0.3500	0.0547	0.57	0.3700	0.0757	0.80
CCAQN4		0.3950	0.0997	1.03	0.4250	0.1307	1.38
DJHQ96		0.3900	0.0947	0.98	0.3900	0.0957	1.01
DVVQ6Y		0.3150	0.0197	0.20	0.3250	0.0307	0.32
EDC4KV		0.3500	0.0547	0.57	0.3550	0.0607	0.64
EGFWGF		0.2500	-0.0453	-0.47	0.2500	-0.0443	-0.47



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Analysis 905

Volatile Acidity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
F7C7DJ	*	0.2350	-0.0603	-0.62	0.2900	-0.0043	-0.04
FUWCXK		0.2700	-0.0253	-0.26	0.3000	0.0057	0.06
GYMZ3P		0.2200	-0.0753	-0.78	0.2050	-0.0893	-0.94
HAL3T6		0.3700	0.0747	0.77	0.3800	0.0857	0.90
HGLK7V		0.3400	0.0447	0.46	0.3300	0.0357	0.38
HM7U6R		0.2600	-0.0353	-0.37	0.2850	-0.0093	-0.10
J7W9GW		0.1900	-0.1053	-1.09	0.1650	-0.1293	-1.36
JBBRTC		0.1835	-0.1118	-1.16	0.1815	-0.1128	-1.19
JC242W		0.1965	-0.0988	-1.02	0.1940	-0.1003	-1.05
JFYPRY		0.2900	-0.0053	-0.06	0.2900	-0.0043	-0.04
JGFTRK		0.3000	0.0047	0.05	0.2900	-0.0043	-0.04
JVWLHC		0.2200	-0.0753	-0.78	0.2050	-0.0893	-0.94
KAEVJ9		0.2200	-0.0753	-0.78	0.2200	-0.0743	-0.78
LA68QT		0.3100	0.0147	0.15	0.2850	-0.0093	-0.10
LFHY6Z		0.2400	-0.0553	-0.57	0.2400	-0.0543	-0.57
M3LDDV		0.1900	-0.1053	-1.09	0.2050	-0.0893	-0.94
M8G2Y9		0.1800	-0.1153	-1.19	0.1750	-0.1193	-1.25
MCDQFF		0.2000	-0.0953	-0.99	0.1950	-0.0993	-1.04
MHGU6E		0.5100	0.2147	2.22	0.4950	0.2007	2.11
NAGWTW	X	0.2450	-0.0503	-0.52	0.3150	0.0207	0.22
PNJHX7		0.4500	0.1547	1.60	0.4300	0.1357	1.43
PXLU2M		0.3000	0.0047	0.05	0.3000	0.0057	0.06
R3A6G4		0.1950	-0.1003	-1.04	0.2000	-0.0943	-0.99
RHKYGR		0.2650	-0.0303	-0.31	0.2600	-0.0343	-0.36
RXHZJT		0.2200	-0.0753	-0.78	0.2600	-0.0343	-0.36
TGQG84		0.3240	0.0287	0.30	0.3060	0.0117	0.12



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Volatile Acidity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TLW6TR	X	0.4600	0.1647	1.70	0.2600	-0.0343	-0.36
VX6W2B		0.2250	-0.0703	-0.73	0.2200	-0.0743	-0.78
VYHA4L	*	0.5500	0.2547	2.63	0.5500	0.2557	2.69
XAANT9		0.3000	0.0047	0.05	0.3100	0.0157	0.17
XBJVUG		0.2100	-0.0853	-0.88	0.2100	-0.0843	-0.89
XUZQYA		0.1900	-0.1053	-1.09	0.2300	-0.0643	-0.68
XVAVBD	*	0.5700	0.2747	2.84	0.5400	0.2457	2.59
YEXQAD		0.4700	0.1747	1.81	0.4700	0.1757	1.85
Z8VZ7E		0.2900	-0.0053	-0.06	0.2900	-0.0043	-0.04
Z9QLXK	*	0.2450	-0.0503	-0.52	0.2000	-0.0943	-0.99
ZK4UNJ		0.2475	-0.0478	-0.49	0.2425	-0.0518	-0.54
ZN47JJ		0.2200	-0.0753	-0.78	0.2200	-0.0743	-0.78
ZVKGXJ		0.3450	0.0497	0.51	0.3350	0.0407	0.43
ZWTJVC		0.3450	0.0497	0.51	0.3550	0.0607	0.64
ZZG4Q8		0.3301	0.0348	0.36	0.3004	0.0061	0.06

Grand Means	Summary Statistics
0.29533 g/L as acetic acid	0.29426 g/L as acetic acid
Stnd Dev Btwn Labs	
0.09675 g/L as acetic acid	
0.09504 g/L as acetic acid	
Statistics based on 62 of 67 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato



Analysis 905

Volatile Acidity

Comments on assigned Data Flags

4BKP6A (X) - Data for both samples are high.

4FEPJ6 (M) - Laboratory did not submit data for Sample SA94.

4FUUT3 (X) - Inconsistent in testing between samples.

NAGWTV (X) - Inconsistent in testing between samples.

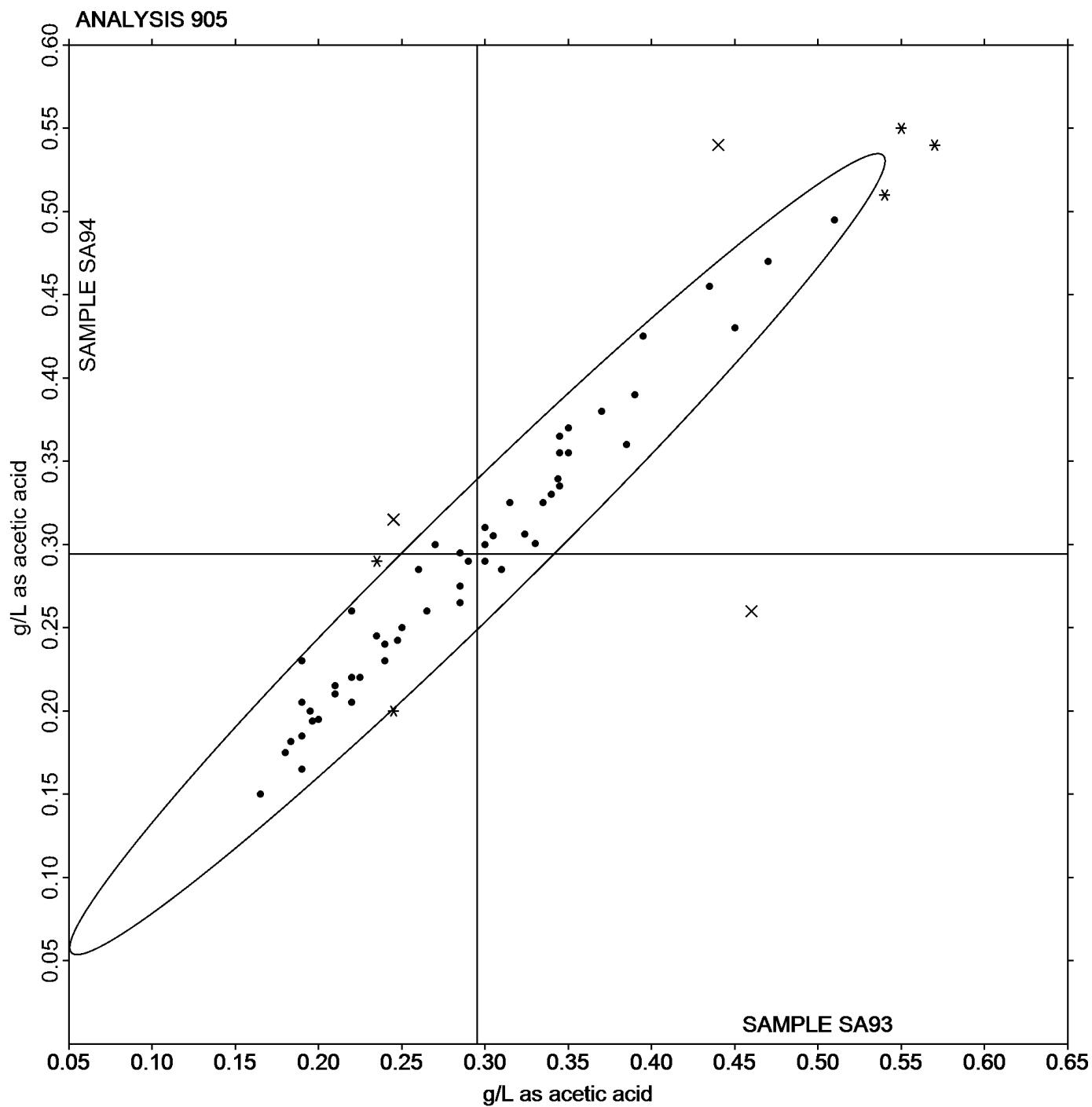
TLW6TR (X) - Inconsistent in testing between samples.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Cash Still method	0.3553	0.0607	0.0600	0.3521	0.0588	0.0578	12	18
Enzymatic method	0.2245	0.0338	-0.0708	0.2225	0.0369	-0.0717	25	28
HPLC	0.1900	0.0000	-0.1053	0.1850	0.0000	-0.1093	1	1
GC	0.2570	0.0948	-0.0383	0.2680	0.0537	-0.0263	2	2
Colorimetric Analysis	0.2850	0.0000	-0.0103	0.2950	0.0000	0.0007	1	1
Seg. Flow / Colorimetric Analyzer	0.3500	0.0493	0.0547	0.3594	0.0594	0.0651	8	8
FTIR	0.3131	0.0937	0.0178	0.3094	0.0874	0.0151	8	9



Volatile Acidity





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Specific Gravity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		1.022	0.001	0.67	1.022	0.001	0.88
2LEYYL		1.022	0.000	0.38	1.022	0.000	0.34
2QY4JA	X	1.018	-0.003	-3.87	1.018	-0.003	-3.80
3VCCDR		1.022	0.000	0.41	1.022	0.000	0.41
4BKP6A	X	5.500	4.479	5,145.62	5.500	4.479	5,298.95
4FUUT3	X	1.020	-0.001	-1.63	1.030	0.009	10.34
4W4NKC		1.022	0.000	0.44	1.022	0.000	0.52
4YDKG2		1.022	0.000	0.38	1.022	0.001	0.64
68Y39F	X	1.013	-0.008	-9.27	1.016	-0.005	-6.35
6QUMY9		1.022	0.001	0.71	1.022	0.001	0.64
6TWLA2		1.020	-0.002	-1.91	1.020	-0.002	-1.96
6YLEA8		1.022	0.000	0.54	1.022	0.001	0.61
88QU76		1.021	0.000	0.04	1.021	0.000	-0.19
8E9BN8		1.022	0.000	0.31	1.022	0.000	0.50
98A4KR		1.021	-0.001	-0.94	1.020	-0.001	-0.98
9LNCJB	X	1.022	0.001	0.67	1.019	-0.003	-3.15
AD92GA		1.022	0.000	0.54	1.022	0.000	0.56
BWD4U6		1.022	0.001	1.20	1.022	0.001	1.42
CCAQN4		1.020	-0.002	-1.86	1.020	-0.001	-1.60
CKEMIH9	X	0.964	-0.058	-66.51	0.951	-0.070	-82.98
DJHQ96		1.022	0.000	0.54	1.022	0.000	0.55
DVVQ6Y		1.022	0.000	0.56	1.022	0.001	0.60
EDC4KV		1.022	0.000	0.44	1.022	0.000	0.36
EGFWGF		1.021	0.000	-0.02	1.021	0.000	0.17
GYMZ3P		1.022	0.001	0.68	1.022	0.001	0.77
HAL3T6		1.022	0.000	0.34	1.022	0.000	0.37



