



Wine Industry Interlaboratory Program

Summary Report #051- Fall 2015

[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>
911	<u>Copper Content</u>
912	<u>Potassium Content</u>
915	<u>A420nm (1cm path)</u>
916	<u>A520nm (1cm path)</u>
950	<u>Research Property: Turbidity</u>
951	<u>Research Property: Methanol Content</u>
952	<u>Research: Ethanol by Dist. / Density Method</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 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 2015

Analysis 901

Ethanol (% of volume)

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TC4QC		12.63	0.06	1.04	12.64	0.07	1.00
2TQQZE		12.60	0.04	0.63	12.65	0.08	1.15
339UKH		12.68	0.11	1.85	12.70	0.12	1.80
3EPE6E		12.57	0.01	0.15	12.59	0.02	0.28
3JFNED		12.47	-0.09	-1.48	12.47	-0.11	-1.54
3K8WEG		12.54	-0.02	-0.34	12.57	0.00	-0.01
3T3M7H	*	12.74	0.17	2.82	12.75	0.18	2.60
3W7KGB		12.61	0.04	0.71	12.59	0.02	0.28
3YC3E8		12.63	0.07	1.12	12.63	0.05	0.79
4K87UJ		12.56	0.00	-0.02	12.57	-0.01	-0.09
62RCG4		12.54	-0.03	-0.42	12.59	0.01	0.20
6PFM38		12.58	0.02	0.31	12.58	0.01	0.13
73ZNX6		12.64	0.08	1.28	12.64	0.06	0.93
8637A7		12.53	-0.03	-0.50	12.56	-0.01	-0.16
8F8WD3		12.59	0.02	0.39	12.62	0.05	0.71
9DWC38		12.60	0.04	0.63	12.61	0.03	0.50
ABYK9C		12.44	-0.13	-2.04	12.46	-0.12	-1.68
AFXV2		12.53	-0.03	-0.50	12.50	-0.07	-1.03
BJCWZ4		12.58	0.01	0.23	12.57	0.00	-0.01
BK8CDZ		12.59	0.03	0.47	12.63	0.06	0.86
BPE3F7	X	12.40	-0.16	-2.61	12.50	-0.07	-1.03
C7G34Z		12.60	0.03	0.55	12.62	0.05	0.71
CAGDYZ		12.53	-0.03	-0.50	12.53	-0.04	-0.59
CZV7ZB		12.54	-0.02	-0.34	12.59	0.02	0.28
DQK6EA		12.55	-0.01	-0.18	12.56	-0.02	-0.23
E39TPZ		12.58	0.01	0.23	12.62	0.05	0.71



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Analysis 901

Ethanol (% of volume)

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ECZ4YV		12.55	-0.02	-0.26	12.55	-0.03	-0.38
FGBGGU		12.54	-0.02	-0.34	12.58	0.00	0.06
FL3LBX	X	12.50	-0.06	-0.99	12.40	-0.17	-2.48
FR6X7V		12.46	-0.10	-1.64	12.48	-0.09	-1.32
FR9HUX		12.58	0.02	0.31	12.58	0.00	0.06
FWL336		12.65	0.09	1.44	12.65	0.07	1.08
FYN2DX		12.58	0.02	0.31	12.62	0.04	0.64
G2A6LV		12.58	0.02	0.31	12.61	0.03	0.50
GC87YY		12.52	-0.05	-0.75	12.53	-0.04	-0.59
GG4UF7		12.53	-0.04	-0.58	12.54	-0.03	-0.45
GMPMQ7	*	12.40	-0.16	-2.61	12.40	-0.17	-2.48
HGW3ZV		12.62	0.05	0.88	12.63	0.05	0.79
HMMCBT		12.45	-0.12	-1.88	12.44	-0.13	-1.90
JJ4G82	X	12.48	-0.08	-1.31	12.59	0.02	0.28
JZMM9Y		12.56	-0.01	-0.10	12.56	-0.01	-0.16
K3C7X4		12.56	-0.01	-0.10	12.56	-0.01	-0.16
KDCUP2	X	13.45	0.89	14.41	13.55	0.98	14.22
KMXXWZ		12.61	0.05	0.79	12.61	0.03	0.50
KXH6WP		12.50	-0.06	-0.99	12.50	-0.07	-1.03
L4GDD2		12.63	0.06	1.04	12.64	0.07	1.00
LD7YJZ		12.55	-0.02	-0.26	12.50	-0.07	-1.03
LEMVBY	*	12.57	0.01	0.15	12.52	-0.05	-0.74
MKMUYU	*	12.45	-0.11	-1.80	12.41	-0.16	-2.30
MTDF6T		12.55	-0.02	-0.26	12.58	0.00	0.06
N96D8M		12.62	0.05	0.88	12.62	0.05	0.71
NPBWHK		12.54	-0.02	-0.34	12.58	0.01	0.13



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 901

Ethanol (% of volume)

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NPUK3Z		12.59	0.02	0.39	12.59	0.02	0.28
NVEPQU		12.50	-0.06	-0.99	12.50	-0.07	-1.03
P66LCV		12.50	-0.06	-0.99	12.50	-0.07	-1.03
PZBREU		12.53	-0.03	-0.50	12.54	-0.03	-0.45
Q8794Q	X	12.45	-0.11	-1.80	12.55	-0.03	-0.38
QQEB3V		12.63	0.07	1.12	12.68	0.10	1.51
QUEMXV		12.58	0.02	0.31	12.59	0.01	0.20
RV8VJK		12.47	-0.09	-1.48	12.45	-0.12	-1.76
TA68RN		12.53	-0.03	-0.50	12.55	-0.02	-0.30
TQDXUT		12.57	0.00	0.06	12.56	-0.02	-0.23
TZELLQ		12.54	-0.03	-0.42	12.50	-0.07	-1.03
UPCMDG		12.58	0.02	0.31	12.61	0.03	0.50
UQMM9P		12.60	0.04	0.63	12.61	0.04	0.57
UZ9QFP	X	12.85	0.29	4.68	13.05	0.48	6.96
VF73NT		12.57	0.00	0.06	12.55	-0.02	-0.30
VGf82H		12.57	0.01	0.15	12.60	0.03	0.42
WDWCYP		12.56	0.00	-0.02	12.58	0.01	0.13
XFXW2F		12.61	0.04	0.71	12.64	0.07	1.00
XQCU7J	*	12.40	-0.17	-2.69	12.41	-0.17	-2.41
YHGEUK		12.60	0.04	0.63	12.60	0.03	0.42
YZWK7G		12.61	0.05	0.79	12.64	0.07	1.00
ZGYKUB		12.67	0.10	1.69	12.67	0.10	1.44
ZPVER9		12.59	0.03	0.47	12.61	0.03	0.50



Grand Means		Summary Statistics	
	12.561 percent		12.571 percent
Std Dev Btwn Labs			
	0.062 percent		0.069 percent
Statistics based on 69 of 75 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay

Comments on assigned Data Flags

BPE3F7 (X) - Inconsistent in testing between samples.

FL3LBX (X) - Inconsistent in testing between samples.

JJ4G82 (X) - Inconsistent in testing between samples.

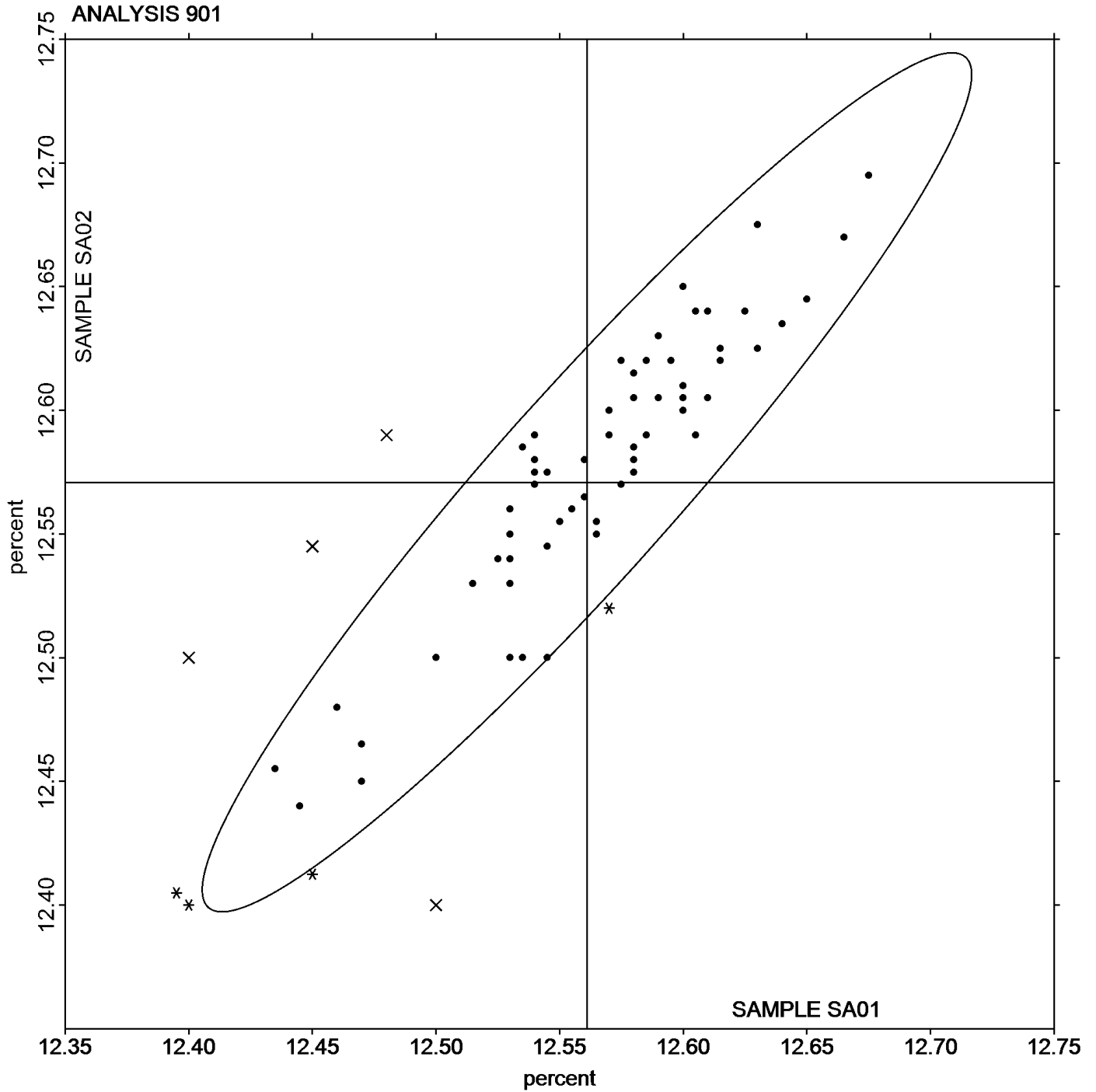
KDCUP2 (X) - Data for both samples are high.

Q8794Q (X) - Inconsistent in testing between samples.

UZ9QFP (X) - Data for both samples are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	12.67	0.00	0.10	12.67	0.00	0.10	1	1
Ebulliometer Method	12.50	0.00	-0.06	12.50	0.00	-0.07	1	3
Gas Chromatography Method	12.60	0.04	0.04	12.65	0.04	0.08	2	2
Near Infrared Method	12.57	0.05	0.01	12.58	0.06	0.01	47	51
Dist. / Density Method	12.55	0.04	-0.01	12.58	0.05	0.01	5	9
FTIR	12.55	0.05	-0.02	12.55	0.05	-0.02	8	9





ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 902
Total Sulfur Dioxide

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Fall 2015

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TC4QC	X	128.50	36.53	5.13	137.50	40.07	5.38
2TQQZE		96.00	4.03	0.57	96.00	-1.43	-0.19
339UKH		91.50	-0.47	-0.07	92.50	-4.93	-0.66
3EPE6E		94.00	2.03	0.29	101.00	3.57	0.48
3JFNED		101.50	9.53	1.34	108.00	10.57	1.42
3K8WEG		99.50	7.53	1.06	103.50	6.07	0.81
3T3M7H		96.50	4.53	0.64	102.00	4.57	0.61
3W7KGB		89.00	-2.97	-0.42	101.00	3.57	0.48
3YC3E8		94.50	2.53	0.36	94.50	-2.93	-0.39
4K87UJ		91.50	-0.47	-0.07	96.50	-0.93	-0.12
62RCG4		78.88	-13.09	-1.84	90.61	-6.82	-0.92
6PFM38		88.00	-3.97	-0.56	93.00	-4.43	-0.59
73ZNX6		99.50	7.53	1.06	104.50	7.07	0.95
8637A7		94.00	2.03	0.29	101.00	3.57	0.48
8F8WD3		94.00	2.03	0.29	99.00	1.57	0.21
9DWC38		99.00	7.03	0.99	96.50	-0.93	-0.12
9KV2KB	*	73.00	-18.97	-2.67	83.00	-14.43	-1.94
ABYK9C		86.50	-5.47	-0.77	101.00	3.57	0.48
AFXV2		91.50	-0.47	-0.07	97.00	-0.43	-0.06
BJCWZ4		87.50	-4.47	-0.63	93.50	-3.93	-0.53
BK8CDZ		97.50	5.53	0.78	103.50	6.07	0.81
BPE3F7		99.00	7.03	0.99	96.50	-0.93	-0.12
C7G34Z		85.50	-6.47	-0.91	98.50	1.07	0.14
CAGDYZ		88.50	-3.47	-0.49	96.50	-0.93	-0.12
CZV7ZB		93.00	1.03	0.15	97.00	-0.43	-0.06
DQK6EA		101.50	9.53	1.34	100.00	2.57	0.34