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Specific Gravity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
HGLK7V		1.022	0.000	0.33	1.022	0.000	0.34
HM7U6R		1.022	0.000	0.22	1.021	0.000	0.27
J7W9GW		1.022	0.000	0.21	1.021	0.000	0.22
JBBRTC		1.022	0.001	0.67	1.022	0.000	0.52
JFYPRY		1.021	0.000	-0.02	1.021	0.000	-0.01
JGFTRK		1.022	0.000	0.33	1.022	0.000	0.28
JVWLHC		1.020	-0.002	-2.03	1.020	-0.002	-1.96
KAEVJ9		1.020	-0.002	-1.91	1.020	-0.002	-1.96
LA68QT	X	1.022	0.000	0.14	1.020	-0.001	-1.20
LFHY6Z		1.022	0.001	0.75	1.022	0.000	0.54
M8G2Y9		1.023	0.001	1.38	1.023	0.001	1.61
MCDQFF		1.022	0.000	0.45	1.022	0.000	0.48
MHGU6E		1.021	0.000	-0.36	1.021	0.000	-0.43
NAGWTW		1.022	0.000	0.32	1.022	0.000	0.31
PNJHX7	*	1.023	0.001	1.65	1.022	0.001	0.69
PXLU2M		1.021	-0.001	-1.05	1.021	0.000	-0.31
RHKYGR		1.022	0.000	0.26	1.022	0.000	0.34
RXHZJT	X	5.700	4.679	5,375.40	5.700	4.679	5,535.58
TGQG84	*	1.023	0.002	1.82	1.022	0.001	0.88
TLW6TR		1.022	0.000	0.50	1.022	0.001	0.61
VNDGC7		1.020	-0.002	-1.97	1.020	-0.002	-1.87
VX6W2B		1.022	0.000	0.56	1.022	0.000	0.52
VYHA4L	*	1.019	-0.002	-2.71	1.019	-0.003	-3.17
XAANT9		1.022	0.001	0.58	1.022	0.001	1.32
XBJVUG		1.022	0.001	0.74	1.022	0.001	0.71
XUZQYA		1.022	0.001	0.67	1.022	0.001	0.80



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Specific Gravity

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XVAVBD		1.022	0.000	0.38	1.022	0.000	0.52
YEXQAD		1.022	0.000	0.45	1.022	0.001	0.65
Z8VZ7E		1.022	0.000	0.37	1.022	0.000	0.40
Z9QLXK		1.019	-0.002	-2.49	1.019	-0.002	-2.32
ZK4UNJ		1.021	-0.001	-0.70	1.020	-0.001	-1.13
ZN47JJ		1.022	0.000	0.30	1.022	0.000	0.35
ZVKGXJ		1.022	0.000	0.33	1.022	0.000	0.40
ZWTJVC		1.022	0.000	0.15	1.022	0.000	0.28
ZZG4Q8		1.022	0.000	0.10	1.022	0.000	0.52

Grand Means	Summary Statistics
1.0214 sp gr 20/20 C	1.0213 sp gr 20/20 C
Stnd Dev Btwn Labs	0.0008 sp gr 20/20 C
Statistics based on 53 of 61 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato

Comments on assigned Data Flags

2QY4JA (X) - Data for both samples are low. Possible Systematic Error.

4BKP6A (X) - Extreme data.

4FUUT3 (X) - Inconsistent in testing between samples, data for Sample SA94 are high.

68Y39F (X) - Data for both samples are low.

9LNCJB (X) - Inconsistent in testing between samples, data for Sample SA94 are low.

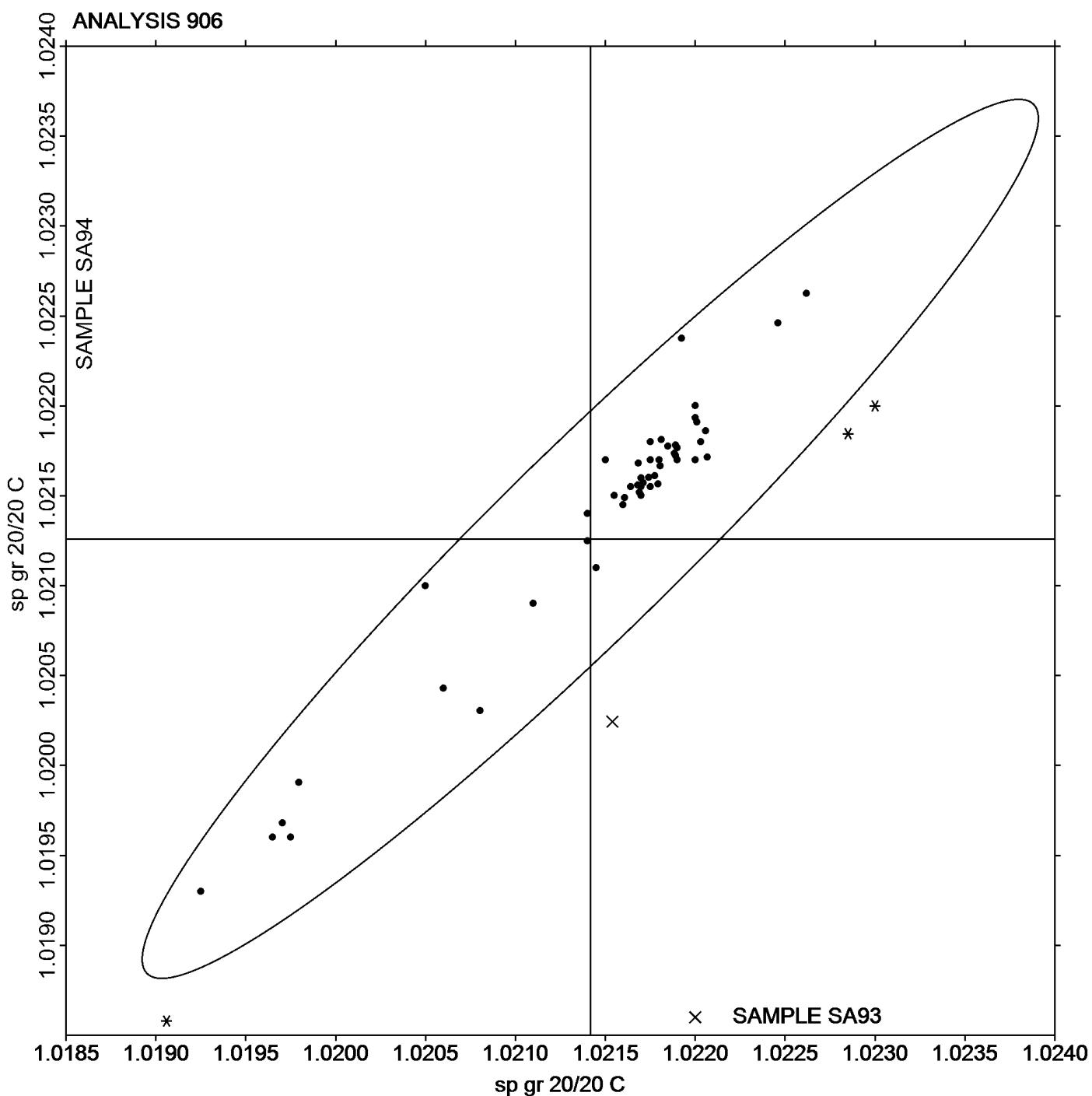
CKEMH9 (X) - Data for both samples are low.

LA68QT (X) - Inconsistent in testing between samples.

RXHZJT (X) - Extreme data.



Specific Gravity





ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 907

Fall 2014

pH

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		3.170	0.031	0.85	3.160	0.024	0.68
2LEYYL		3.120	-0.019	-0.51	3.120	-0.016	-0.46
2QY4JA		3.105	-0.034	-0.92	3.115	-0.021	-0.60
33BTX6		3.115	-0.024	-0.65	3.115	-0.021	-0.60
48LBHJ		3.210	0.071	1.93	3.210	0.074	2.10
4BKP6A		3.145	0.006	0.17	3.160	0.024	0.68
4FUUT3		3.230	0.091	2.48	3.220	0.084	2.38
4GBZF8	*	3.130	-0.009	-0.24	3.105	-0.031	-0.88
4W4NKC		3.140	0.001	0.03	3.140	0.004	0.11
4YDKG2		3.095	-0.044	-1.19	3.115	-0.021	-0.60
6QUMY9		3.190	0.051	1.39	3.190	0.054	1.53
6TWLA2		3.165	0.026	0.71	3.155	0.019	0.54
6YLEA8		3.151	0.012	0.32	3.155	0.018	0.52
88QU76		3.140	0.001	0.03	3.130	-0.006	-0.17
8E9BN8	*	3.125	-0.014	-0.38	3.150	0.014	0.39
8ZQLP6		3.140	0.001	0.03	3.145	0.009	0.25
98A4KR	X	3.220	0.081	2.21	3.180	0.044	1.24
9LNCJB		3.160	0.021	0.57	3.150	0.014	0.39
AD92GA		3.135	-0.004	-0.11	3.120	-0.016	-0.46
BWD4U6		3.145	0.006	0.17	3.150	0.014	0.39
CCAQN4		3.175	0.036	0.98	3.170	0.034	0.96
DJHQ96		3.130	-0.009	-0.24	3.115	-0.021	-0.60
DVVQ6Y		3.080	-0.059	-1.60	3.075	-0.061	-1.73
EDC4KV		3.130	-0.009	-0.24	3.120	-0.016	-0.46
EGFWGF		3.145	0.006	0.17	3.135	-0.001	-0.03
F7C7DJ		3.140	0.001	0.03	3.130	-0.006	-0.17



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pH

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FUWCXK		3.140	0.001	0.03	3.135	-0.001	-0.03
GYMZ3P		3.130	-0.009	-0.24	3.130	-0.006	-0.17
HAL3T6		3.140	0.001	0.03	3.140	0.004	0.11
HGLK7V		3.105	-0.034	-0.92	3.115	-0.021	-0.60
HM7U6R		3.115	-0.024	-0.65	3.120	-0.016	-0.46
J7W9GW		3.155	0.016	0.44	3.150	0.014	0.39
JBBRTC		3.150	0.011	0.30	3.140	0.004	0.11
JC242W		3.140	0.001	0.03	3.130	-0.006	-0.17
JFYPRY		3.165	0.026	0.71	3.155	0.019	0.54
JGFTRK	X	3.000	-0.139	-3.78	3.000	-0.136	-3.86
JVWLHC		3.070	-0.069	-1.87	3.080	-0.056	-1.59
KAEVJ9		3.140	0.001	0.03	3.140	0.004	0.11
LA68QT		3.060	-0.079	-2.15	3.065	-0.071	-2.02
LFHY6Z		3.160	0.021	0.57	3.150	0.014	0.39
M3LDDV	*	3.205	0.066	1.80	3.220	0.084	2.38
M8G2Y9		3.105	-0.034	-0.92	3.105	-0.031	-0.88
MCDQFF		3.120	-0.019	-0.51	3.120	-0.016	-0.46
MHGU6E		3.140	0.001	0.03	3.140	0.004	0.11
NAGWTW		3.090	-0.049	-1.33	3.085	-0.051	-1.45
PNJHX7		3.180	0.041	1.12	3.175	0.039	1.10
PXLU2M		3.145	0.006	0.17	3.150	0.014	0.39
R3A6G4		3.145	0.006	0.17	3.145	0.009	0.25
RHKYGR	X	3.060	-0.079	-2.15	3.105	-0.031	-0.88
RXHZJT		3.150	0.011	0.30	3.145	0.009	0.25
TGQG84		3.110	-0.029	-0.79	3.110	-0.026	-0.74
TLW6TR		3.130	-0.009	-0.24	3.130	-0.006	-0.17



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pH

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
V99RKF		3.055	-0.084	-2.28	3.055	-0.081	-2.30
VNDGC7		3.114	-0.025	-0.69	3.112	-0.025	-0.70
VX6W2B		3.185	0.046	1.25	3.170	0.034	0.96
VYHA4L		3.135	-0.004	-0.11	3.130	-0.006	-0.17
XAANT9	*	3.250	0.111	3.02	3.240	0.104	2.95
XBJVUG		3.140	0.001	0.03	3.130	-0.006	-0.17
XUZQYA		3.180	0.041	1.12	3.160	0.024	0.68
XVAVBD		3.091	-0.048	-1.30	3.086	-0.050	-1.42
YEXQAD		3.130	-0.009	-0.24	3.110	-0.026	-0.74
Z8VZ7E		3.115	-0.024	-0.65	3.105	-0.031	-0.88
Z9QLXK		3.100	-0.039	-1.06	3.100	-0.036	-1.02
ZK4UNJ		3.135	-0.004	-0.11	3.130	-0.006	-0.17
ZN47JJ		3.160	0.021	0.57	3.150	0.014	0.39
ZVKGXJ		3.190	0.051	1.39	3.190	0.054	1.53
ZWTJVC		3.110	-0.029	-0.79	3.120	-0.016	-0.46
ZZG4Q8	X	3.222	0.083	2.26	3.124	-0.012	-0.34

Grand Means	Summary Statistics
3.1389 pH	3.1361 pH
Stnd Dev Btwn Labs	
0.0368 pH 0.0352 pH	
Statistics based on 64 of 68 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato

**pH****Comments on assigned Data Flags**

98A4KR (X) - Inconsistent in testing between and within both samples.

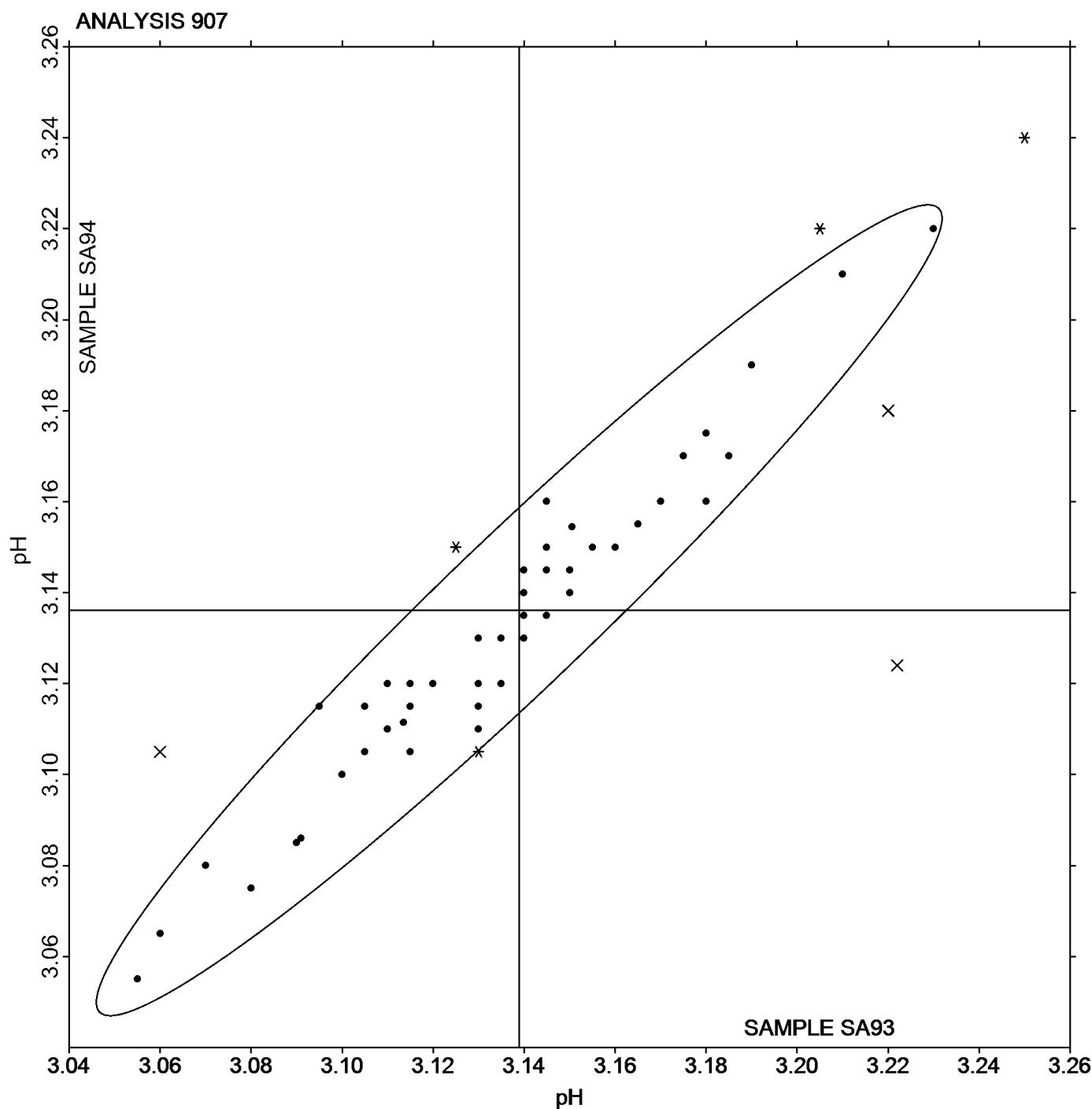
JGFTRK (X) - Data for both samples are low. Possible Systematic Error.

RHKYGR (X) - Inconsistent in testing between samples.

ZZG4Q8 (X) - Inconsistent in testing between samples.



pH





ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 908

Residual Sugar

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2QY4JA		66.70	2.19	0.46	65.39	0.39	0.09
4FEPJ6		61.65	-2.86	-0.60	61.75	-3.25	-0.73
4FUUT3	X	0.40	-64.11	-13.54	0.40	-64.60	-14.58
6QUMY9	*	60.67	-3.84	-0.81	65.26	0.26	0.06
6TWLA2		65.61	1.10	0.23	65.53	0.53	0.12
98A4KR		69.70	5.19	1.10	69.44	4.44	1.00
9LNCJB		70.00	5.49	1.16	69.90	4.90	1.11
DJHQ96		56.76	-7.75	-1.64	58.25	-6.75	-1.52
EDC4KV		58.65	-5.86	-1.24	61.05	-3.95	-0.89
EGFWGF	X	31.30	-33.21	-7.01	34.16	-30.84	-6.96
JBBRTC		65.00	0.49	0.10	65.00	0.00	0.00
JGFRK		66.00	1.49	0.31	66.00	1.00	0.23
LA68QT		57.70	-6.81	-1.44	57.50	-7.50	-1.69
MHGUG6E		63.85	-0.66	-0.14	63.55	-1.45	-0.33
PNJHX7		65.00	0.49	0.10	66.00	1.00	0.23
TGQG84		71.60	7.09	1.50	72.80	7.80	1.76
TLW6TR		66.80	2.29	0.48	67.25	2.25	0.51
XBJVUG		68.85	4.34	0.92	68.70	3.70	0.84
YEXQAD		57.25	-7.26	-1.53	57.30	-7.70	-1.74
ZN47JJ		69.45	4.94	1.04	69.30	4.30	0.97

Grand Means	Summary Statistics
64.513 g/L	64.998 g/L
Stnd Dev Btwn Labs	4.431 g/L
Statistics based on 18 of 20 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato

**Comments on assigned Data Flags**

4FUUT3 (X) - Extreme data.

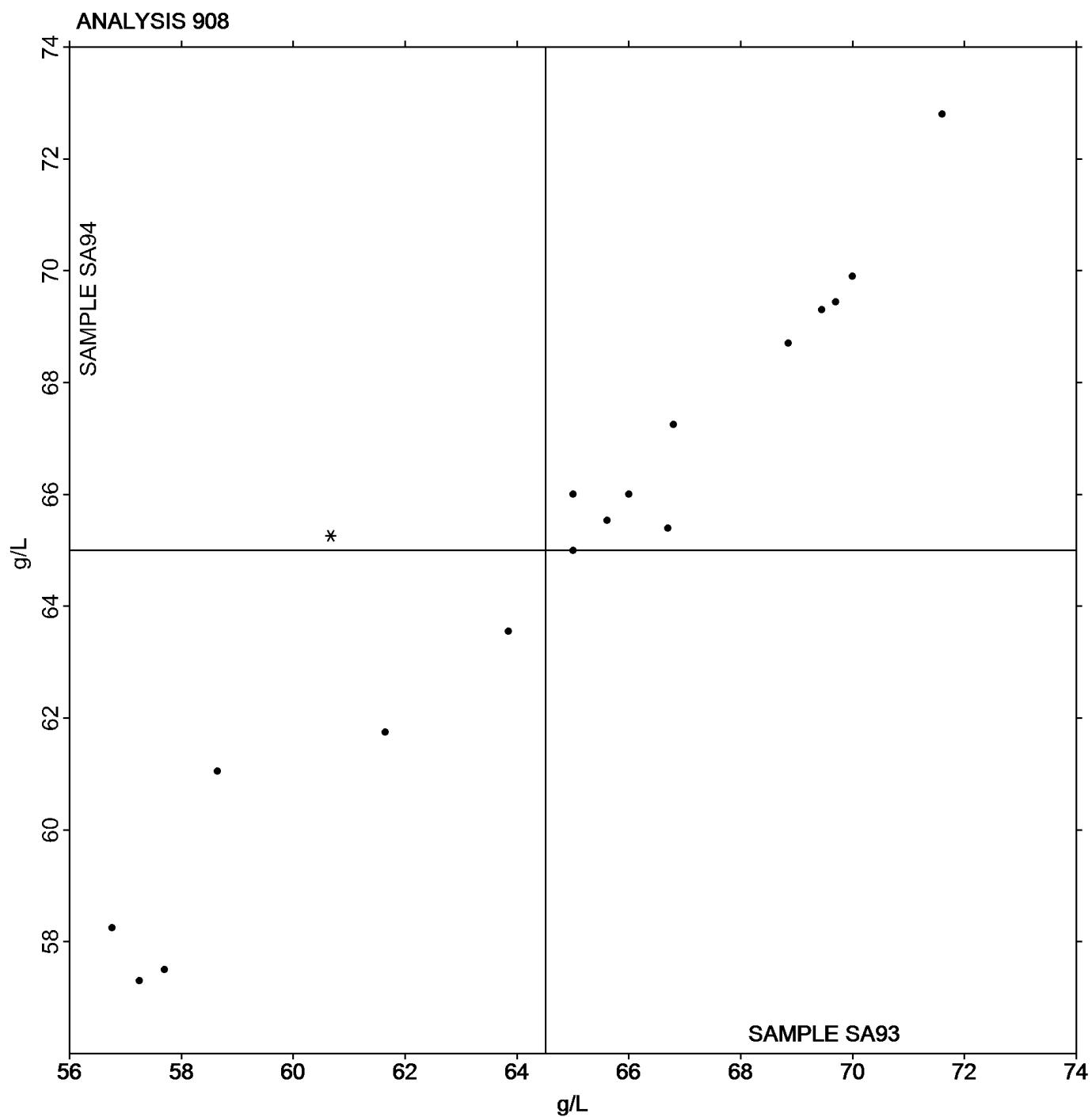
EGFWGF (X) - Data for both samples are low.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Cu Reduction Method	65.01	5.35	0.50	65.49	5.16	0.49	5 7
HPLC	61.65	0.00	-2.86	61.75	0.00	-3.25	1 1
Segmented Flow	62.33	5.20	-2.19	63.53	3.50	-1.47	2 2
FTIR	65.54	4.70	1.02	65.50	4.67	0.50	6 6
Other _____	65.33	6.62	0.82	65.17	6.65	0.17	3 3