Total Sulfur Dioxide

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
E39TPZ		101.00	9.03	1.27	109.00	11.57	1.55
ECZ4YV		88.00	-3.97	-0.56	98.00	0.57	0.08
FGBGGU		80.00	-11.97	-1.68	88.00	-9.43	-1.27
FL3LBX		91.00	-0.97	-0.14	101.50	4.07	0.55
FR6X7V		97.00	5.03	0.71	104.50	7.07	0.95
FR9HUX		90.50	-1.47	-0.21	90.00	-7.43	-1.00
FWL336		98.65	6.68	0.94	106.75	9.32	1.25
FYN2DX		90.00	-1.97	-0.28	95.50	-1.93	-0.26
G2A6LV		92.50	0.53	0.07	98.00	0.57	0.08
GC87YY		95.00	3.03	0.43	92.00	-5.43	-0.73
GG4UF7		97.00	5.03	0.71	108.00	10.57	1.42
GMPMQ7		84.00	-7.97	-1.12	83.00	-14.43	-1.94
HGW3ZV	*	102.50	10.53	1.48	118.00	20.57	2.76
HMMCBT		101.50	9.53	1.34	107.50	10.07	1.35
J4LX4Y	X	180.50	88.53	12.44	178.50	81.07	10.88
JJ4G82		100.50	8.53	1.20	94.50	-2.93	-0.39
JZMM9Y		81.00	-10.97	-1.54	82.50	-14.93	-2.00
K3C7X4		94.00	2.03	0.29	104.50	7.07	0.95
KDCUP2		93.50	1.53	0.22	97.00	-0.43	-0.06
KXH6WP	X	67.00	-24.97	-3.51	69.00	-28.43	-3.81
L4GDD2		79.50	-12.47	-1.75	79.50	-17.93	-2.41
LD7YJZ		93.00	1.03	0.15	99.00	1.57	0.21
LEMVBY		95.00	3.03	0.43	110.50	13.07	1.75
MKMUYU		89.50	-2.47	-0.35	100.00	2.57	0.34
MTDF6T		97.50	5.53	0.78	105.00	7.57	1.02
N96D8M		87.50	-4.47	-0.63	100.50	3.07	0.41

**ASEV-CTS Wine Industry Interlaboratory Testing Program****Report #051****Analysis 902****Fall 2015****Total Sulfur Dioxide**

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NPBWHK		84.00	-7.97	-1.12	88.00	-9.43	-1.27
NPUK3Z	*	103.50	11.53	1.62	96.00	-1.43	-0.19
NVEPQU		88.00	-3.97	-0.56	94.50	-2.93	-0.39
P66LCV		100.00	8.03	1.13	96.50	-0.93	-0.12
PZBREU		85.00	-6.97	-0.98	94.00	-3.43	-0.46
Q8794Q		79.00	-12.97	-1.82	89.00	-8.43	-1.13
QQEB3V		92.00	0.03	0.00	96.00	-1.43	-0.19
QUEMXV		83.00	-8.97	-1.26	91.00	-6.43	-0.86
RV8VJK		81.50	-10.47	-1.47	88.50	-8.93	-1.20
TA68RN		91.00	-0.97	-0.14	90.00	-7.43	-1.00
TQDXUT		91.50	-0.47	-0.07	95.00	-2.43	-0.33
TZELLQ		84.80	-7.17	-1.01	90.30	-7.13	-0.96
UPCMDG		94.00	2.03	0.29	103.00	5.57	0.75
UQMM9P	*	111.50	19.53	2.74	118.00	20.57	2.76
UZ9QFP		81.00	-10.97	-1.54	91.00	-6.43	-0.86
VF73NT		93.00	1.03	0.15	100.00	2.57	0.34
VGf82H		92.50	0.53	0.07	99.50	2.07	0.28
WDWCYP		95.50	3.53	0.50	100.50	3.07	0.41
XFXW2F		91.00	-0.97	-0.14	86.00	-11.43	-1.53
XQCU7J		93.50	1.53	0.22	97.00	-0.43	-0.06
YHGEUK		100.00	8.03	1.13	103.00	5.57	0.75
YZWK7G		95.23	3.26	0.46	101.65	4.22	0.57
ZGYKUB		80.50	-11.47	-1.61	88.50	-8.93	-1.20
ZPVER9		92.00	0.03	0.00	96.50	-0.93	-0.12



Total Sulfur Dioxide

Grand Means	Summary Statistics
91.967 mg/L	97.429 mg/L
Std Dev Btwn Labs	
7.117 mg/L	7.454 mg/L
Statistics based on 73 of 76 reporting participants	

Wines tested: SA01: Chardonnay; SA02: Chardonnay

Comments on assigned Data Flags

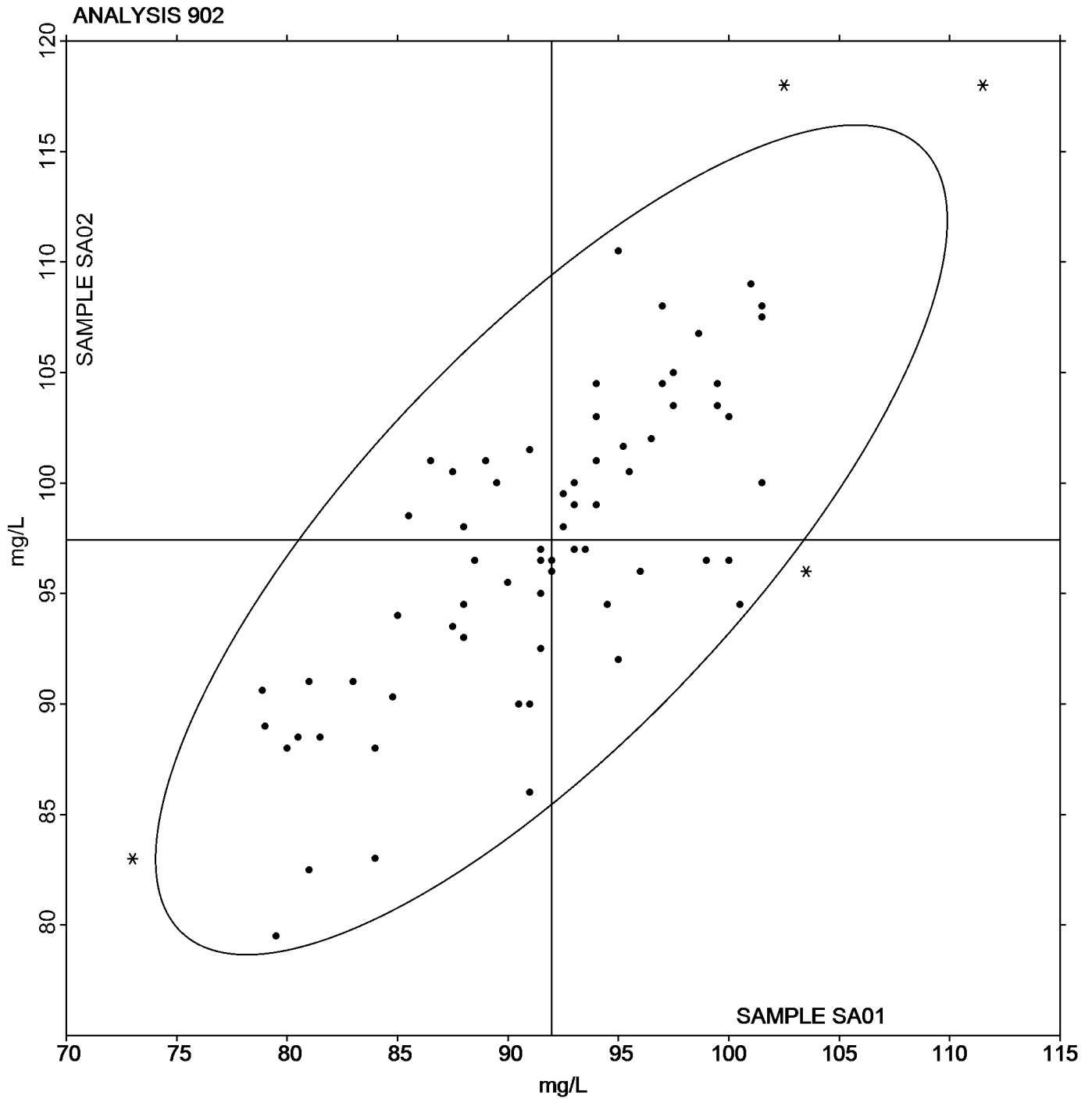
2TC4QC (X) - Data for both samples are high.

J4LX4Y (X) - Data for both samples are high.

KXH6WP (X) - Data for both samples are low. Possible Systematic Error.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	88.00	0.00	-3.97	93.00	0.00	-4.43	1	1
Ripper Method	90.35	6.14	-1.62	95.67	5.46	-1.76	32	34
Aeration Oxidation (AO) Method	91.48	5.45	-0.48	96.38	5.55	-1.05	15	15
Segmented Flow Analyzer	93.00	8.45	1.03	97.88	5.33	0.45	4	5
Enzymatic Method	94.00	6.60	2.03	99.75	9.54	2.32	4	6
Colormetric Analyzer	86.75	6.51	-5.22	91.38	9.33	-6.05	4	5
FTIR	99.25	3.18	7.28	108.00	0.00	10.57	2	2
Flow Injection Analysis	96.88	3.84	4.91	103.61	5.39	6.18	7	8



**ASEV-CTS Wine Industry Interlaboratory Testing Program****Report #051****Analysis 903****Fall 2015****Free Sulfur Dioxide**

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TC4QC		33.00	3.84	1.38	34.50	1.84	0.53
2TQQZE		32.00	2.84	1.02	35.20	2.54	0.73
339UKH		28.50	-0.66	-0.24	36.00	3.34	0.95
3EPE6E		29.00	-0.16	-0.06	34.00	1.34	0.38
3JFNED		29.65	0.49	0.18	33.85	1.19	0.34
3K8WEG		28.50	-0.66	-0.24	38.50	5.84	1.67
3T3M7H		23.50	-5.66	-2.04	31.50	-1.16	-0.33
3W7KGB		29.50	0.34	0.12	35.50	2.84	0.81
3YC3E8		33.00	3.84	1.38	35.00	2.34	0.67
4K87UJ		27.00	-2.16	-0.78	30.50	-2.16	-0.62
62RCG4		30.83	1.67	0.60	33.75	1.09	0.31
6PFM38		30.00	0.84	0.30	33.00	0.34	0.10
73ZNX6	*	31.50	2.34	0.84	26.50	-6.16	-1.76
8637A7		30.00	0.84	0.30	35.50	2.84	0.81
8F8WD3		31.00	1.84	0.66	34.50	1.84	0.53
8NYC37		27.00	-2.16	-0.78	27.00	-5.66	-1.62
9DWC38		32.50	3.34	1.20	30.00	-2.66	-0.76
9KV2KB		27.50	-1.66	-0.60	30.50	-2.16	-0.62
ABYK9C		27.00	-2.16	-0.78	33.00	0.34	0.10
AFXV2		28.50	-0.66	-0.24	35.50	2.84	0.81
BJCWZ4		29.00	-0.16	-0.06	33.50	0.84	0.24
BK8CDZ		23.50	-5.66	-2.04	26.00	-6.66	-1.91
C7G34Z		25.00	-4.16	-1.50	30.00	-2.66	-0.76
CAGDYZ		25.00	-4.16	-1.50	30.00	-2.66	-0.76
CZV7ZB		27.00	-2.16	-0.78	26.00	-6.66	-1.91
DQK6EA		29.50	0.34	0.12	27.00	-5.66	-1.62



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

Report #051
Fall 2015

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
E39TPZ		31.00	1.84	0.66	35.00	2.34	0.67
ECZ4YV		25.00	-4.16	-1.50	31.50	-1.16	-0.33
FGBGGU		28.50	-0.66	-0.24	33.50	0.84	0.24
FL3LBX		28.00	-1.16	-0.42	32.00	-0.66	-0.19
FR6X7V		29.50	0.34	0.12	33.00	0.34	0.10
FR9HUX		32.50	3.34	1.20	38.00	5.34	1.53
FWL336		31.15	1.99	0.72	37.00	4.34	1.24
FYN2DX		28.00	-1.16	-0.42	33.50	0.84	0.24
G2A6LV		30.50	1.34	0.48	33.50	0.84	0.24
GC87YY		26.90	-2.26	-0.81	29.35	-3.31	-0.95
GG4UF7		30.00	0.84	0.30	35.00	2.34	0.67
HGW3ZV		29.00	-0.16	-0.06	37.50	4.84	1.38
HMMCBT		27.00	-2.16	-0.78	28.00	-4.66	-1.33
J4LX4Y	*	35.50	6.34	2.28	33.50	0.84	0.24
JJ4G82		27.00	-2.16	-0.78	26.00	-6.66	-1.91
JZMM9Y		29.00	-0.16	-0.06	30.50	-2.16	-0.62
K3C7X4		30.00	0.84	0.30	35.00	2.34	0.67
KDCUP2		30.50	1.34	0.48	31.50	-1.16	-0.33
KMXXWZ		28.50	-0.66	-0.24	37.00	4.34	1.24
KXH6WP	*	22.00	-7.16	-2.58	27.00	-5.66	-1.62
L4GDD2		28.50	-0.66	-0.24	32.00	-0.66	-0.19
LD7YJZ		29.50	0.34	0.12	34.00	1.34	0.38
LEMVBY		24.50	-4.66	-1.68	33.00	0.34	0.10
MKMUYU		32.00	2.84	1.02	37.00	4.34	1.24
MTDF6T	*	35.50	6.34	2.28	41.50	8.84	2.53
N96D8M	X	17.85	-11.31	-4.07	34.70	2.04	0.58



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Fall 2015

Free Sulfur Dioxide

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NMQTAM		27.20	-1.96	-0.71	29.60	-3.06	-0.88
NPBWHK		28.00	-1.16	-0.42	33.00	0.34	0.10
NPUK3Z		26.50	-2.66	-0.96	24.50	-8.16	-2.34
NVEPQU		30.00	0.84	0.30	35.00	2.34	0.67
P66LCV		33.00	3.84	1.38	29.50	-3.16	-0.91
PZBREU		28.50	-0.66	-0.24	31.00	-1.66	-0.48
Q8794Q		24.00	-5.16	-1.86	30.50	-2.16	-0.62
QQEB3V		28.00	-1.16	-0.42	29.00	-3.66	-1.05
QUEMXV		27.00	-2.16	-0.78	32.50	-0.16	-0.05
RV8VJK		29.50	0.34	0.12	34.00	1.34	0.38
TA68RN		32.00	2.84	1.02	33.00	0.34	0.10
TQDXUT		28.50	-0.66	-0.24	34.00	1.34	0.38
TZELLQ		30.50	1.34	0.48	37.00	4.34	1.24
UPCMDG		27.50	-1.66	-0.60	28.50	-4.16	-1.19
UQMM9P		26.00	-3.16	-1.14	31.00	-1.66	-0.48
UZ9QFP		30.50	1.34	0.48	37.00	4.34	1.24
VF73NT		30.00	0.84	0.30	35.00	2.34	0.67
VGF82H		30.50	1.34	0.48	33.00	0.34	0.10
WDWCYP		31.00	1.84	0.66	33.50	0.84	0.24
XFXW2F		28.00	-1.16	-0.42	27.50	-5.16	-1.48
XQCU7J		33.00	3.84	1.38	33.00	0.34	0.10
YHGEUK		34.50	5.34	1.92	35.50	2.84	0.81
YZWK7G		34.24	5.08	1.83	39.59	6.93	1.98
ZGYKUB	X	19.00	-10.16	-3.66	24.50	-8.16	-2.34
ZPVER9		31.00	1.84	0.66	32.50	-0.16	-0.05