Residual Sugar



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

Report #048
Fall 2014

Analysis 909

L-Malic Acid

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		2.170	0.011	0.07	2.175	0.010	0.06
2LEYYL		2.145	-0.014	-0.08	2.150	-0.015	-0.09
2QY4JA		2.155	-0.004	-0.02	2.200	0.035	0.20
33BTX6		2.260	0.101	0.60	2.210	0.045	0.26
48LBHJ		1.940	-0.219	-1.30	1.945	-0.220	-1.27
4BKP6A		1.905	-0.254	-1.51	1.925	-0.240	-1.39
4FUUT3	X	1.184	-0.975	-5.80	2.141	-0.024	-0.14
4GBZF8		2.232	0.073	0.43	2.227	0.061	0.35
4W4NKC	X	1.590	-0.569	-3.38	1.920	-0.245	-1.42
4YDKG2		2.140	-0.019	-0.12	2.149	-0.016	-0.09
6QUMY9	*	2.265	0.106	0.63	2.385	0.220	1.27
6TWLA2		2.485	0.326	1.94	2.495	0.330	1.91
6YLEA8	X	0.945	-1.214	-7.22	0.960	-1.205	-6.96
88QU76		2.192	0.033	0.19	2.165	-0.001	0.00
8E9BN8		2.209	0.050	0.30	2.238	0.073	0.42
98A4KR		2.460	0.301	1.79	2.440	0.275	1.59
9LNCJB		2.207	0.048	0.29	2.206	0.041	0.24
AD92GA		2.485	0.326	1.94	2.485	0.320	1.85
BWD4U6		2.192	0.033	0.19	2.179	0.014	0.08
CCAQN4		2.120	-0.039	-0.23	2.060	-0.105	-0.61
DVVQ6Y		2.205	0.046	0.27	2.240	0.075	0.43
EGFWGF		1.855	-0.304	-1.81	1.815	-0.350	-2.02
F7C7DJ		2.182	0.023	0.14	2.218	0.053	0.31
GYMZ3P		2.165	0.006	0.04	2.115	-0.050	-0.29
HAL3T6		2.125	-0.034	-0.20	2.145	-0.020	-0.12
HGLK7V		2.030	-0.129	-0.77	2.025	-0.140	-0.81



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 909

L-Malic Acid

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
J7W9GW		2.240	0.081	0.48	2.265	0.100	0.58
JBBRTC	X	1.193	-0.966	-5.75	1.176	-0.990	-5.72
JC242W		2.077	-0.082	-0.49	2.100	-0.066	-0.38
JFYPRY	X	1.815	-0.344	-2.04	2.280	0.115	0.66
JVWLHC		2.030	-0.129	-0.77	2.050	-0.115	-0.67
KAEVJ9		2.226	0.067	0.40	2.216	0.051	0.29
LFHY6Z		1.960	-0.199	-1.18	1.965	-0.200	-1.16
M8G2Y9		2.045	-0.114	-0.68	2.075	-0.090	-0.52
MCDQFF		1.973	-0.186	-1.11	1.992	-0.173	-1.00
MHGU6E	*	2.360	0.201	1.20	2.455	0.290	1.67
NAGWTW		2.575	0.416	2.47	2.570	0.405	2.34
PNJHX7		2.200	0.041	0.24	2.200	0.035	0.20
PXLU2M		2.410	0.251	1.49	2.385	0.220	1.27
R3A6G4		2.035	-0.124	-0.74	2.065	-0.100	-0.58
RHKYGR		2.245	0.086	0.51	2.246	0.081	0.47
RXHZJT	X	1.057	-1.102	-6.55	1.097	-1.068	-6.17
TGQG84		2.110	-0.049	-0.29	2.040	-0.125	-0.72
TLW6TR		2.070	-0.089	-0.53	2.130	-0.035	-0.20
VX6W2B		2.227	0.068	0.40	2.237	0.071	0.41
VYHA4L	X	1.851	-0.308	-1.83	2.085	-0.080	-0.46
XAANT9	*	1.735	-0.424	-2.52	1.775	-0.390	-2.25
XBJVUG		2.231	0.072	0.43	2.250	0.084	0.49
XUZQYA		2.245	0.086	0.51	2.305	0.140	0.81
YEXQAD	X	0.880	-1.279	-7.60	0.890	-1.275	-7.37
Z8VZ7E		2.210	0.051	0.30	2.210	0.045	0.26
Z9QLXX		1.920	-0.239	-1.42	1.860	-0.305	-1.76



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 909

L-Malic Acid

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ZK4UNJ		1.848	-0.311	-1.85	1.870	-0.295	-1.71
ZN47JJ		2.233	0.074	0.44	2.234	0.068	0.39
ZVKGXJ		2.140	-0.019	-0.11	2.080	-0.085	-0.49
ZWTJVC		2.190	0.031	0.18	2.175	0.010	0.06
ZZG4Q8		2.135	-0.024	-0.14	2.154	-0.012	-0.07

Grand Means	Summary Statistics
2.1590 g/L	2.1652 g/L
Stnd Dev Btwn Labs	0.1731 g/L
Statistics based on 49 of 57 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato

Comments on assigned Data Flags

4FUUT3 (X) - Inconsistent in testing between samples, data for Sample SA93 are low.

4W4NKC (X) - Inconsistent in testing between samples, data for Sample SA93 are low.

6YLEA8 (X) - Data for both samples are low.

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

JFYPRY (X) - Inconsistent in testing between samples and inconsistent within the determinations for Sample SA93.

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

VYHA4L (X) - Inconsistent in testing between samples.

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



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #048
Fall 2014

Analysis 910

Glucose + Fructose

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		61.25	-5.02	-1.42	60.40	-6.11	-1.61
2LEYYL		63.75	-2.52	-0.71	66.00	-0.51	-0.13
2QY4JA	*	75.42	9.14	2.58	75.26	8.75	2.31
33BTX6		60.25	-6.02	-1.70	58.99	-7.52	-1.98
48LBHJ		66.45	0.18	0.05	66.45	-0.06	-0.02
4BKP6A		67.55	1.28	0.36	66.70	0.19	0.05
4FUUT3		69.10	2.83	0.80	70.60	4.09	1.08
4GBZF8		67.85	1.58	0.44	67.65	1.14	0.30
4W4NKC	*	63.05	-3.22	-0.91	59.65	-6.86	-1.81
4YDKG2		68.35	2.08	0.59	67.75	1.24	0.33
6QUMY9	*	61.69	-4.59	-1.30	65.43	-1.08	-0.29
6TWLA2		63.35	-2.92	-0.83	62.85	-3.66	-0.97
6YLEA8	*	65.48	-0.80	-0.23	69.38	2.87	0.76
88QU76		65.50	-0.78	-0.22	65.61	-0.90	-0.24
8E9BN8		70.37	4.09	1.15	69.96	3.45	0.91
98A4KR		67.20	0.93	0.26	67.10	0.59	0.16
9LNCJB		69.95	3.68	1.04	69.85	3.34	0.88
AD92GA		66.86	0.59	0.17	67.22	0.71	0.19
CCAQN4	X	67.88	1.61	0.45	60.03	-6.48	-1.71
DVVQ6Y		60.45	-5.82	-1.64	60.15	-6.36	-1.68
F7C7DJ		66.54	0.27	0.08	64.50	-2.01	-0.53
FUWCXK	X	31.10	-35.18	-9.93	32.27	-34.24	-9.03
GYMZ3P		65.59	-0.69	-0.19	65.34	-1.17	-0.31
HAL3T6		73.50	7.23	2.04	73.50	6.99	1.84
HGLK7V		65.35	-0.92	-0.26	67.50	0.99	0.26
HM7U6R		65.67	-0.60	-0.17	67.18	0.67	0.18



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 910

Glucose + Fructose

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
J7W9GW	X	69.50	3.23	0.91	62.50	-4.01	-1.06
JC242W	X	46.17	-20.11	-5.68	46.06	-20.45	-5.39
JFYPRY		69.33	3.05	0.86	70.60	4.09	1.08
JGFTRK		66.00	-0.27	-0.08	66.50	-0.01	0.00
JVWLHC		63.36	-2.91	-0.82	63.15	-3.36	-0.89
KAEVJ9		69.15	2.88	0.81	68.95	2.44	0.64
LA68QT		71.20	4.93	1.39	73.20	6.69	1.76
LFHY6Z		65.30	-0.97	-0.27	65.45	-1.06	-0.28
M3LDDV		69.85	3.58	1.01	69.65	3.14	0.83
M8G2Y9		66.35	0.08	0.02	67.30	0.79	0.21
MCDQFF		61.90	-4.37	-1.23	61.60	-4.91	-1.29
MHGU6E		60.00	-6.27	-1.77	60.00	-6.51	-1.72
NAGWTV	X	68.05	1.78	0.50	37.30	-29.21	-7.70
PXLU2M		60.00	-6.27	-1.77	60.05	-6.46	-1.70
R3A6G4		66.00	-0.27	-0.08	68.00	1.49	0.39
RHKYGR		67.30	1.03	0.29	68.50	1.99	0.52
RXHZJT		66.00	-0.27	-0.08	66.00	-0.51	-0.13
TLW6TR	X	53.00	-13.27	-3.75	54.00	-12.51	-3.30
VNDGC7		68.25	1.98	0.56	67.70	1.19	0.31
VX6W2B		69.45	3.18	0.90	68.95	2.44	0.64
VYHA4L		67.24	0.97	0.27	70.00	3.49	0.92
XAANT9		69.05	2.78	0.78	69.20	2.69	0.71
XBJVUG		68.85	2.58	0.73	68.70	2.19	0.58
XUZQYA		69.91	3.64	1.03	69.75	3.24	0.85
YEXQAD	*	57.25	-9.02	-2.55	57.30	-9.21	-2.43
Z8VZ7E		68.43	2.15	0.61	67.28	0.77	0.20



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #048

Analysis 910

Fall 2014

Glucose + Fructose

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
Z9QLXK		63.50	-2.77	-0.78	63.60	-2.91	-0.77
ZK4UNJ		65.95	-0.32	-0.09	66.43	-0.08	-0.02
ZN47JJ		69.45	3.18	0.90	69.30	2.79	0.74
ZVKGXJ		65.74	-0.53	-0.15	65.85	-0.66	-0.18
ZWTJVC		65.95	-0.32	-0.09	65.05	-1.46	-0.38
ZZG4Q8		64.98	-1.29	-0.37	65.48	-1.03	-0.27

Grand Means	Summary Statistics
66.273 g/L	66.510 g/L
Stnd Dev Btwn Labs	3.792 g/L
Statistics based on 52 of 58 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato

Comments on assigned Data Flags

CCAQN4 (X) - Inconsistent in testing between samples and inconsistent within the determinations for Sample SA93.

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

J7W9GW (X) - Inconsistent in testing between samples.

JC242W (X) - Data for both samples are low.

NAGWTV (X) - Inconsistent in testing between samples, data for Sample SA94 are low.

TLW6TR (X) - Data for both samples are low. Possible Systematic Error.



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #048

Analysis 910

Fall 2014

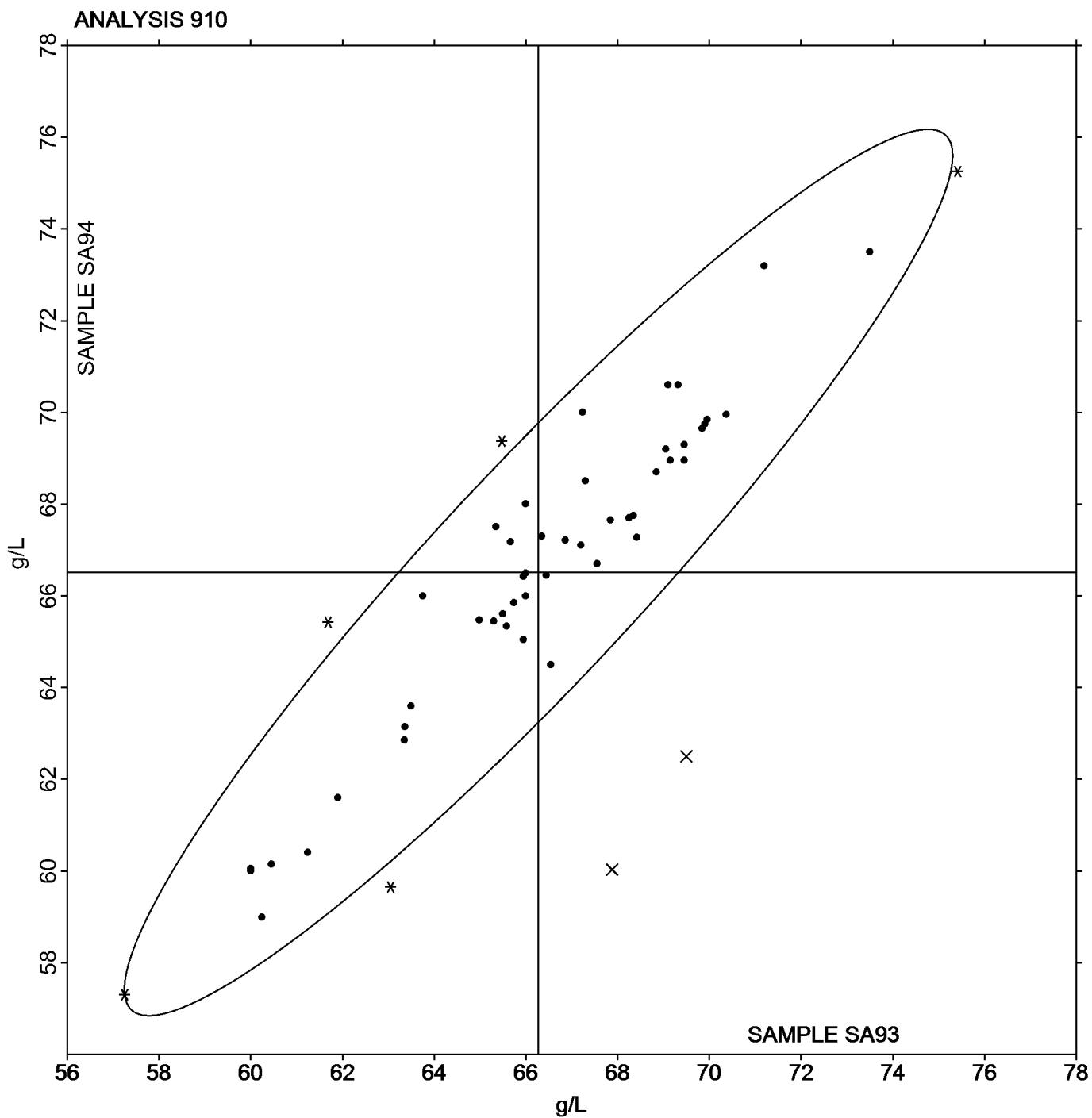
Glucose + Fructose

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
HPLC	66.00	0.00	-0.27	66.50	0.00	-0.01	1 2
Enzymatic/Spectrophotometric	66.46	3.22	0.18	66.63	3.49	0.12	42 51
FTIR	67.57	1.34	1.29	67.58	1.44	1.07	3 3
Other _____	63.50	0.00	-2.77	63.60	0.00	-2.91	1 2



Glucose + Fructose





ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #048
Fall 2014

Analysis 911

Copper Content

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
68Y39F		0.3470	-0.0044	-0.08	0.2335	-0.0083	-0.20
6QUMY9		0.3350	-0.0164	-0.28	0.2200	-0.0218	-0.53
8E9BN8		0.4300	0.0786	1.36	0.2750	0.0332	0.81
98A4KR		0.3790	0.0276	0.48	0.2900	0.0482	1.17
9LNCJB		0.3700	0.0186	0.32	0.2700	0.0282	0.69
EDC4KV		0.3435	-0.0079	-0.14	0.2250	-0.0168	-0.41
HAL3T6		0.2350	-0.1164	-2.02	0.1800	-0.0618	-1.51
JFYPRY		0.3800	0.0286	0.50	0.2900	0.0482	1.17
JGFTRK		0.3300	-0.0214	-0.37	0.2200	-0.0218	-0.53
LFHY6Z		0.3515	0.0001	0.00	0.2450	0.0032	0.08
M3LDDV		0.3150	-0.0364	-0.63	0.2150	-0.0268	-0.65
M8G2Y9		0.2550	-0.0964	-1.67	0.1500	-0.0918	-2.24
PNJHX7		0.3250	-0.0264	-0.46	0.2200	-0.0218	-0.53
TLW6TR		0.3217	-0.0297	-0.51	0.2375	-0.0044	-0.11
VX6W2B		0.4800	0.1286	2.23	0.3120	0.0702	1.71
XAANT9		0.3695	0.0181	0.31	0.2415	-0.0003	-0.01
XUZQYA		0.4135	0.0621	1.08	0.2855	0.0437	1.06
Z9QLXK		0.3950	0.0436	0.76	0.2750	0.0332	0.81
ZVKGXJ		0.3000	-0.0514	-0.89	0.2100	-0.0318	-0.78

Grand Means	Summary Statistics
0.35135 mg/L	0.24184 mg/L
Stnd Dev Btwn Labs	
0.05770 mg/L 0.04101 mg/L	
Statistics based on 19 of 19 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Fall 2014

Analysis 911

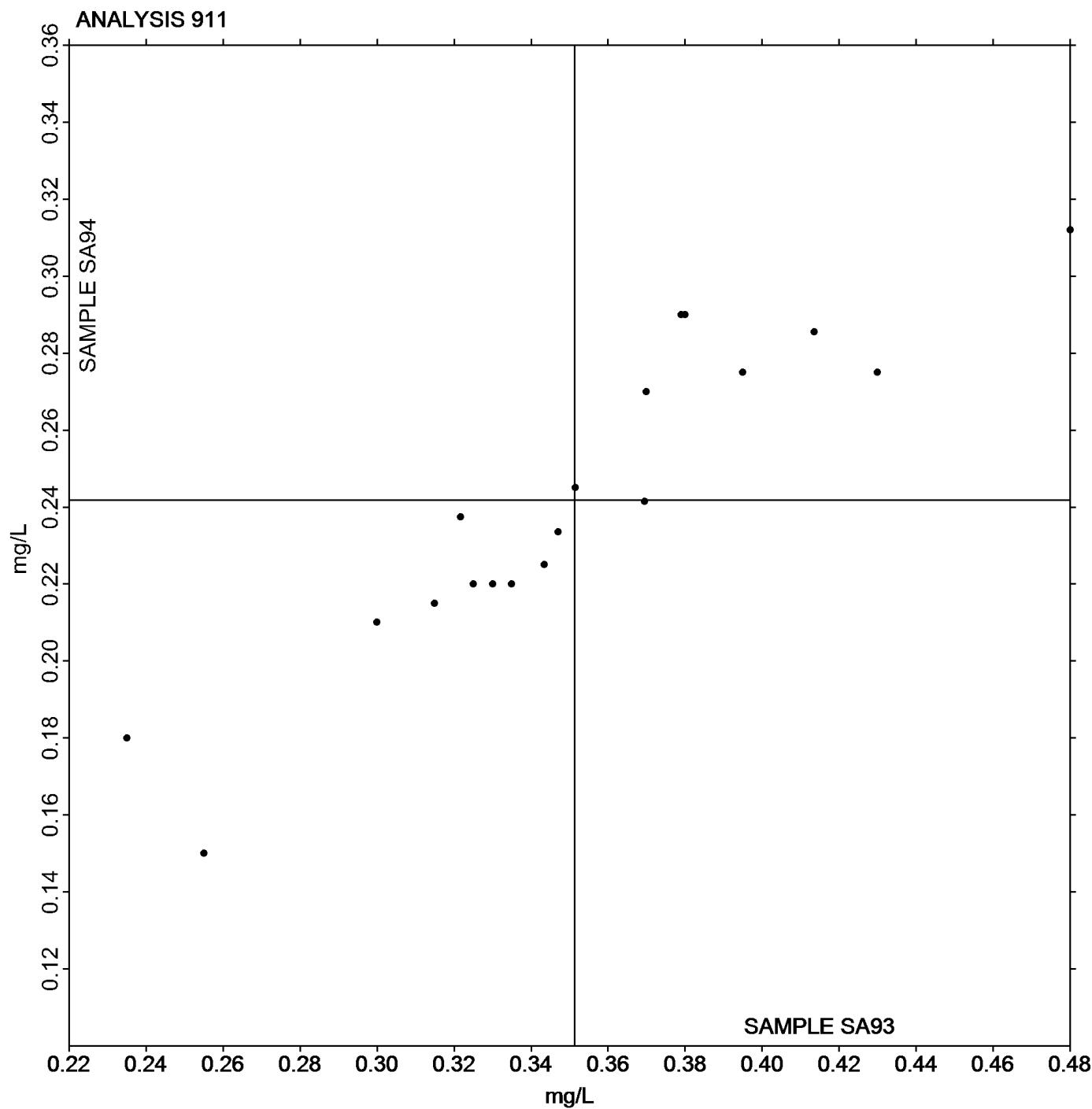
Copper Content

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	0.3545	0.0346	0.0031	0.2550	0.0495	0.0132	2 2
Atomic Absorption Spectroscopy	0.3606	0.0671	0.0093	0.2441	0.0458	0.0023	10 10
ICP-OES	0.3340	0.0627	-0.0174	0.2370	0.0449	-0.0048	5 5
Other _____	0.3453	0.0025	-0.0061	0.2293	0.0060	-0.0126	2 2



Copper 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

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Fall 2014

Analysis 912

Potassium (K) Content

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
33BTX6		739.0	73.1	0.40	750.0	94.8	0.44
4FEPJ6		606.0	-59.9	-0.33	613.0	-42.2	-0.20
68Y39F		577.0	-88.9	-0.49	624.5	-30.7	-0.14
6QUMY9		566.4	-99.5	-0.55	564.5	-90.7	-0.42
8E9BN8		695.0	29.1	0.16	727.0	71.8	0.33
98A4KR		421.5	-244.4	-1.35	494.7	-160.5	-0.75
HAL3T6		505.0	-160.9	-0.89	523.0	-132.2	-0.62
JFYPRY		653.5	-12.4	-0.07	676.5	21.3	0.10
JGFTRK		530.0	-135.9	-0.75	525.0	-130.2	-0.61
M8G2Y9		660.0	-5.9	-0.03	663.0	7.8	0.04
MHGU6E		749.0	83.1	0.46	759.5	104.3	0.49
PNJHX7		575.0	-90.9	-0.50	595.0	-60.2	-0.28
TLW6TR	*	720.0	54.1	0.30	245.0	-410.2	-1.91
XUZQYA		810.5	144.6	0.80	829.5	174.3	0.81
Z9QLXK	*	1,230.0	564.1	3.12	1,280.0	624.8	2.91
ZVKGXJ		617.0	-48.9	-0.27	613.0	-42.2	-0.20

Grand Means	Summary Statistics
665.93 mg/L	655.20 mg/L
Stnd Dev Btwn Labs	
181.01 mg/L 214.65 mg/L	
Statistics based on 16 of 16 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #048