Free Sulfur Dioxide

Grand Means		Summary Statistics	
	29.160 mg/L		32.665 mg/L
Std Dev Btwn Labs			
	2.776 mg/L		3.496 mg/L
Statistics based on 75 of 77 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay

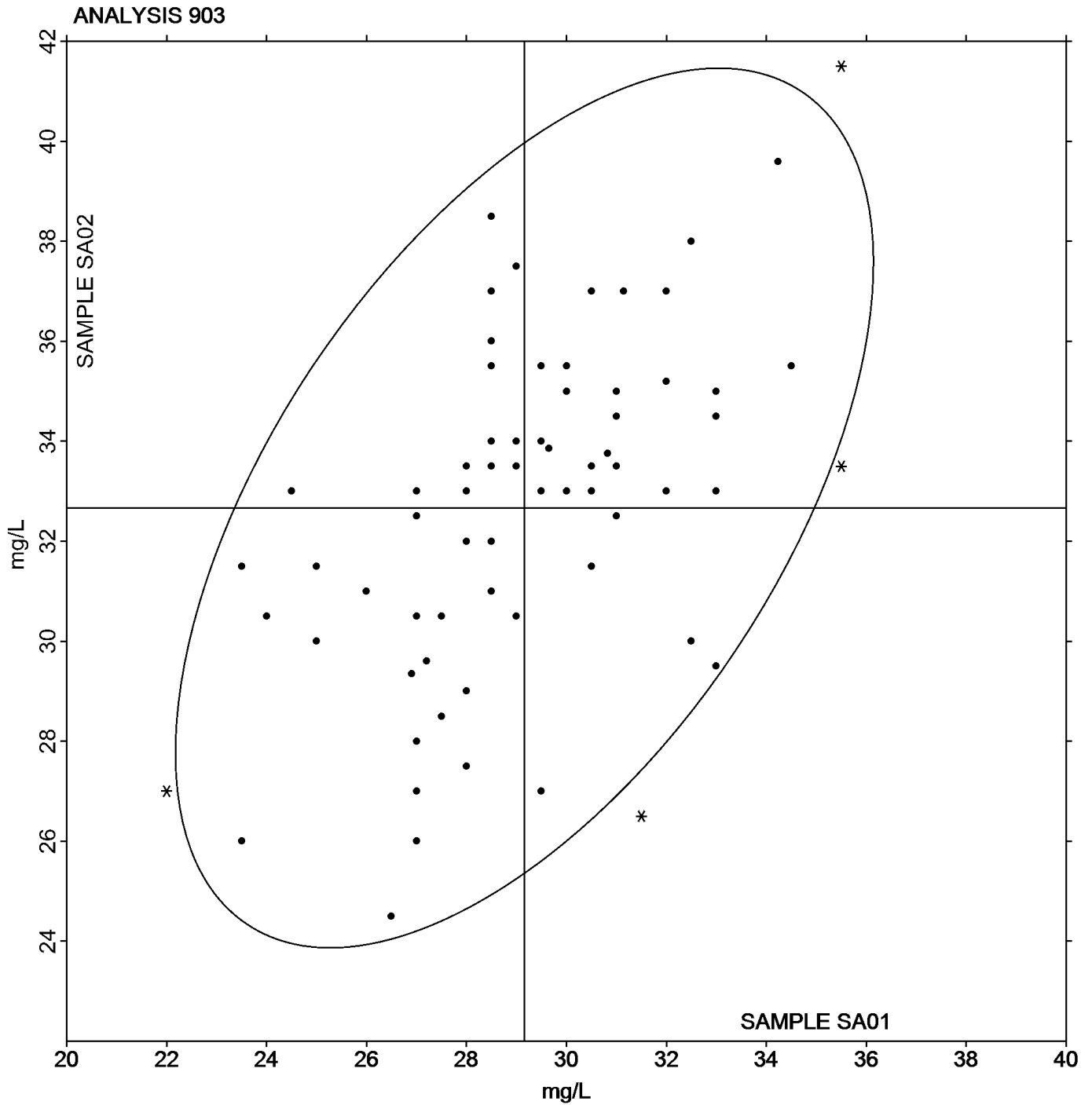
Comments on assigned Data Flags

N96D8M (X) - Low Data for Sample SA01.

ZGYKUB (X) - Low data for Sample SA01.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	30.00	0.00	0.84	33.00	0.00	0.34	1	1
Ripper Method	29.21	1.72	0.05	34.01	2.21	1.35	18	21
Aeration Oxidation (AO) Method	28.77	2.83	-0.39	31.52	3.49	-1.14	31	34
Segmented Flow Analyzer	30.50	3.14	1.34	34.00	3.00	1.34	5	5
Colorimetric Analyzer	30.25	1.55	1.09	34.38	3.09	1.71	4	4
Flow Injection Analysis	28.17	2.69	-0.99	32.25	3.95	-0.41	10	10
FTIR	29.83	0.25	0.67	34.43	0.81	1.76	2	2





Titratable Acidity

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TC4QC		4.850	-0.055	-0.40	4.800	-0.108	-0.69
2TQQZE		4.950	0.045	0.33	4.950	0.042	0.27
339UKH	X	6.035	1.130	8.29	5.845	0.937	5.99
3EPE6E		4.735	-0.170	-1.24	4.655	-0.253	-1.62
3JFNED		4.680	-0.225	-1.65	4.630	-0.278	-1.78
3K8WEG		5.025	0.120	0.88	5.025	0.117	0.75
3T3M7H		4.855	-0.050	-0.36	4.815	-0.093	-0.59
3W7KGB		4.950	0.045	0.33	5.000	0.092	0.59
3YC3E8		5.000	0.095	0.70	4.950	0.042	0.27
4K87UJ		4.915	0.010	0.08	4.880	-0.028	-0.18
62RCG4		4.725	-0.180	-1.32	4.610	-0.298	-1.91
73ZNX6	*	4.500	-0.405	-2.97	4.500	-0.408	-2.61
8637A7		4.950	0.045	0.33	5.020	0.112	0.72
8F8WD3		4.850	-0.055	-0.40	4.900	-0.008	-0.05
8NYC37		4.750	-0.155	-1.13	4.750	-0.158	-1.01
9DWC38		4.930	0.025	0.19	4.925	0.017	0.11
9KV2KB		5.035	0.130	0.96	5.135	0.227	1.45
ABYK9C		4.900	-0.005	-0.03	5.000	0.092	0.59
AFXV2	X	5.865	0.960	7.04	5.430	0.522	3.34
BJCWZ4		4.800	-0.105	-0.77	4.900	-0.008	-0.05
BK8CDZ		4.845	-0.060	-0.44	4.795	-0.113	-0.72
BPE3F7		5.000	0.095	0.70	5.000	0.092	0.59
C7G34Z		4.915	0.010	0.08	4.925	0.017	0.11
CAGDYZ		4.900	-0.005	-0.03	4.900	-0.008	-0.05
CZV7ZB		5.005	0.100	0.74	5.010	0.102	0.65
DQK6EA		4.850	-0.055	-0.40	4.800	-0.108	-0.69



Titratable Acidity

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
E39TPZ		4.935	0.030	0.22	4.975	0.067	0.43
ECZ4YV		5.000	0.095	0.70	4.950	0.042	0.27
FGBGGU		4.970	0.065	0.48	4.970	0.062	0.40
FL3LBX	X	4.830	-0.075	-0.55	4.640	-0.268	-1.71
FR6X7V		5.020	0.115	0.85	5.060	0.152	0.97
FR9HUX	X	4.700	-0.205	-1.50	4.890	-0.018	-0.12
FWL336		5.100	0.195	1.43	5.100	0.192	1.23
FYN2DX		4.800	-0.105	-0.77	4.800	-0.108	-0.69
GG4UF7		5.110	0.205	1.51	5.110	0.202	1.29
GMPMQ7		4.850	-0.055	-0.40	4.900	-0.008	-0.05
HGW3ZV		5.000	0.095	0.70	5.000	0.092	0.59
HMMCBT		4.850	-0.055	-0.40	4.850	-0.058	-0.37
J4LX4Y	X	6.930	2.025	14.85	6.985	2.077	13.28
JJ4G82		4.850	-0.055	-0.40	4.865	-0.043	-0.28
JZMM9Y		4.850	-0.055	-0.40	4.850	-0.058	-0.37
K3C7X4		4.870	-0.035	-0.25	4.875	-0.033	-0.21
KDCUP2		4.845	-0.060	-0.44	4.880	-0.028	-0.18
KMXXWZ		4.805	-0.100	-0.73	4.840	-0.068	-0.44
KXH6WP		5.000	0.095	0.70	5.000	0.092	0.59
L4GDD2		4.915	0.010	0.08	4.955	0.047	0.30
LD7YJZ		4.860	-0.045	-0.33	4.885	-0.023	-0.15
LEMVBY		4.800	-0.105	-0.77	4.800	-0.108	-0.69
MKMUYU		5.045	0.140	1.03	4.945	0.037	0.24
MTDF6T		4.950	0.045	0.33	4.850	-0.058	-0.37
N96D8M		5.180	0.275	2.02	5.250	0.342	2.19
NMQTAM		4.875	-0.030	-0.22	4.850	-0.058	-0.37



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 904

Titrateable Acidity

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NPBWHK		5.100	0.195	1.43	5.100	0.192	1.23
NPUK3Z		4.795	-0.110	-0.80	4.785	-0.123	-0.79
NVEPQU		4.960	0.055	0.41	5.000	0.092	0.59
P66LCV		4.600	-0.305	-2.23	4.600	-0.308	-1.97
PZBREU	*	4.950	0.045	0.33	4.800	-0.108	-0.69
Q8794Q	*	5.150	0.245	1.80	5.300	0.392	2.51
QQEB3V		4.900	-0.005	-0.03	4.900	-0.008	-0.05
QUEMXV		5.145	0.240	1.76	5.145	0.237	1.52
RV8VJK	X	5.650	0.745	5.46	5.535	0.627	4.01
TA68RN		5.040	0.135	0.99	5.050	0.142	0.91
TQDXUT		4.750	-0.155	-1.13	4.750	-0.158	-1.01
TZELLQ		5.000	0.095	0.70	5.000	0.092	0.59
UPCMDG		4.940	0.035	0.26	4.950	0.042	0.27
UQMM9P		5.000	0.095	0.70	5.000	0.092	0.59
UZ9QFP		5.130	0.225	1.65	5.140	0.232	1.48
VF73NT		4.800	-0.105	-0.77	4.800	-0.108	-0.69
VGf82H		4.890	-0.015	-0.11	4.895	-0.013	-0.08
WDWCYP	X	4.900	-0.005	-0.03	34.600	29.692	189.86
XFXW2F		4.900	-0.005	-0.03	4.800	-0.108	-0.69
XQCU7J		4.800	-0.105	-0.77	4.800	-0.108	-0.69
YHGEUK		4.800	-0.105	-0.77	4.850	-0.058	-0.37
YZWK7G	*	4.500	-0.405	-2.97	4.500	-0.408	-2.61
ZGYKUB		4.840	-0.065	-0.47	4.860	-0.048	-0.31
ZPVER9	*	5.040	0.135	0.99	5.195	0.287	1.83



Titratable Acidity

Grand Means	Summary Statistics	
4.9047 g/L as tartaric acid	4.9080 g/L as tartaric acid	4.9080 g/L as tartaric acid
Std Dev Btwn Labs	0.1364 g/L as tartaric acid	0.1564 g/L as tartaric acid
Statistics based on 69 of 76 reporting participants		

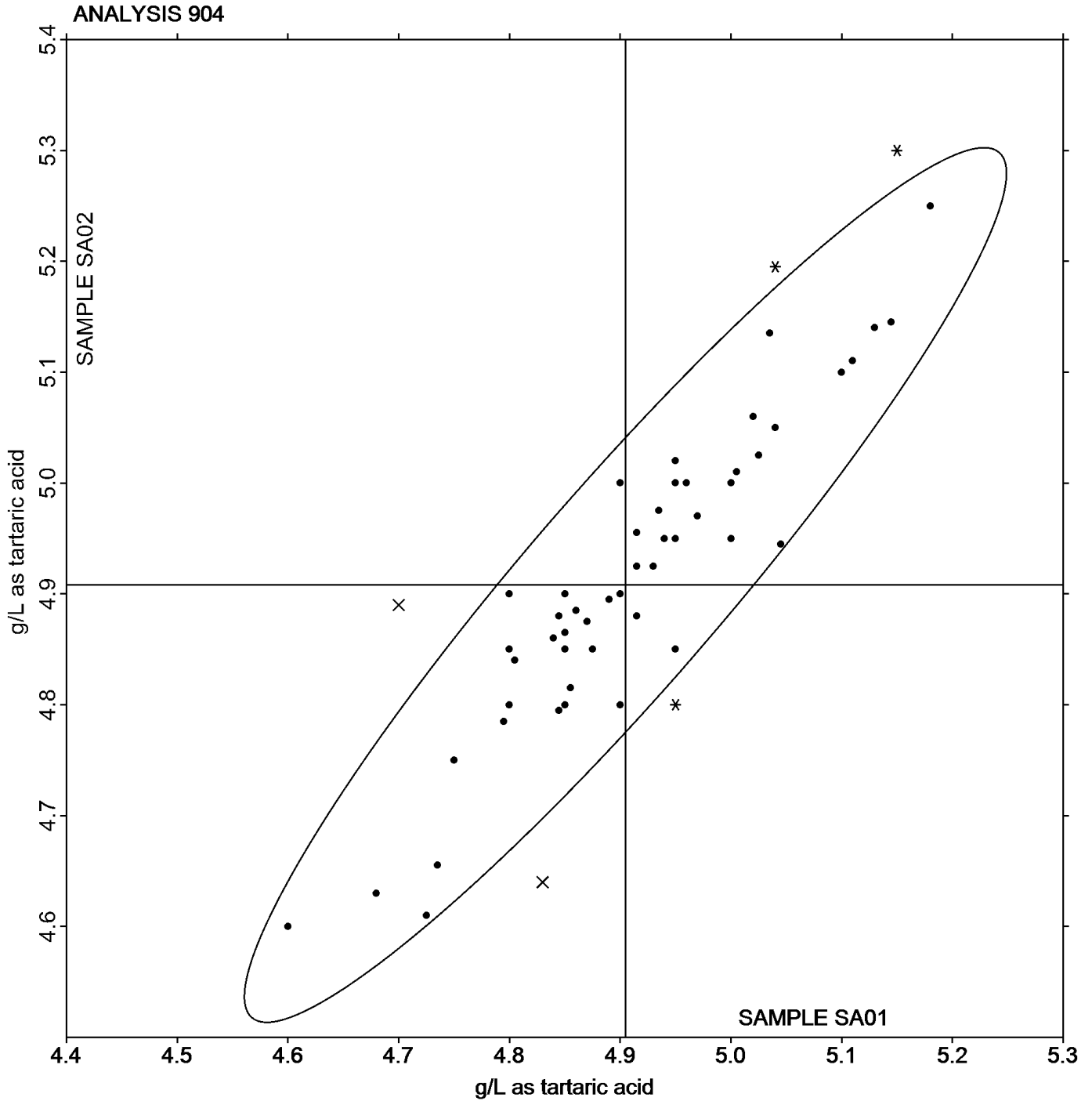
Wines tested: SA01: Chardonnay; SA02: Chardonnay