Analysis 912

Fall 2014

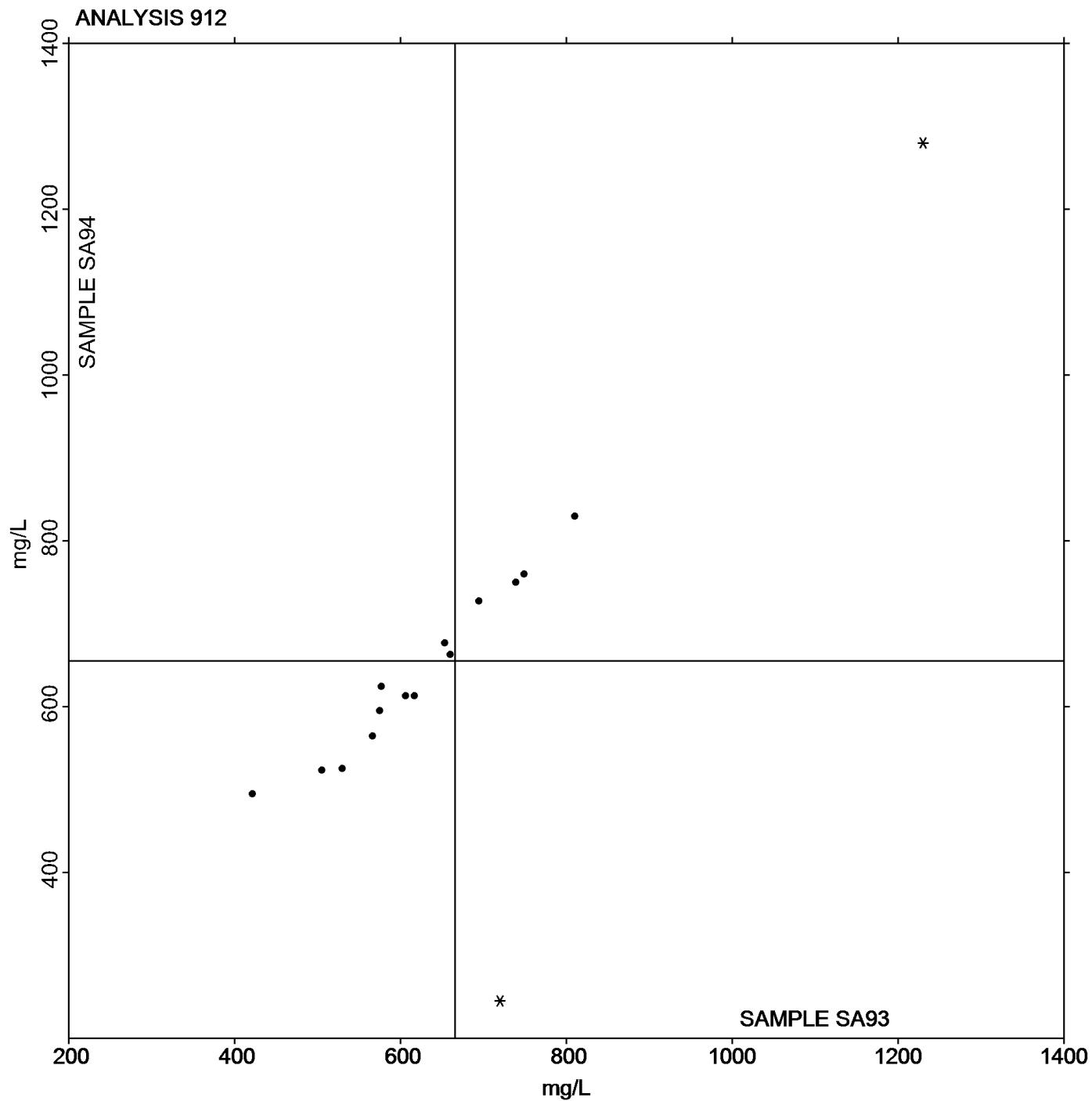
Potassium (K) Content

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	421.5	0.0	-244.4	494.7	0.0	-160.5	1 1
Atomic Absorption Spectroscopy	660.9	84.3	-5.0	678.3	85.9	23.1	6 6
ICP-OES	575.0	60.9	-91.0	589.8	64.9	-65.5	4 5
FTIR	749.0	0.0	83.1	759.5	0.0	104.3	1 1
Other _____	634.5	147.8	-31.4	637.5	159.1	-17.7	2 3



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

Report #048
Fall 2014

Analysis 915

A420nm (1cm path)

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		0.0600	-0.0011	-0.19	0.0695	0.0020	0.28
2LEYYL		0.0560	-0.0051	-0.85	0.0630	-0.0045	-0.61
2QY4JA		0.0550	-0.0061	-1.01	0.0650	-0.0025	-0.34
33BTX6		0.0600	-0.0011	-0.19	0.0600	-0.0075	-1.02
4BKP6A	*	0.0700	0.0089	1.47	0.0870	0.0195	2.67
4FUUT3	X	0.3775	0.3164	52.42	0.1325	0.0650	8.88
6QUMY9		0.0496	-0.0115	-1.91	0.0543	-0.0132	-1.80
8E9BN8		0.0600	-0.0011	-0.19	0.0710	0.0035	0.48
AD92GA		0.0640	0.0029	0.48	0.0715	0.0040	0.55
CCAQN4		0.0630	0.0019	0.31	0.0770	0.0095	1.30
CKEMH9	X	0.0755	0.0144	2.38	0.0660	-0.0015	-0.20
DVVQ6Y		0.0630	0.0019	0.31	0.0705	0.0030	0.42
GYMZ3P		0.0596	-0.0016	-0.26	0.0613	-0.0062	-0.85
HAL3T6	*	0.0700	0.0089	1.47	0.0650	-0.0025	-0.34
HGLK7V		0.0650	0.0039	0.64	0.0745	0.0070	0.96
J7W9GW	X	0.0617	0.0006	0.10	0.0900	0.0225	3.08
JBBRTC	X	0.0195	-0.0416	-6.90	0.0260	-0.0415	-5.66
JFYPRY		0.0613	0.0002	0.03	0.0668	-0.0007	-0.10
LA68QT		0.0635	0.0024	0.39	0.0700	0.0025	0.35
LFHY6Z		0.0650	0.0039	0.64	0.0660	-0.0015	-0.20
M3LDDV		0.0669	0.0058	0.96	0.0772	0.0097	1.32
M8G2Y9		0.0500	-0.0111	-1.84	0.0600	-0.0075	-1.02
MCDQFF	X	0.0013	-0.0599	-9.92	0.0014	-0.0661	-9.02
MHGUE		0.0635	0.0024	0.39	0.0710	0.0035	0.48
NAGWTW		0.0705	0.0094	1.55	0.0725	0.0050	0.69
RHKYGR		0.0610	-0.0001	-0.02	0.0660	-0.0015	-0.20



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #048

Analysis 915

Fall 2014

A420nm (1cm path)

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TGQG84		0.0601	-0.0010	-0.17	0.0701	0.0026	0.36
TLW6TR		0.0615	0.0004	0.06	0.0700	0.0025	0.35
V99RKF		0.0600	-0.0011	-0.19	0.0640	-0.0035	-0.47
VYHA4L		0.0605	-0.0006	-0.10	0.0650	-0.0025	-0.34
XAANT9		0.0630	0.0019	0.31	0.0660	-0.0015	-0.20
XVAVBD		0.0475	-0.0136	-2.26	0.0565	-0.0110	-1.50
Z8VZ7E		0.0650	0.0039	0.64	0.0680	0.0005	0.07
Z9QLXK		0.0645	0.0034	0.56	0.0710	0.0035	0.48
ZK4UNJ		0.0670	0.0059	0.97	0.0715	0.0040	0.55
ZVKGXJ	*	0.0455	-0.0156	-2.59	0.0460	-0.0215	-2.93
ZWTJVC		0.0620	0.0009	0.15	0.0700	0.0025	0.35
ZZG4Q8		0.0635	0.0024	0.39	0.0690	0.0015	0.21

Grand Means	Summary Statistics
0.06112 Absorbance Units	0.06745 Absorbance Units
Stnd Dev Btwn Labs	
0.00604 Absorbance Units	0.00732 Absorbance Units
Statistics based on 33 of 38 reporting participants	

Wines tested: SA93: Moscato; SA94: Moscato

Comments on assigned Data Flags

4FUUT3 (X) - Data for both samples are high. Also inconsistent in testing within Sample SA93.

CKEMH9 (X) - Inconsistent in testing between samples.

J7W9GW (X) - Data for both samples are hight. Also inconsistent in testing within both samples.

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

MCDQFF (X) - Extreme data.



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 915
A420nm (1cm path)

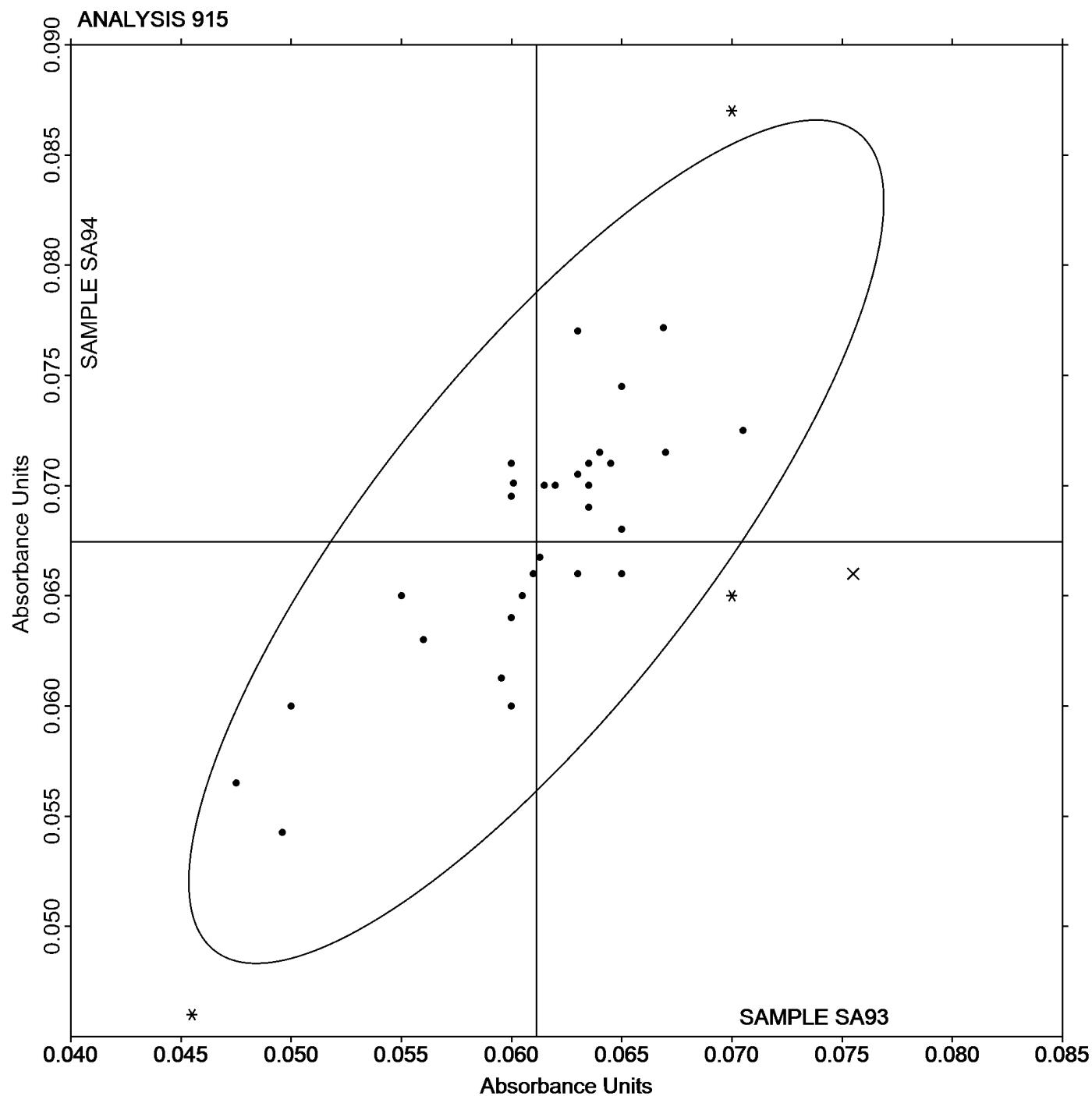
Report #048
Fall 2014

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Code not used by CTS at this time	0.0610	0.0051	-0.0001	0.0676	0.0055	0.0001	30 38



A420nm (1cm path)





ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #048
Fall 2014

Analysis 916

A520nm (1cm path)

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		0.0110	0.0006	0.20	0.0145	0.0020	0.47
2LEYYL		0.0070	-0.0034	-1.27	0.0080	-0.0045	-1.05
2QY4JA		0.0100	-0.0004	-0.17	0.0100	-0.0025	-0.58
33BTX6		0.0070	-0.0034	-1.27	0.0070	-0.0055	-1.28
4BKP6A	*	0.0150	0.0046	1.68	0.0235	0.0110	2.57
4FUUT3	X	0.0495	0.0391	14.39	0.0780	0.0655	15.30
6QUMY9		0.0035	-0.0069	-2.56	0.0029	-0.0096	-2.25
8E9BN8		0.0100	-0.0004	-0.17	0.0145	0.0020	0.47
AD92GA		0.0120	0.0016	0.57	0.0160	0.0035	0.82
CCAQN4		0.0120	0.0016	0.57	0.0200	0.0075	1.76
DVVQ6Y		0.0105	0.0001	0.02	0.0140	0.0015	0.35
GYMZ3P		0.0075	-0.0030	-1.10	0.0085	-0.0040	-0.94
HGLK7V		0.0115	0.0011	0.39	0.0175	0.0050	1.17
J7W9GW	X	0.0671	0.0566	20.85	0.0302	0.0177	4.14
JBBRTC	X	0.0290	0.0186	6.83	0.0290	0.0165	3.86
JFYPRY		0.0118	0.0013	0.48	0.0132	0.0007	0.17
LA68QT		0.0090	-0.0014	-0.53	0.0110	-0.0015	-0.35
LFHY6Z		0.0110	0.0006	0.20	0.0090	-0.0035	-0.81
M3LDDV		0.0162	0.0058	2.12	0.0196	0.0071	1.66
M8G2Y9		0.0100	-0.0004	-0.17	0.0100	-0.0025	-0.58
MCDQFF	X	0.0002	-0.0103	-3.79	0.0002	-0.0123	-2.87
MHGU6E		0.0125	0.0021	0.76	0.0145	0.0020	0.47
NAGWTW		0.0135	0.0031	1.12	0.0135	0.0010	0.24
RHKYGR		0.0060	-0.0044	-1.64	0.0090	-0.0035	-0.81
TGQG84		0.0100	-0.0004	-0.17	0.0133	0.0008	0.19
TLW6TR		0.0120	0.0016	0.57	0.0140	0.0015	0.35



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #048
Fall 2014

Analysis 916

A520nm (1cm path)

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
V99RKF		0.0110	0.0006	0.20	0.0115	-0.0010	-0.23
VYHA4L		0.0110	0.0006	0.20	0.0135	0.0010	0.24
XAANT9		0.0110	0.0006	0.20	0.0110	-0.0015	-0.35
XVAVBD		0.0065	-0.0039	-1.45	0.0080	-0.0045	-1.05
Z8VZ7E		0.0120	0.0016	0.57	0.0120	-0.0005	-0.11
Z9QLXK		0.0120	0.0016	0.57	0.0130	0.0005	0.12
ZK4UNJ	X	0.0135	0.0031	1.12	0.0425	0.0300	7.01
ZVKGXJ		0.0075	-0.0029	-1.09	0.0065	-0.0060	-1.40
ZWTJVC		0.0105	0.0001	0.02	0.0130	0.0005	0.12
ZZG4Q8		0.0135	0.0031	1.12	0.0150	0.0025	0.59

Grand Means	Summary Statistics
0.01045 Absorbance Units	0.01248 Absorbance Units
Stnd Dev Btwn Labs	
0.00271 Absorbance Units	0.00428 Absorbance Units
Statistics based on 31 of 36 reporting participants	

Wines tested: SA93: Moscato; SA94: MoscatoComments on assigned Data Flags

4FUUT3 (X) - Data for both samples are high.

J7W9GW (X) - Data for both samples are high.

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

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

ZK4UNJ (X) - Inconsistent in testing between samples.



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 916
A520nm (1cm path)

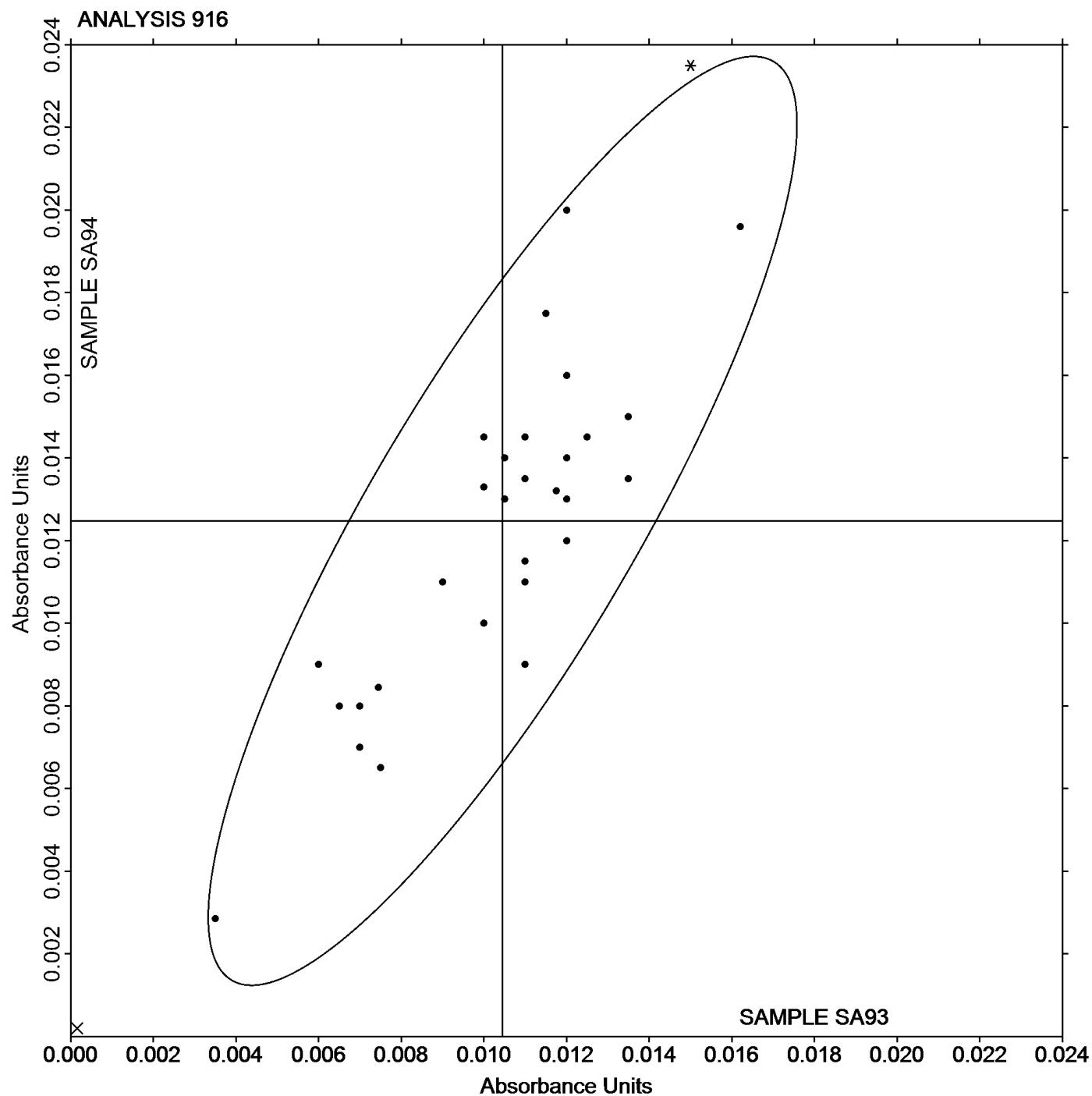
Report #048
Fall 2014

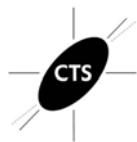
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA93 <i>Moscato</i>			Sample SA94 <i>Moscato</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Code not used by CTS at this time	0.0103	0.0026	-0.0002	0.0121	0.0038	-0.0004	30 36



A520nm (1cm path)

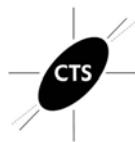




ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 950
Research Property - Turbidity

Report #048
Fall 2014

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
228L8Y		0.5665	0.1916	51.1%	0.4790	0.1982	70.6%
2QY4JA	X	1.2250	0.8501	226.8%	0.8650	0.5842	208.0%
4FUUT3		0.4500	0.0751	20.0%	0.2500	-0.0308	-11.0%
4W4NKC		0.3315	-0.0434	-11.6%	0.2200	-0.0608	-21.7%
6QUMY9		0.2950	-0.0799	-21.3%	0.2600	-0.0208	-7.4%
6TWLA2		0.3220	-0.0529	-14.1%	0.2335	-0.0473	-16.8%
6YLEA8		0.0950	-0.2799	-74.7%	0.0400	-0.2408	-85.8%
8E9BN8		0.5150	0.1401	37.4%	0.2750	-0.0058	-2.1%
98A4KR		0.3000	-0.0749	-20.0%	0.3000	0.0192	6.8%
9LNCJB		0.3570	-0.0179	-4.8%	0.2250	-0.0558	-19.9%
AD92GA		0.5035	0.1286	34.3%	0.4260	0.1452	51.7%
CCAQN4		0.6000	0.2251	60.0%	0.4850	0.2042	72.7%
CKEMH9		0.4730	0.0981	26.2%	0.2450	-0.0358	-12.7%
DVVQ6Y		0.3600	-0.0149	-4.0%	0.2750	-0.0058	-2.1%
EGFWGF	X	0.5200	0.1451	38.7%	0.5900	0.3092	110.1%
GYMZ3P		0.3140	-0.0609	-16.2%	0.2210	-0.0598	-21.3%
HGLK7V		0.2940	-0.0809	-21.6%	0.1900	-0.0908	-32.3%
HM7U6R		0.6735	0.2986	79.6%	0.5360	0.2552	90.9%
J7W9GW		0.3765	0.0016	0.4%	0.1580	-0.1228	-43.7%
JBBRTC		0.2300	-0.1449	-38.7%	0.1500	-0.1308	-46.6%
JC242W	X	2.7500	2.3751	633.5%	2.2850	2.0042	713.7%
JFYPRY		0.3850	0.0101	2.7%	0.2800	-0.0008	-0.3%
KAEVJ9		0.3900	0.0151	4.0%	0.2300	-0.0508	-18.1%



ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 950
Research Property - Turbidity

Report #048
Fall 2014

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
LA68QT		0.3865	0.0116	3.1%	0.3755	0.0947	33.7%
LFHY6Z		0.3570	-0.0179	-4.8%	0.2630	-0.0178	-6.3%
M3LDDV	*	0.7500	0.3751	100.1%	0.5375	0.2567	91.4%
M8G2Y9		0.1500	-0.2249	-60.0%	0.1700	-0.1108	-39.5%
MHGU6E		0.3015	-0.0734	-19.6%	0.1985	-0.0823	-29.3%
NAGWTV		0.3950	0.0201	5.4%	0.3625	0.0817	29.1%
PNJHX7		0.1200	-0.2549	-68.0%	0.1400	-0.1408	-50.1%
PXLU2M	X	0.4850	0.1101	29.4%	0.6300	0.3492	124.4%
RHKYGR		0.2760	-0.0989	-26.4%	0.2215	-0.0593	-21.1%
TLW6TR		0.3150	-0.0599	-16.0%	0.1700	-0.1108	-39.5%
VX6W2B		0.2950	-0.0799	-21.3%	0.1815	-0.0993	-35.4%
VYHA4L		0.2990	-0.0759	-20.2%	0.2905	0.0097	3.5%
XAANT9		0.4350	0.0601	16.0%	0.3600	0.0792	28.2%
XBJVUG		0.4500	0.0751	20.0%	0.3500	0.0692	24.6%
XUZQYA		0.3525	-0.0224	-6.0%	0.3255	0.0447	15.9%
YEXQAD	X	0.2350	-0.1399	-37.3%	0.4800	0.1992	70.9%
Z8VZ7E		0.4600	0.0851	22.7%	0.3350	0.0542	19.3%
Z9QLXK		0.3700	-0.0049	-1.3%	0.2550	-0.0258	-9.2%
ZK4UNJ		0.3480	-0.0269	-7.2%	0.3150	0.0342	12.2%
ZVKGXJ		0.3900	0.0151	4.0%	0.3600	0.0792	28.2%
ZWTJVC		0.3640	-0.0109	-2.9%	0.2880	0.0072	2.6%
ZZG4Q8		0.3500	-0.0249	-6.6%	0.2550	-0.0258	-9.2%



ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 950
Research Property - Turbidity

Report #048
Fall 2014

Research Property Target Value		
Target Value	0.37490	NTU
<i>For Test 950, CTS has chosen not to designate a target value for this property instead of using an average value.</i>		

Wines tested: SA93: Moscato; SA94: Moscato

Consensus Average
(may differ from target value) 0.37490 NTU 0.28081 NTU

This consensus average is based on 40 reporting participants.

Comments on assigned Data Flags

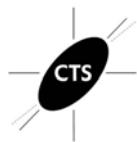
2QY4JA (X) - Data for both samples are high.