Comments on assigned Data Flags

- 339UKH (X) - Data for both samples are high.
- AFXV2 (X) - Data for both samples are high.
- FL3LBX (X) - Inconsistent in testing between samples.
- FR9HUX (X) - Inconsistent in testing between samples. Data for Sample SA01 are high.
- J4LX4Y (X) - Data for both samples are high.
- RV8VJK (X) - Data for both samples are high.
- WDWCYP (X) - Inconsistent in testing between samples. Extreme Data for Sample SA02.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method	4.900	0.085	-0.005	4.930	0.099	0.022	2	2
Autotitration	4.898	0.087	-0.007	4.900	0.100	-0.008	39	45
Manual Titration	4.940	0.146	0.035	4.942	0.172	0.034	14	20
FTIR	4.963	0.143	0.058	4.951	0.161	0.043	8	8
Segmented Flow Analyzer	4.600	0.000	-0.305	4.600	0.000	-0.308	1	1





ASEV-CTS Wine Industry Interlaboratory Testing Program
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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TC4QC	*	0.4000	0.0177	0.43	0.4450	0.0637	1.59
2TQQZE	*	0.2775	-0.1048	-2.55	0.2770	-0.1043	-2.60
339UKH	X	0.6450	0.2627	6.39	0.6675	0.2862	7.13
3EPE6E		0.3500	-0.0323	-0.78	0.3500	-0.0313	-0.78
3JFNED		0.3800	-0.0023	-0.06	0.3850	0.0037	0.09
3K8WEG		0.4150	0.0327	0.80	0.4250	0.0437	1.09
3T3M7H		0.3550	-0.0273	-0.66	0.3550	-0.0263	-0.66
3W7KGB		0.4100	0.0277	0.67	0.4000	0.0187	0.46
3YC3E8	*	0.4450	0.0627	1.52	0.4800	0.0987	2.46
4K87UJ		0.3800	-0.0023	-0.06	0.4050	0.0237	0.59
6PFM38		0.3700	-0.0123	-0.30	0.3700	-0.0113	-0.28
73ZNX6		0.4250	0.0427	1.04	0.4350	0.0537	1.34
8637A7		0.3800	-0.0023	-0.06	0.3650	-0.0163	-0.41
8F8WD3		0.4450	0.0627	1.52	0.4300	0.0487	1.21
8NYC37		0.3550	-0.0273	-0.66	0.3450	-0.0363	-0.90
9DWC38		0.3750	-0.0073	-0.18	0.3650	-0.0163	-0.41
ABYK9C		0.3350	-0.0473	-1.15	0.3200	-0.0613	-1.53
AFXV2	*	0.4300	0.0477	1.16	0.3750	-0.0063	-0.16
BJCWZ4		0.3700	-0.0123	-0.30	0.3700	-0.0113	-0.28
BK8CDZ		0.3750	-0.0073	-0.18	0.3500	-0.0313	-0.78
BPE3F7	*	0.4500	0.0677	1.65	0.4000	0.0187	0.46
C7G34Z		0.3500	-0.0323	-0.78	0.3550	-0.0263	-0.66
CAGDYZ		0.4150	0.0327	0.80	0.3750	-0.0063	-0.16
CZV7ZB		0.4050	0.0227	0.55	0.3910	0.0097	0.24
DQK6EA		0.4450	0.0627	1.52	0.4600	0.0787	1.96
ECZ4YV		0.3350	-0.0473	-1.15	0.3550	-0.0263	-0.66



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

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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FGBGGU		0.3900	0.0077	0.19	0.3900	0.0087	0.22
FL3LBX		0.3250	-0.0573	-1.39	0.3550	-0.0263	-0.66
FR6X7V		0.3500	-0.0323	-0.78	0.3450	-0.0363	-0.90
FR9HUX		0.3550	-0.0273	-0.66	0.3450	-0.0363	-0.90
FWL336		0.3900	0.0077	0.19	0.4000	0.0187	0.46
FYN2DX		0.3700	-0.0123	-0.30	0.3900	0.0087	0.22
GC87YY		0.3350	-0.0473	-1.15	0.3300	-0.0513	-1.28
GG4UF7		0.3900	0.0077	0.19	0.3900	0.0087	0.22
HGW3ZV		0.4100	0.0277	0.67	0.4100	0.0287	0.71
HMMCBT		0.3600	-0.0223	-0.54	0.3500	-0.0313	-0.78
J4LX4Y		0.3950	0.0127	0.31	0.3800	-0.0013	-0.03
JJ4G82		0.4500	0.0677	1.65	0.4500	0.0687	1.71
JZMM9Y		0.3200	-0.0623	-1.51	0.3200	-0.0613	-1.53
K3C7X4		0.3500	-0.0323	-0.78	0.3400	-0.0413	-1.03
KDCUP2		0.4350	0.0527	1.28	0.3900	0.0087	0.22
KMXXWZ		0.3750	-0.0073	-0.18	0.3700	-0.0113	-0.28
KXH6WP		0.4200	0.0377	0.92	0.4200	0.0387	0.96
L4GDD2		0.3750	-0.0073	-0.18	0.3700	-0.0113	-0.28
LD7YJZ		0.3150	-0.0673	-1.64	0.3200	-0.0613	-1.53
LEMVBY		0.3550	-0.0273	-0.66	0.3750	-0.0063	-0.16
MKMUYU		0.3600	-0.0223	-0.54	0.3850	0.0037	0.09
MTDF6T		0.3250	-0.0573	-1.39	0.3500	-0.0313	-0.78
N96D8M		0.3700	-0.0123	-0.30	0.3700	-0.0113	-0.28
NMQTAM		0.3200	-0.0623	-1.51	0.3300	-0.0513	-1.28
NPBWHK		0.3900	0.0077	0.19	0.4000	0.0187	0.46
NPUK3Z		0.4350	0.0527	1.28	0.4300	0.0487	1.21



Volatile Acidity

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NVEPQU		0.4300	0.0477	1.16	0.3950	0.0137	0.34
P66LCV		0.3900	0.0077	0.19	0.3900	0.0087	0.22
PZBREU		0.3700	-0.0123	-0.30	0.3700	-0.0113	-0.28
Q8794Q		0.4400	0.0577	1.40	0.4600	0.0787	1.96
QQEB3V		0.3900	0.0077	0.19	0.3900	0.0087	0.22
QUEMXV		0.4650	0.0827	2.01	0.4550	0.0737	1.83
RV8VJK		0.3400	-0.0423	-1.03	0.3400	-0.0413	-1.03
TA68RN		0.3900	0.0077	0.19	0.3900	0.0087	0.22
TQDXUT		0.3600	-0.0223	-0.54	0.3800	-0.0013	-0.03
TZELLQ		0.4650	0.0827	2.01	0.4550	0.0737	1.83
UPCMDG		0.3500	-0.0323	-0.78	0.3700	-0.0113	-0.28
UQMM9P		0.3500	-0.0323	-0.78	0.3400	-0.0413	-1.03
UZ9QFP		0.4500	0.0677	1.65	0.4500	0.0687	1.71
VGF82H		0.4208	0.0385	0.94	0.4074	0.0260	0.65
WDWCYP		0.3850	0.0027	0.07	0.3900	0.0087	0.22
XFXW2F		0.4000	0.0177	0.43	0.4000	0.0187	0.46
YHGEUK		0.3700	-0.0123	-0.30	0.3850	0.0037	0.09
YZWK7G		0.3780	-0.0043	-0.10	0.3600	-0.0213	-0.53
ZGYKUB		0.3350	-0.0473	-1.15	0.3350	-0.0463	-1.15
ZPVER9		0.3255	-0.0568	-1.38	0.3240	-0.0573	-1.43

Grand Means		Summary Statistics	
	0.38228 g/L as acetic acid		0.38133 g/L as acetic acid
Std Dev Btwn Labs			
	0.04114 g/L as acetic acid		0.04015 g/L as acetic acid
Statistics based on 71 of 72 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay

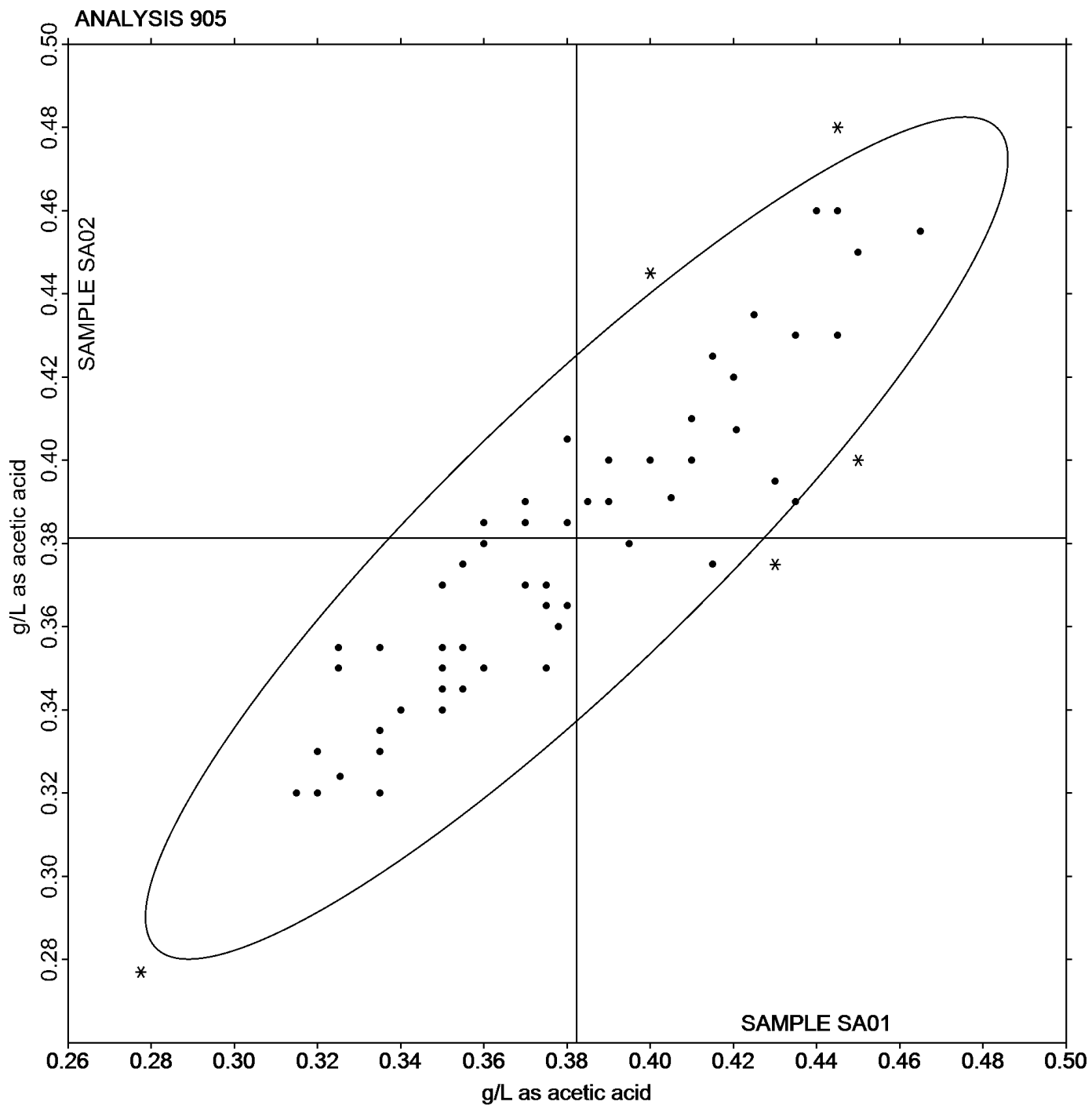


Comments on assigned Data Flags

339UKH (X) - Data for both samples are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Cash Still method	0.4059	0.0347	0.0237	0.4054	0.0327	0.0240	16	20
Enzymatic method	0.3571	0.0287	-0.0252	0.3548	0.0258	-0.0266	27	29
HPLC	0.4208	0.0000	0.0385	0.4074	0.0000	0.0260	1	1
GC	0.3665	0.0163	-0.0158	0.3675	0.0106	-0.0138	2	2
Colorimetric Analysis	0.3250	0.0000	-0.0573	0.3550	0.0000	-0.0263	1	1
Seg. Flow / Colorimetric Analyzer	0.3975	0.0389	0.0152	0.3975	0.0342	0.0162	8	8
FTIR	0.3950	0.0331	0.0127	0.3959	0.0342	0.0146	11	11





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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TC4QC		0.9963	0.0000	-0.01	0.9963	0.0000	-0.02
2TQQZE		0.9964	0.0001	0.15	0.9964	0.0001	0.13
339UKH		0.9965	0.0002	0.33	0.9965	0.0002	0.26
3EPE6E	X	0.9959	-0.0005	-0.81	0.9964	0.0001	0.13
3JFNED		0.9965	0.0001	0.24	0.9964	0.0001	0.17
3K8WEG		0.9962	-0.0001	-0.20	0.9961	-0.0002	-0.38
3T3M7H	X	0.9962	-0.0001	-0.20	0.9891	-0.0073	-12.38
3W7KGB		0.9964	0.0000	0.06	0.9964	0.0000	0.06
3YC3E8		0.9968	0.0005	0.83	0.9968	0.0005	0.80
4K87UJ		0.9963	0.0000	-0.02	0.9964	0.0000	0.05
62RCG4		0.9971	0.0008	1.34	0.9971	0.0008	1.31
6PFM38		0.9964	0.0001	0.13	0.9964	0.0001	0.11
73ZNX6	X	0.9984	0.0021	3.63	0.9985	0.0022	3.69
8637A7		0.9953	-0.0011	-1.86	0.9951	-0.0012	-2.08
8F8WD3		0.9964	0.0001	0.15	0.9966	0.0003	0.47
9DWC38	X	0.9955	-0.0008	-1.42	0.9975	0.0012	2.00
ABYK9C		0.9961	-0.0002	-0.36	0.9961	-0.0002	-0.36
AFXV2		0.9963	-0.0001	-0.11	0.9964	0.0000	0.05
BJCWZ4		0.9966	0.0002	0.41	0.9966	0.0003	0.47
BK8CDZ		0.9963	0.0000	0.02	0.9963	0.0000	0.00
BPE3F7		0.9963	0.0000	-0.02	0.9963	0.0000	-0.02
C7G34Z		0.9963	0.0000	-0.07	0.9963	0.0000	-0.03
CAGDYZ		0.9964	0.0001	0.13	0.9964	0.0000	0.08
CZV7ZB		0.9965	0.0001	0.24	0.9964	0.0000	0.05
DQK6EA		0.9963	0.0000	-0.02	0.9963	0.0000	-0.04
E39TPZ		0.9963	0.0000	-0.02	0.9964	0.0000	0.05



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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ECZ4YV		0.9964	0.0001	0.13	0.9968	0.0005	0.80
FL3LBX	*	0.9947	-0.0017	-2.90	0.9947	-0.0017	-2.85
FR6X7V		0.9960	-0.0003	-0.55	0.9960	-0.0003	-0.55
FR9HUX		0.9953	-0.0010	-1.77	0.9951	-0.0013	-2.17
FYN2DX		0.9961	-0.0002	-0.37	0.9960	-0.0003	-0.55
G2A6LV		0.9962	-0.0001	-0.14	0.9963	-0.0001	-0.12
GMPMQ7		0.9963	0.0000	0.01	0.9963	0.0000	0.00
HGW3ZV		0.9963	0.0000	0.03	0.9963	0.0000	0.04
J4LX4Y		0.9965	0.0002	0.33	0.9965	0.0001	0.22
JJ4G82	X	0.9935	-0.0028	-4.84	0.9934	-0.0029	-4.93
JZMM9Y	*	0.9981	0.0018	3.12	0.9980	0.0017	2.86
K3C7X4		0.9963	0.0000	-0.02	0.9963	0.0000	-0.04
KMXXWZ		0.9968	0.0005	0.85	0.9969	0.0006	0.98
KXH6WP	*	0.9946	-0.0017	-2.99	0.9947	-0.0017	-2.85
L4GDD2		0.9963	0.0000	0.01	0.9963	0.0000	0.01
LD7YJZ	X	0.9931	-0.0033	-5.70	0.9933	-0.0030	-5.15
LEMVBY		0.9964	0.0001	0.10	0.9964	0.0001	0.19
MKMUYU		0.9968	0.0005	0.85	0.9969	0.0006	0.98
N96D8M	X	0.9840	-0.0123	-21.50	0.9840	-0.0123	-20.98
NPUK3Z		0.9963	0.0000	0.01	0.9963	0.0000	0.00
NVEPQU		0.9963	0.0000	-0.02	0.9963	0.0000	-0.04
P66LCV		0.9963	0.0000	-0.02	0.9963	0.0000	-0.04
Q8794Q		0.9963	0.0000	0.00	0.9963	0.0000	0.00
QQEB3V		0.9963	0.0000	0.03	0.9963	0.0000	0.02
QUEMXV		0.9963	0.0000	-0.02	0.9963	0.0000	-0.04
RV8VJK	X	0.9969	0.0005	0.94	0.9961	-0.0003	-0.46



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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TA68RN		0.9963	0.0000	-0.02	0.9964	0.0001	0.13
TQDXUT		0.9963	0.0000	-0.06	0.9963	0.0000	-0.02
TZELLQ		0.9960	-0.0003	-0.55	0.9962	-0.0002	-0.29
UPCMDG	X	1.0041	0.0078	13.59	1.0041	0.0078	13.24
UQMM9P	*	0.9947	-0.0017	-2.90	0.9947	-0.0016	-2.78
UZ9QFP		0.9959	-0.0005	-0.81	0.9960	-0.0004	-0.63
VGf82H		0.9963	0.0000	0.05	0.9963	0.0000	0.04
XFXW2F		0.9964	0.0000	0.06	0.9962	-0.0001	-0.21
XQCU7J		0.9977	0.0014	2.41	0.9977	0.0014	2.42
YHGEUK		0.9963	0.0000	-0.01	0.9963	0.0000	0.00
YZWK7G		0.9965	0.0002	0.33	0.9965	0.0002	0.30
ZGYKUB		0.9962	-0.0002	-0.27	0.9961	-0.0002	-0.30

Grand Means		Summary Statistics	
0.99631	sp gr 20/20 C	0.99632	sp gr 20/20 C
Std Dev Btwn Labs		0.00059	sp gr 20/20 C
0.00057	sp gr 20/20 C	Statistics based on 55 of 64 reporting participants	

Wines tested: SA01: Chardonnay; SA02: Chardonnay



Analysis 906
Specific Gravity

Comments on assigned Data Flags

3EPE6E (X) - Inconsistent in testing between samples. High data for Sample SA01.

3T3M7H (X) - Inconsistent in testing between samples. Low data for Sample SA02.

73ZNX6 (X) - Data for both samples are high. Possible Systematic Error.

9DWC38 (X) - Inconsistent in testing between samples.

JJ4G82 (X) - Data for both samples are low.

LD7YJZ (X) - Data for both samples are low.

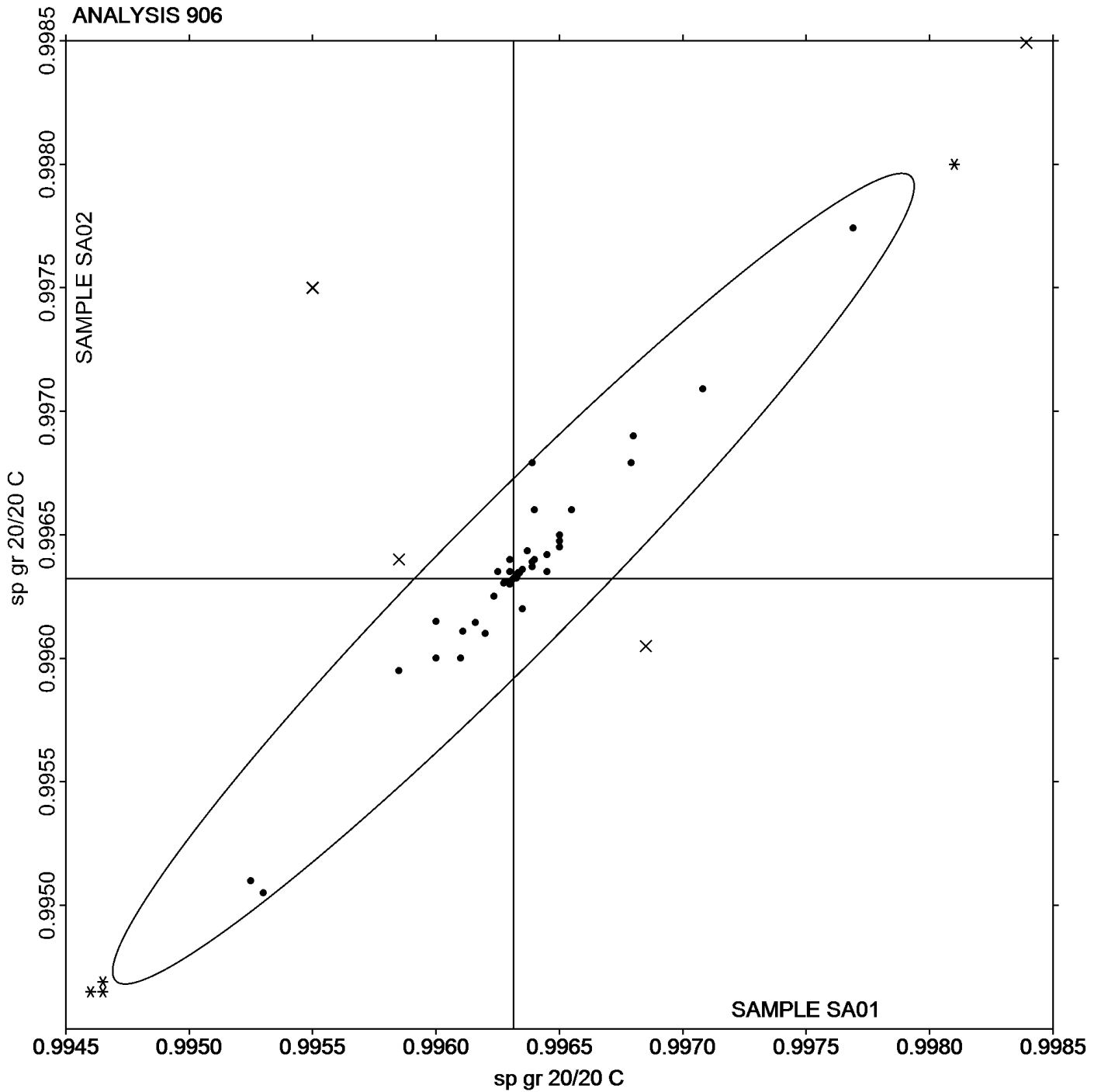
N96D8M (X) - Data for both samples are low.

RV8VJK (X) - Inconsistent in testing between samples.

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



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pH

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TC4QC		3.405	0.006	0.19	3.420	0.011	0.35
2TQQZE		3.400	0.001	0.03	3.400	-0.009	-0.28
339UKH	X	3.355	-0.044	-1.35	3.415	0.006	0.19
3EPE6E	*	3.335	-0.064	-1.97	3.330	-0.079	-2.49
3JFNED		3.325	-0.074	-2.27	3.340	-0.069	-2.17
3K8WEG	X	3.425	0.026	0.80	3.470	0.061	1.92
3T3M7H	*	3.495	0.096	2.96	3.505	0.096	3.03
3W7KGB		3.390	-0.009	-0.27	3.400	-0.009	-0.28
3YC3E8		3.395	-0.004	-0.12	3.405	-0.004	-0.12
4K87UJ		3.425	0.026	0.80	3.425	0.016	0.51
62RCG4	X	3.135	-0.264	-8.12	3.080	-0.329	-10.36
6PFM38		3.355	-0.044	-1.35	3.375	-0.034	-1.07
73ZNX6		3.405	0.006	0.19	3.420	0.011	0.35
8637A7		3.380	-0.019	-0.58	3.395	-0.014	-0.44
8F8WD3		3.400	0.001	0.03	3.410	0.001	0.03
8NYC37		3.440	0.041	1.26	3.440	0.031	0.98
9DWC38		3.450	0.051	1.57	3.460	0.051	1.61
9KV2KB	X	3.289	-0.110	-3.40	3.292	-0.117	-3.70
ABYK9C		3.360	-0.039	-1.20	3.370	-0.039	-1.23
AFXV2	X	3.430	0.031	0.96	3.470	0.061	1.92
BJCWZ4		3.380	-0.019	-0.58	3.390	-0.019	-0.60
BK8CDZ		3.345	-0.054	-1.66	3.350	-0.059	-1.86
C7G34Z		3.390	-0.009	-0.27	3.400	-0.009	-0.28
CAGDYZ		3.440	0.041	1.26	3.460	0.051	1.61
CZV7ZB		3.370	-0.029	-0.89	3.370	-0.039	-1.23
DQK6EA		3.390	-0.009	-0.27	3.390	-0.019	-0.60



pH

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
E39TPZ		3.352	-0.047	-1.44	3.381	-0.028	-0.89
ECZ4YV	X	3.400	0.001	0.03	3.445	0.036	1.14
FGBGGU		3.380	-0.019	-0.58	3.390	-0.019	-0.60
FL3LBX		3.420	0.021	0.65	3.415	0.006	0.19
FR6X7V		3.355	-0.044	-1.35	3.370	-0.039	-1.23
FR9HUX		3.425	0.026	0.80	3.440	0.031	0.98
FWL336		3.440	0.041	1.26	3.450	0.041	1.29
FYN2DX		3.380	-0.019	-0.58	3.395	-0.014	-0.44
GG4UF7		3.470	0.071	2.19	3.480	0.071	2.24
HGW3ZV		3.380	-0.019	-0.58	3.390	-0.019	-0.60
HMMCBT		3.410	0.011	0.34	3.420	0.011	0.35
J4LX4Y		3.410	0.011	0.34	3.410	0.001	0.03
JJ4G82		3.390	-0.009	-0.27	3.400	-0.009	-0.28
JZMM9Y		3.405	0.006	0.19	3.400	-0.009	-0.28
K3C7X4		3.440	0.041	1.26	3.450	0.041	1.29
KDCUP2		3.370	-0.029	-0.89	3.385	-0.024	-0.75
KMXXWZ		3.390	-0.009	-0.27	3.410	0.001	0.03
KXH6WP		3.405	0.006	0.19	3.405	-0.004	-0.12
L4GDD2		3.400	0.001	0.03	3.405	-0.004	-0.12
LD7YJZ		3.400	0.001	0.03	3.410	0.001	0.03
LEMVBY		3.380	-0.019	-0.58	3.390	-0.019	-0.60
MKMUYU	X	3.320	-0.079	-2.43	3.385	-0.024	-0.75
MTDF6T	*	3.330	-0.069	-2.12	3.360	-0.049	-1.54
N96D8M	X	3.515	0.116	3.57	3.490	0.081	2.55
NMQTAM		3.400	0.001	0.03	3.415	0.006	0.19
NPBWHK		3.430	0.031	0.96	3.420	0.011	0.35

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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NPUK3Z		3.411	0.012	0.37	3.408	-0.001	-0.03
NVEPQU		3.375	-0.024	-0.74	3.380	-0.029	-0.91
PZBREU		3.415	0.016	0.50	3.430	0.021	0.66
Q8794Q		3.405	0.006	0.19	3.420	0.011	0.35
QQEB3V		3.390	-0.009	-0.27	3.400	-0.009	-0.28
QUEMXV		3.415	0.016	0.50	3.435	0.026	0.82
RV8VJK		3.390	-0.009	-0.27	3.410	0.001	0.03
TA68RN		3.400	0.001	0.03	3.400	-0.009	-0.28
TQDXUT		3.390	-0.009	-0.27	3.400	-0.009	-0.28
TZELLQ		3.365	-0.034	-1.04	3.370	-0.039	-1.23
UPCMDG		3.365	-0.034	-1.04	3.390	-0.019	-0.60
UQMM9P		3.440	0.041	1.26	3.450	0.041	1.29
UZ9QFP		3.421	0.022	0.66	3.435	0.026	0.82
VF73NT		3.410	0.011	0.34	3.420	0.011	0.35
VGF82H	X	3.590	0.191	5.88	3.600	0.191	6.02
WDWCYP		3.455	0.056	1.73	3.465	0.056	1.77
XFXW2F		3.390	-0.009	-0.27	3.400	-0.009	-0.28
XQCU7J		3.425	0.026	0.80	3.435	0.026	0.82
YHGEUK		3.395	-0.004	-0.12	3.415	0.006	0.19
YZWK7G		3.390	-0.009	-0.27	3.410	0.001	0.03
ZGYKUB		3.440	0.041	1.26	3.450	0.041	1.29
ZPVER9		3.405	0.006	0.19	3.410	0.001	0.03



Grand Means	Summary Statistics
3.3989 pH	3.4089 pH
Std Dev Btwn Labs	
0.0325 pH	0.0317 pH

Statistics based on 65 of 74 reporting participants

Wines tested: SA01: Chardonnay; SA02: Chardonnay

Comments on assigned Data Flags

339UKH (X) - Inconsistent in testing between samples.