EGFWGF (X) - High data for Sample SA94.

JC242W (X) - Extreme data.

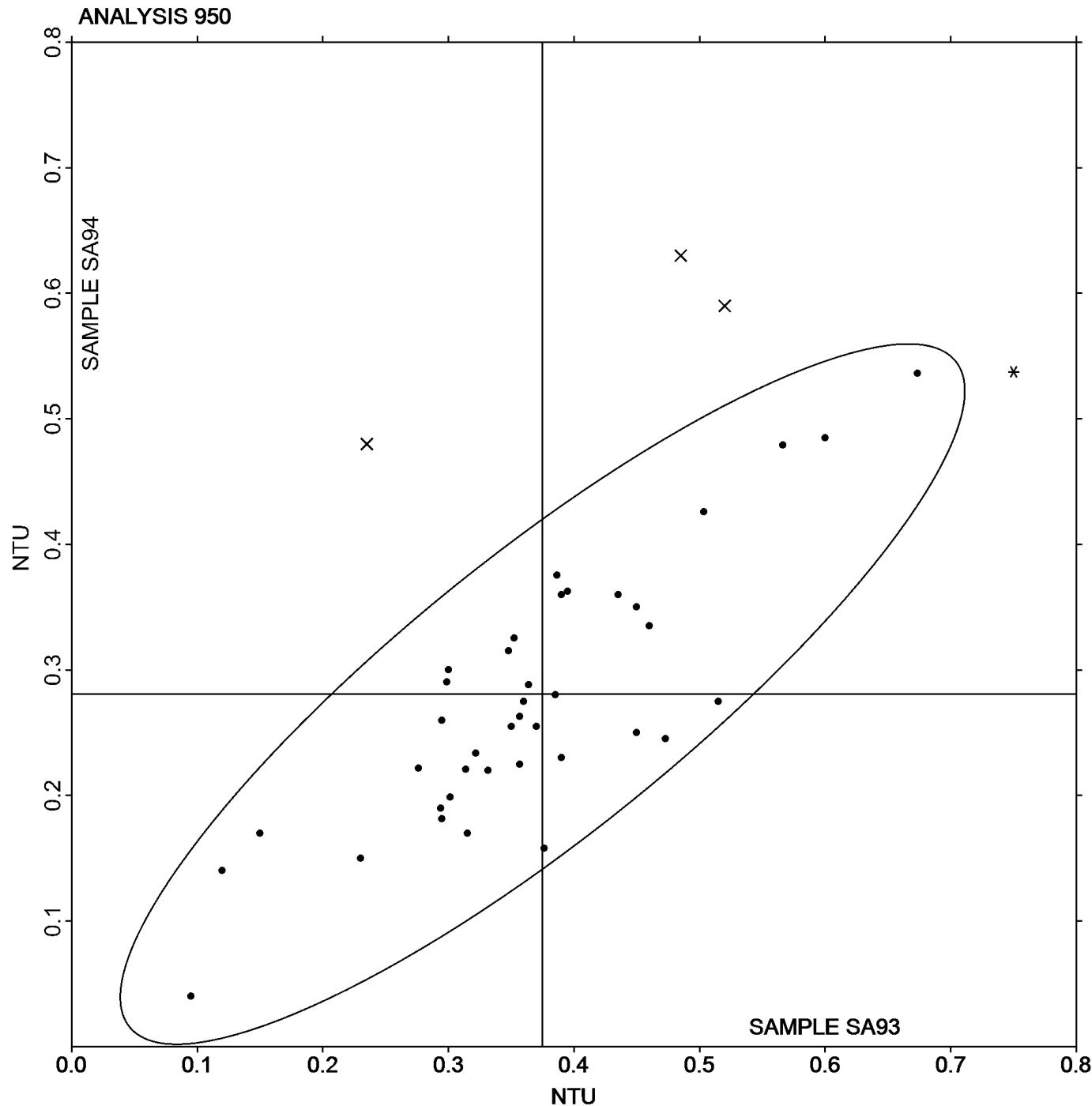
PXLU2M (X) - High Data for Sample SA94.

YEXQAD (X) - Inconsistent in testing between samples.



ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 950
Research Property - Turbidity

Report #048
Fall 2014





ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 951
Research Property: Methanol Content

Report #048
Fall 2014

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
2QY4JA	X	0.05	-85.23	-99.9%	0.06	-87.29	-99.9%
6QUMY9		83.00	-2.28	-2.7%	86.03	-1.32	-1.5%
AD92GA		98.80	13.52	15.9%	99.50	12.15	13.9%
EDC4KV		71.50	-13.78	-16.2%	76.50	-10.85	-12.4%
HAL3T6		77.00	-8.28	-9.7%	75.50	-11.85	-13.6%
JFYPRY		95.50	10.22	12.0%	88.50	1.15	1.3%
JGFTRK		77.00	-8.28	-9.7%	81.50	-5.85	-6.7%
TLW6TR		76.00	-9.28	-10.9%	78.00	-9.35	-10.7%
XAANT9		145.00	59.72	70.0%	142.50	55.15	63.1%
Z9QLXK		76.50	-8.78	-10.3%	77.00	-10.35	-11.8%
ZVKGXJ		52.50	-32.78	-38.4%	68.50	-18.85	-21.6%

Research Property Target Value

Target Value

85.280 mg/L

87.350 mg/L

For Test 951, CTS has chosen not to designate a target value for this property instead of using an average value.

Wines tested: SA93: Moscato; SA94: Moscato

Consensus Average
(may differ from target value)

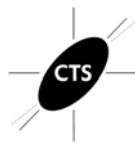
85.280 mg/L

87.353 mg/L

This consensus average is based on 10 reporting participants.

Comments on assigned Data Flags

2QY4JA (X) - Extreme data.



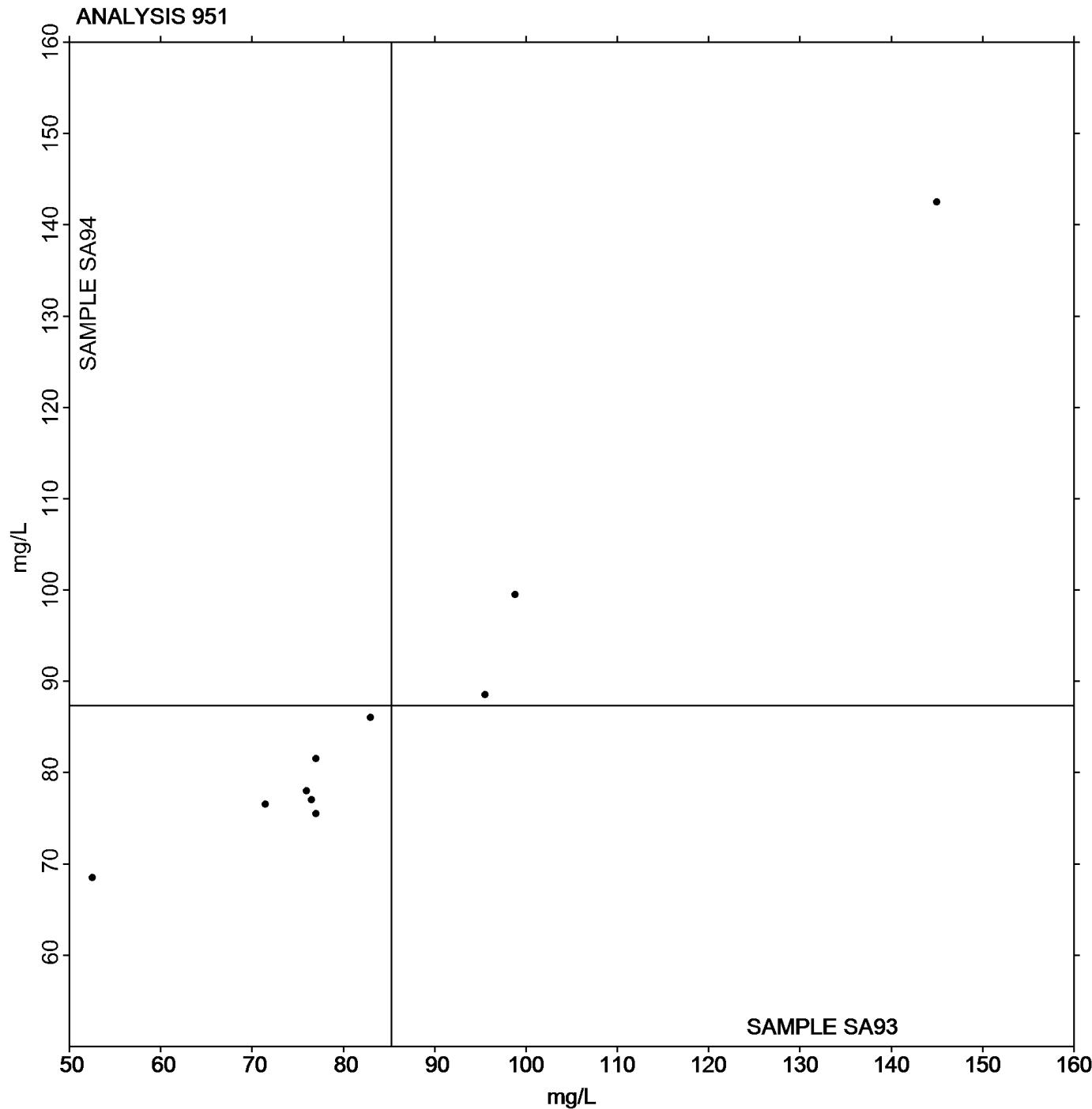
ASEV-CTS Wine Industry Interlaboratory Testing Program

Research Property 951

Research Property: Methanol Content

Report #048

Fall 2014



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



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 952

Report #048
Fall 2014

Research Property: Potassium Sorbate as Sorbic Acid

WebCode	Data Flag	Sample SA93			Sample SA94		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
228L8Y		150.5	-8.4	-0.31	151.5	-6.5	-0.25
48LBHJ		134.0	-24.9	-0.92	133.0	-25.0	-0.94
4W4NKC		180.0	21.1	0.79	172.0	14.0	0.52
68Y39F		147.0	-11.9	-0.44	142.5	-15.5	-0.58
6QUMY9		147.7	-11.2	-0.42	142.5	-15.5	-0.58
8E9BN8		161.0	2.1	0.08	150.5	-7.5	-0.28
98A4KR	*	242.0	83.1	3.09	231.0	73.0	2.74
AD92GA		158.2	-0.7	-0.02	145.7	-12.3	-0.46
EDC4KV		160.0	1.1	0.04	155.0	-3.0	-0.11
JFYPRY		107.5	-51.4	-1.91	123.0	-35.0	-1.32
JGFTRK		200.0	41.1	1.53	214.0	56.0	2.10
LFHY6Z		152.5	-6.4	-0.24	155.0	-3.0	-0.11
MHGU6E		150.0	-8.9	-0.33	150.0	-8.0	-0.30
TLW6TR		171.0	12.1	0.45	171.0	13.0	0.49
VNDGC7		158.8	-0.1	0.00	155.5	-2.6	-0.10
XAANT9		149.5	-9.4	-0.35	142.0	-16.0	-0.60
XVAVBD		124.0	-34.9	-1.30	120.0	-38.0	-1.43
Z8VZ7E		168.0	9.1	0.34	166.0	8.0	0.30
Z9QLXK		149.0	-9.9	-0.37	155.0	-3.0	-0.11
ZK4UNJ	*	160.3	1.4	0.05	188.3	30.2	1.13
ZVKGXJ		165.0	6.1	0.23	155.5	-2.5	-0.10



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 952

Report #048
Fall 2014

Research Property: Potassium Sorbate as Sorbic Acid

Research Property Target Value

Target Value	158.85	mg/L	158.04 mg/L
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For Test 952, CTS has chosen not to designate a target value for this property instead of using an average value.

Wines tested: SA93: Moscato; SA94: Moscato

Consensus Average (may differ from target value)	158.85	mg/L	158.04 mg/L
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This consensus average is based on 21 reporting participants.



Research Property: Potassium Sorbate as Sorbic Acid