3K8WEG (X) - Inconsistent in testing between samples.

62RCG4 (X) - Data for both samples are low.

9KV2KB (X) - Data for both samples are low. Also inconsistent in testing within Sample SA01.

AFXV2 (X) - Inconsistent in testing between samples.

ECZ4YV (X) - Inconsistent in testing between samples.

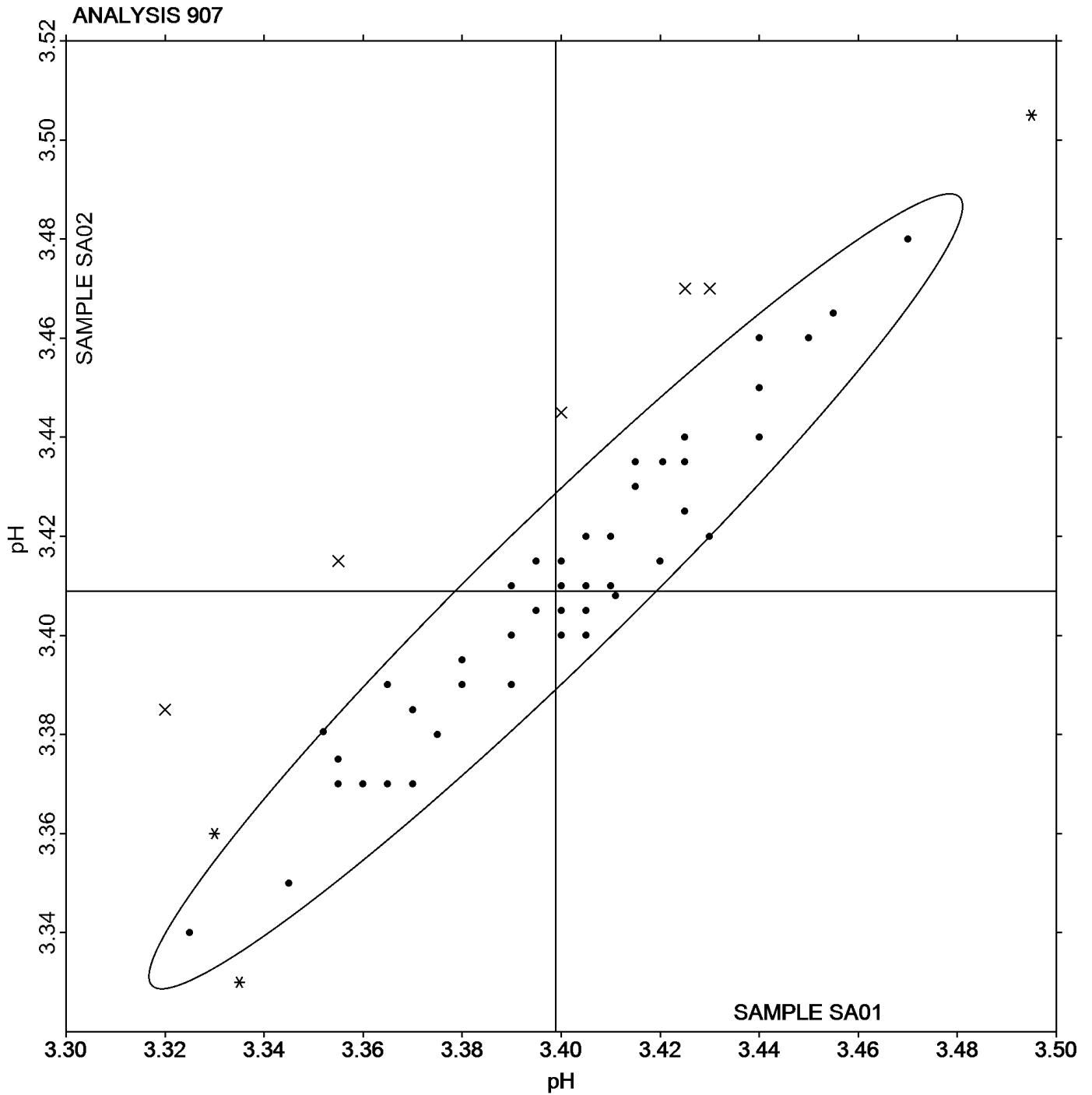
MKMUYU (X) - Inconsistent in testing between samples and inconsistent within the determinations for Sample SA01.

N96D8M (X) - Inconsistent in testing between samples, data for Sample SA01 are high.

VGF82H (X) - Data for both samples are high.



pH





Residual Sugar

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TQQZE		14.30	0.42	0.42	14.00	0.18	0.17
3JFNED		13.61	-0.27	-0.27	13.42	-0.40	-0.38
3T3M7H		14.95	1.07	1.07	14.79	0.97	0.91
3YC3E8		13.55	-0.33	-0.33	13.35	-0.47	-0.45
62RCG4	X	13.07	-0.81	-0.82	15.82	2.00	1.89
6PFM38		13.85	-0.03	-0.03	13.70	-0.12	-0.12
AFXV2		12.83	-1.05	-1.05	12.49	-1.34	-1.26
FL3LBX		15.64	1.76	1.77	15.47	1.64	1.55
FWL336		14.30	0.42	0.42	14.25	0.43	0.40
HGW3ZV		14.00	0.12	0.12	13.95	0.13	0.12
HMMCBT		11.22	-2.66	-2.67	11.13	-2.70	-2.55
LD7YJZ		12.90	-0.98	-0.98	12.80	-1.02	-0.97
MKMUYU	X	0.34	-13.54	-13.58	0.33	-13.49	-12.75
N96D8M	X	6.00	-7.88	-7.90	6.00	-7.82	-7.39
PZBREU		13.46	-0.42	-0.42	13.51	-0.31	-0.29
TA68RN		14.24	0.36	0.36	14.22	0.40	0.38
TZELLQ		13.75	-0.13	-0.13	13.75	-0.07	-0.07
VGF82H		13.99	0.11	0.11	13.96	0.13	0.13
YHGEUK	*	14.25	0.37	0.37	15.10	1.28	1.21
YZWK7G		15.10	1.22	1.23	15.10	1.28	1.21

Grand Means		Summary Statistics	
	13.879 g/L		13.822 g/L
Std Dev Btwn Labs			
	0.997 g/L		1.058 g/L
Statistics based on 17 of 20 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay



Comments on assigned Data Flags

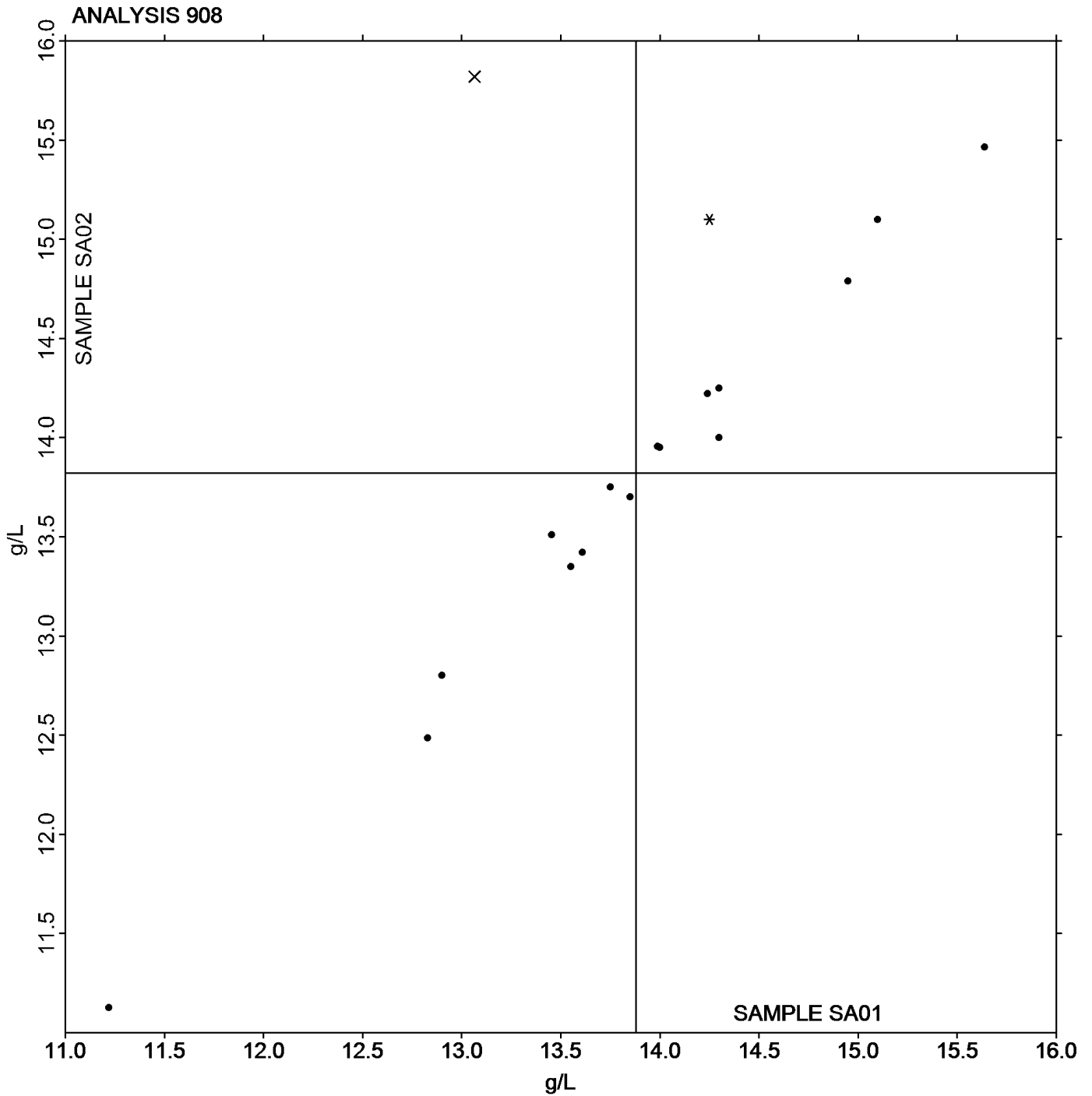
62RCG4 (X) - Inconsistent in testing between samples, data for Sample SA02 are high.

MKMUYU (X) - Extreme data.

N96D8M (X) - Data for both samples are low.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	13.46	0.00	-0.42	13.51	0.00	-0.31	1	1
Cu Reduction Method	14.19	0.94	0.31	14.02	1.01	0.20	7	9
FTIR	13.96	0.65	0.08	13.87	0.65	0.05	7	7
Other _____	11.22	0.00	-2.66	11.13	0.00	-2.70	1	2



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



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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TQQZE		0.7040	-0.0976	-1.43	0.7125	-0.1171	-1.52
339UKH	X	0.0650	-0.7366	-10.81	0.1100	-0.7196	-9.31
3EPE6E		0.7595	-0.0421	-0.62	0.7890	-0.0406	-0.53
3JFNED		0.7350	-0.0666	-0.98	0.7650	-0.0646	-0.84
3K8WEG		0.8950	0.0934	1.37	0.9250	0.0954	1.23
3T3M7H	X	0.4400	-0.3616	-5.30	0.4650	-0.3646	-4.72
3W7KGB		0.8650	0.0634	0.93	0.8950	0.0654	0.85
3YC3E8		0.7050	-0.0966	-1.42	0.7550	-0.0746	-0.97
4K87UJ		0.7850	-0.0166	-0.24	0.8350	0.0054	0.07
6PFM38		0.7000	-0.1016	-1.49	0.7500	-0.0796	-1.03
8637A7		0.8500	0.0484	0.71	0.8750	0.0454	0.59
8F8WD3		0.7550	-0.0466	-0.68	0.8000	-0.0296	-0.38
8NYC37		0.8050	0.0034	0.05	0.8200	-0.0096	-0.12
9DWC38		0.7890	-0.0126	-0.18	0.8275	-0.0021	-0.03
ABYK9C		0.8065	0.0049	0.07	0.8105	-0.0191	-0.25
BJCWZ4		0.8100	0.0084	0.12	0.8375	0.0079	0.10
BK8CDZ		0.7750	-0.0266	-0.39	0.8500	0.0204	0.26
C7G34Z		0.9700	0.1684	2.47	1.0200	0.1904	2.46
CAGDYZ		0.8250	0.0234	0.34	0.8675	0.0379	0.49
CZV7ZB		0.8535	0.0519	0.76	0.8745	0.0449	0.58
DQK6EA		0.7550	-0.0466	-0.68	0.7200	-0.1096	-1.42
ECZ4YV	*	0.8900	0.0884	1.30	0.8600	0.0304	0.39
FGBGGU		0.8065	0.0049	0.07	0.8455	0.0159	0.21
FL3LBX	*	0.8350	0.0334	0.49	0.9500	0.1204	1.56
FR6X7V		0.8750	0.0734	1.08	0.8900	0.0604	0.78
FR9HUX		0.7600	-0.0416	-0.61	0.7700	-0.0596	-0.77



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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FYN2DX		0.8320	0.0304	0.45	0.8455	0.0159	0.21
GC87YY		0.7950	-0.0066	-0.10	0.8650	0.0354	0.46
GG4UF7		0.6900	-0.1116	-1.64	0.7200	-0.1096	-1.42
HGW3ZV		0.8050	0.0034	0.05	0.8800	0.0504	0.65
HMMCBT		0.8000	-0.0016	-0.02	0.8075	-0.0221	-0.29
J4LX4Y		0.8300	0.0284	0.42	0.8450	0.0154	0.20
JJ4G82		0.7585	-0.0431	-0.63	0.7830	-0.0466	-0.60
JZMM9Y		0.8800	0.0784	1.15	0.9100	0.0804	1.04
K3C7X4		0.7700	-0.0316	-0.46	0.8050	-0.0246	-0.32
KMXXWZ		0.7985	-0.0031	-0.05	0.8080	-0.0216	-0.28
KXH6WP	X	0.8550	0.0534	0.78	0.7850	-0.0446	-0.58
L4GDD2		0.6900	-0.1116	-1.64	0.7000	-0.1296	-1.68
LD7YJZ	X	1.1650	0.3634	5.33	1.1600	0.3304	4.27
LEMVBY		0.8050	0.0034	0.05	0.8300	0.0004	0.00
MKMUYU		0.7630	-0.0386	-0.57	0.7860	-0.0436	-0.56
MTDF6T		0.8400	0.0384	0.56	0.9250	0.0954	1.23
N96D8M		0.7640	-0.0376	-0.55	0.7865	-0.0431	-0.56
NMQTAM		0.7100	-0.0916	-1.34	0.7100	-0.1196	-1.55
NPBWHK		0.8210	0.0194	0.29	0.8150	-0.0146	-0.19
NPUK3Z		0.8200	0.0184	0.27	0.8350	0.0054	0.07
NVEPQU		0.8700	0.0684	1.00	0.8900	0.0604	0.78
PZBREU		0.8050	0.0034	0.05	0.8300	0.0004	0.00
Q8794Q	X	0.9000	0.0984	1.44	1.0400	0.2104	2.72
QQEB3V		0.8185	0.0169	0.25	0.8510	0.0214	0.28
QUEMXV		0.7800	-0.0216	-0.32	0.8300	0.0004	0.00
RV8VJK		0.7800	-0.0216	-0.32	0.8200	-0.0096	-0.12



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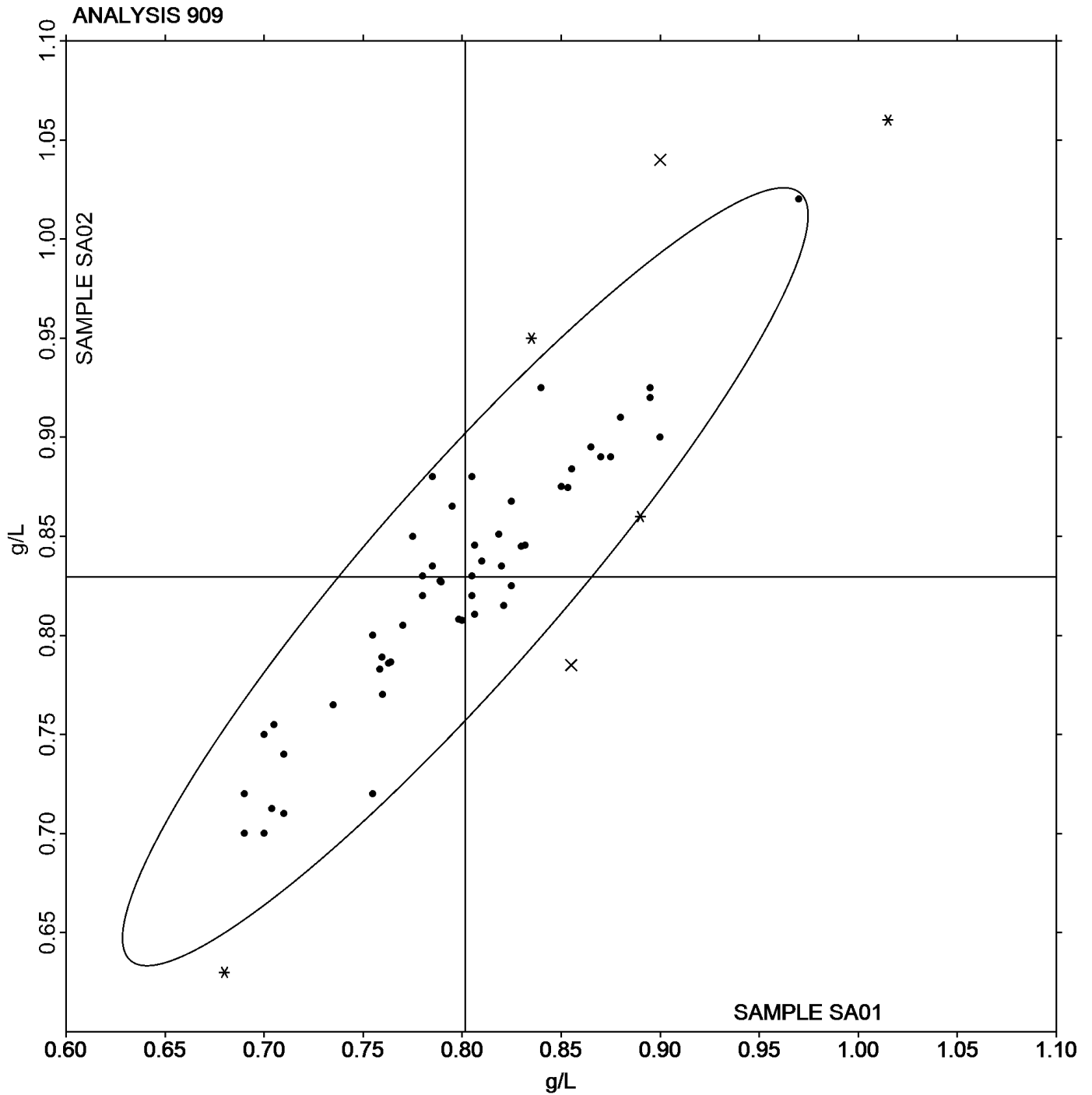
WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TA68RN		0.7000	-0.1016	-1.49	0.7000	-0.1296	-1.68
TQDXUT		0.7100	-0.0916	-1.34	0.7400	-0.0896	-1.16
TZELLQ		0.9000	0.0984	1.44	0.9000	0.0704	0.91
UPCMDG		0.8250	0.0234	0.34	0.8250	-0.0046	-0.06
UQMM9P	*	1.0150	0.2134	3.13	1.0600	0.2304	2.98
VGf82H	X	0.5154	-0.2862	-4.20	0.5426	-0.2870	-3.71
WDWCYP		0.8555	0.0539	0.79	0.8840	0.0544	0.70
XFXW2F		0.8950	0.0934	1.37	0.9200	0.0904	1.17
YZWK7G	*	0.6800	-0.1216	-1.78	0.6300	-0.1996	-2.58
ZGYKUB		0.7850	-0.0166	-0.24	0.8800	0.0504	0.65
ZPVER9		0.7895	-0.0121	-0.18	0.8270	-0.0026	-0.03

Grand Means		Summary Statistics	
	0.80157 g/L		0.82961 g/L
Std Dev Btwn Labs			0.07730 g/L
	0.06816 g/L		
Statistics based on 57 of 63 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay

Comments on assigned Data Flags

- 339UKH (X) - Data for both samples are low.
- 3T3M7H (X) - Data for both samples are low.
- KXH6WP (X) - Inconsistent in testing between samples.
- LD7YJZ (X) - Data for both samples are high.
- Q8794Q (X) - Inconsistent in testing between samples, data for Sample SA02 are high.
- VGf82H (X) - Data for both samples are low. Possible Systematic Error.





Glucose + Fructose

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TC4QC	X	14.24	1.09	1.29	12.90	-0.19	-0.23
339UKH	X	11.15	-2.00	-2.35	12.40	-0.69	-0.83
3EPE6E		13.50	0.35	0.42	13.05	-0.04	-0.05
3JFNED		11.55	-1.60	-1.88	11.51	-1.58	-1.90
3K8WEG		13.43	0.28	0.33	13.25	0.16	0.19
3W7KGB		15.25	2.10	2.48	15.10	2.01	2.41
3YC3E8	X	7.98	-5.17	-6.09	7.77	-5.32	-6.38
4K87UJ		13.30	0.15	0.18	13.60	0.51	0.61
73ZNX6		11.70	-1.45	-1.70	11.60	-1.49	-1.79
8637A7		13.60	0.45	0.53	13.50	0.41	0.49
8F8WD3		11.50	-1.65	-1.94	11.60	-1.49	-1.79
8NYC37		12.91	-0.24	-0.28	12.68	-0.42	-0.50
9DWC38		13.50	0.35	0.42	13.70	0.61	0.73
ABYK9C		13.00	-0.15	-0.17	13.00	-0.09	-0.11
AFXV2		12.83	-0.32	-0.37	12.63	-0.47	-0.56
BJCWZ4		14.00	0.85	1.01	13.80	0.71	0.85
BK8CDZ		12.73	-0.42	-0.50	13.15	0.06	0.07
BPE3F7		13.50	0.35	0.42	13.20	0.11	0.13
C7G34Z		13.96	0.81	0.95	13.91	0.81	0.97
CAGDYZ		12.60	-0.55	-0.64	12.55	-0.54	-0.65
CZV7ZB	X	14.75	1.60	1.89	13.68	0.58	0.70
DQK6EA		13.40	0.25	0.30	13.55	0.46	0.55
E39TPZ		13.80	0.65	0.77	13.85	0.76	0.91
ECZ4YV		12.55	-0.60	-0.70	12.66	-0.43	-0.52
FGBGGU		14.10	0.95	1.12	14.20	1.11	1.33
FL3LBX		13.79	0.64	0.75	13.91	0.82	0.98



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Glucose + Fructose

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FR6X7V		12.76	-0.39	-0.46	12.97	-0.12	-0.15
FR9HUX		11.64	-1.51	-1.78	11.43	-1.67	-2.00
FYN2DX		12.93	-0.22	-0.26	12.88	-0.21	-0.26
GC87YY		13.00	-0.15	-0.17	13.00	-0.09	-0.11
GG4UF7		13.90	0.75	0.89	13.70	0.61	0.73
HGW3ZV		13.90	0.75	0.89	13.95	0.86	1.03
HMMCBT		11.22	-1.93	-2.27	11.13	-1.97	-2.36
J4LX4Y		12.01	-1.14	-1.34	11.96	-1.14	-1.36
JJ4G82	X	12.60	-0.55	-0.65	13.53	0.44	0.52
JZMM9Y		13.25	0.10	0.12	13.50	0.41	0.49
K3C7X4		13.60	0.45	0.53	13.40	0.31	0.37
KMXXWZ	X	13.45	0.30	0.36	12.55	-0.54	-0.65
KXH6WP		13.82	0.67	0.79	13.81	0.71	0.85
L4GDD2		12.75	-0.40	-0.47	12.55	-0.54	-0.65
LD7YJZ		13.70	0.55	0.65	13.60	0.51	0.61
LEMVBY		13.14	-0.01	-0.01	12.70	-0.39	-0.47
MKMUYU		13.01	-0.14	-0.16	12.85	-0.24	-0.29
MTDF6T		13.70	0.55	0.65	13.40	0.31	0.37
N96D8M		12.86	-0.28	-0.33	12.64	-0.45	-0.54
NMQTAM		12.83	-0.32	-0.37	12.86	-0.23	-0.28
NPUK3Z		13.45	0.30	0.36	13.25	0.16	0.19
NVEPQU		12.55	-0.60	-0.70	12.35	-0.74	-0.89
P66LCV		13.80	0.65	0.77	13.90	0.81	0.97
PZBREU		13.46	0.31	0.36	13.51	0.42	0.50
QQEB3V		13.65	0.50	0.59	13.70	0.61	0.73
QUEMXV		12.98	-0.17	-0.20	12.81	-0.28	-0.34



Glucose + Fructose

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RV8VJK		12.90	-0.25	-0.29	12.95	-0.14	-0.17
TA68RN		13.76	0.61	0.72	13.77	0.68	0.81
TQDXUT	*	14.75	1.60	1.89	14.20	1.11	1.33
TZELLQ		12.75	-0.40	-0.47	12.75	-0.34	-0.41
UPCMDG		13.30	0.15	0.18	12.95	-0.14	-0.17
UQMM9P	X	10.49	-2.66	-3.13	11.30	-1.79	-2.15
VGF82H		11.83	-1.31	-1.55	11.82	-1.27	-1.53
WDWCYP		14.95	1.80	2.13	14.85	1.76	2.11
XFXW2F		12.79	-0.36	-0.42	12.90	-0.19	-0.23
ZGYKUB		11.40	-1.75	-2.06	11.65	-1.44	-1.73
ZPVER9		13.41	0.26	0.30	13.54	0.45	0.54

Grand Means		Summary Statistics	
	13.147 g/L		13.093 g/L
Std Dev Btwn Labs			0.834 g/L
	0.849 g/L		
Statistics based on 56 of 63 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay

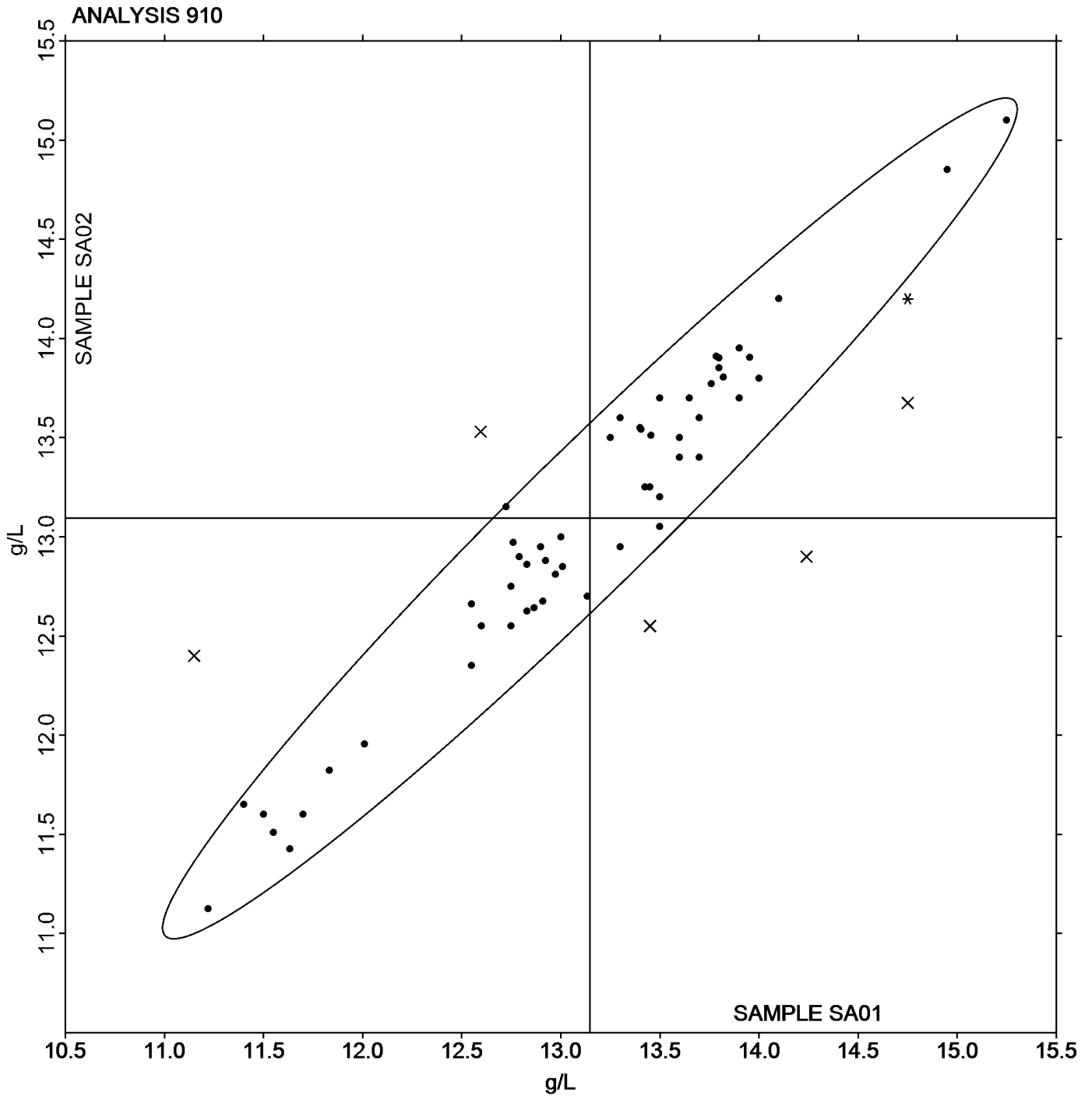
Comments on assigned Data Flags

- 2TC4QC (X) - Inconsistent in testing between samples.
- 339UKH (X) - Data for both samples are low.
- 3YC3E8 (X) - Data for both samples are low.
- CZV7ZB (X) - Inconsistent in testing between samples.
- JJ4G82 (X) - Inconsistent in testing between samples.
- KMXXWZ (X) - Inconsistent in testing between samples.
- UQMM9P (X) - Inconsistent in testing between samples, data for Sample SA01 are low.



Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
HPLC	13.04	1.06	-0.10	12.97	1.06	-0.12	3	3
Enzymatic/Spectrophotometric	13.14	0.83	-0.01	13.10	0.82	0.01	45	53
Segmented Flow	12.55	0.00	-0.60	12.35	0.00	-0.74	1	1
FTIR	13.08	0.92	-0.06	13.03	0.94	-0.06	6	6





Copper Content

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3EPE6E		0.1825	0.0291	1.23	0.1290	0.0202	1.23
3JFNED		0.1390	-0.0144	-0.61	0.0940	-0.0148	-0.90
6PFM38		0.1350	-0.0184	-0.78	0.1000	-0.0088	-0.53
8637A7		0.1690	0.0156	0.66	0.1105	0.0017	0.10
CZV7ZB	*	0.0800	-0.0734	-3.12	0.0800	-0.0288	-1.75
FWL336		0.1500	-0.0034	-0.15	0.1100	0.0012	0.07
HGW3ZV		0.1650	0.0116	0.49	0.1150	0.0062	0.38
K3C7X4		0.1560	0.0026	0.11	0.1015	-0.0073	-0.44
L4GDD2		0.1850	0.0316	1.34	0.1250	0.0162	0.99
LD7YJZ		0.1655	0.0121	0.51	0.1075	-0.0013	-0.08
LEMVBY		0.1830	0.0296	1.26	0.1245	0.0157	0.96
MKMUYU	X	0.3400	0.1866	7.92	0.3300	0.2212	13.45
NPUK3Z	*	0.1500	-0.0034	-0.15	0.1500	0.0412	2.51
P66LCV		0.1550	0.0016	0.07	0.1050	-0.0038	-0.23
QQEB3V		0.1500	-0.0034	-0.15	0.1000	-0.0088	-0.53
QUEMXV		0.1600	0.0066	0.28	0.1200	0.0112	0.68
RV8VJK		0.1450	-0.0084	-0.36	0.0900	-0.0188	-1.14
TA68RN		0.1600	0.0066	0.28	0.1100	0.0012	0.07
VGF82H		0.1290	-0.0244	-1.04	0.0875	-0.0213	-1.29
YHGEUK		0.1560	0.0026	0.11	0.1075	-0.0013	-0.08

Grand Means		Summary Statistics	
	0.15342 mg/L		0.10879 mg/L
Std Dev Btwn Labs			
	0.02355 mg/L		0.01644 mg/L
Statistics based on 19 of 20 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay

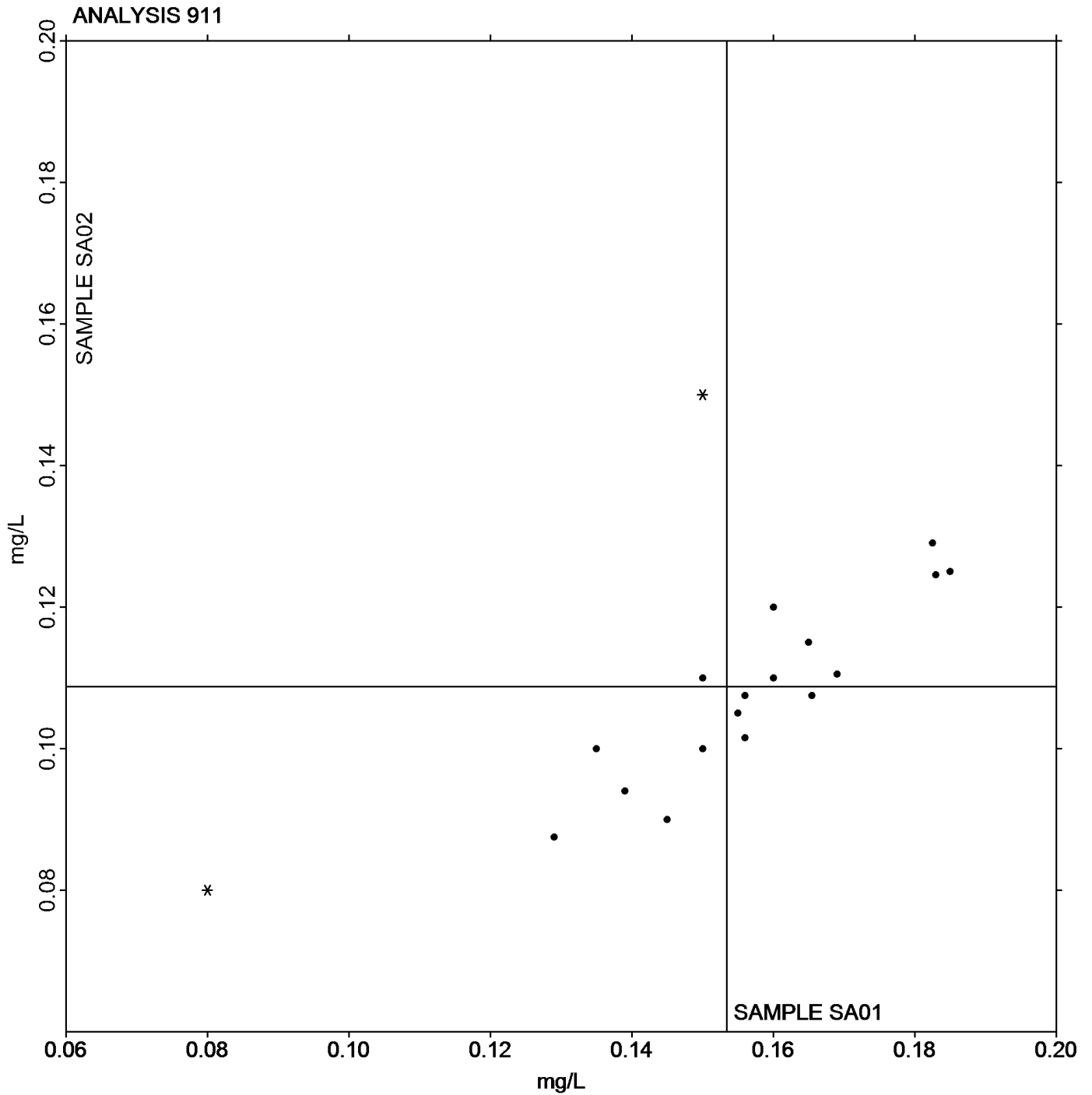


Comments on assigned Data Flags

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

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	0.1550	0.0000	0.0016	0.1050	0.0000	-0.0038	1	2
Atomic Absorption Spectroscopy	0.1589	0.0171	0.0055	0.1097	0.0145	0.0009	9	10
ICP-OES	0.1517	0.0153	-0.0017	0.1024	0.0066	-0.0064	5	6
Other _____	0.1705	0.0205	0.0171	0.1163	0.0124	0.0075	2	2



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



Potassium (K) Content

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3JFNED		735.0	132.9	0.96	745.0	144.9	0.98
6PFM38		610.0	7.9	0.06	612.5	12.4	0.08
8637A7		512.0	-90.1	-0.65	497.0	-103.1	-0.70
BPE3F7		563.0	-39.1	-0.28	552.0	-48.1	-0.32
CZV7ZB		479.5	-122.6	-0.89	373.5	-226.6	-1.53
GMPMQ7		488.0	-114.1	-0.83	518.0	-82.1	-0.55
HGW3ZV		640.0	37.9	0.28	565.0	-35.1	-0.24
J4LX4Y		806.5	204.4	1.48	869.0	268.9	1.82
LD7YJZ		628.1	26.0	0.19	627.0	26.9	0.18
LEMVBY		757.0	154.9	1.12	749.5	149.4	1.01
MKMUYU		478.0	-124.1	-0.90	540.0	-60.1	-0.41
NPUK3Z		550.5	-51.6	-0.37	549.5	-50.6	-0.34
P66LCV		555.0	-47.1	-0.34	555.0	-45.1	-0.30
QQEB3V		540.0	-62.1	-0.45	548.0	-52.1	-0.35
QUEMXV		515.0	-87.1	-0.63	525.5	-74.6	-0.50
RV8VJK		534.5	-67.6	-0.49	527.0	-73.1	-0.49
TZELLQ		981.5	379.4	2.75	979.5	379.4	2.57
VGf82H		464.2	-137.9	-1.00	468.3	-131.8	-0.89

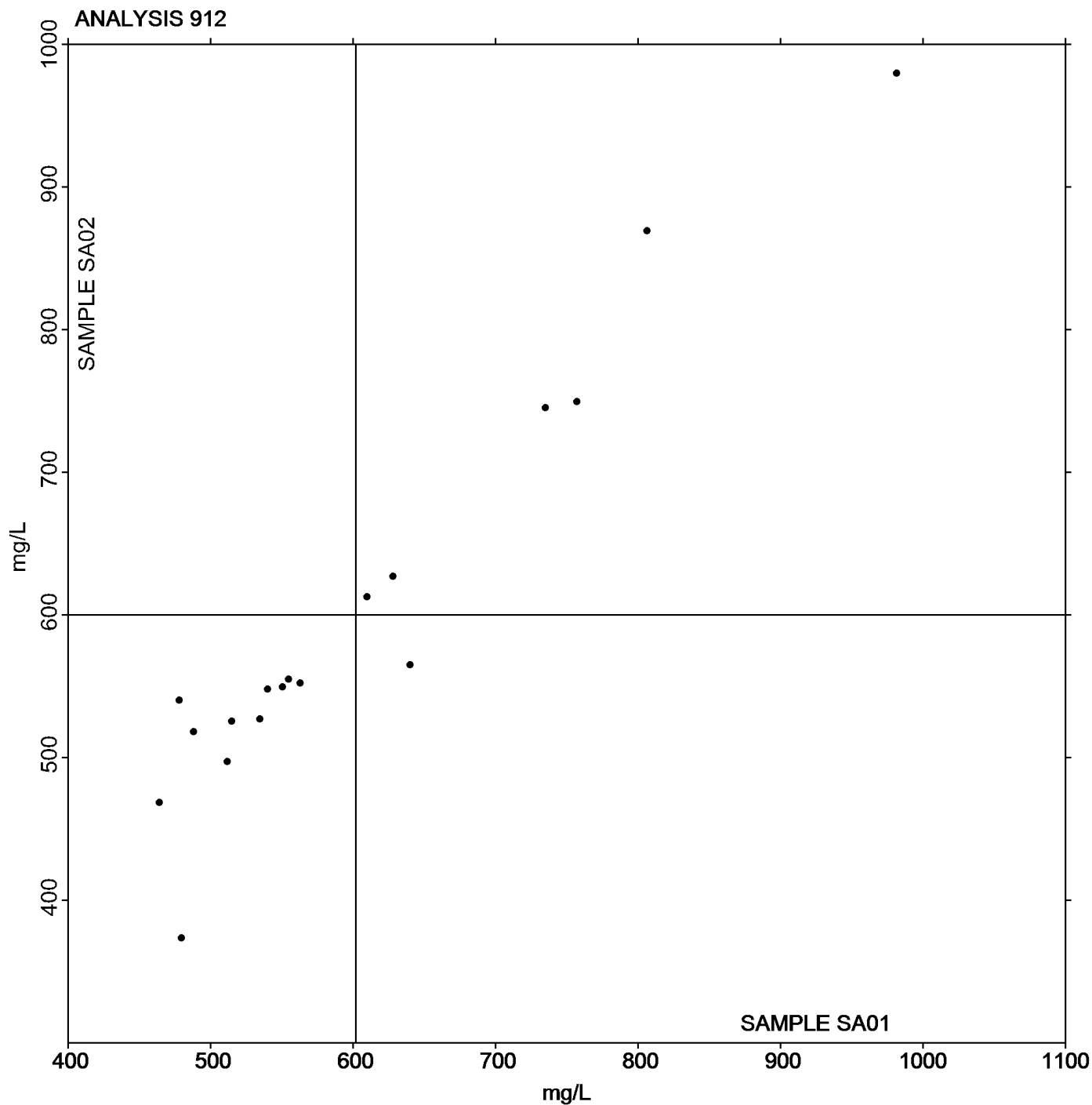
Grand Means		Summary Statistics	
	602.10 mg/L		600.07 mg/L
Std Dev Btwn Labs			
	137.74 mg/L		147.91 mg/L
Statistics based on 18 of 18 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay



Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA01 <i>Chardonnay</i>			Sample SA02 <i>Chardonnay</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Please specify method used	478.0	0.0	-124.1	540.0	0.0	-60.1	1	1
Atomic Absorption Spectroscopy	576.0	131.5	-26.1	572.8	159.2	-27.2	8	8
ICP-OES	568.1	49.0	-34.0	566.8	53.0	-33.3	5	5
FTIR	858.3	174.3	256.2	862.3	165.8	262.2	2	2
Other _____	597.5	60.1	-4.6	560.0	7.1	-40.1	2	2



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 #051****Analysis 915****Fall 2015****A420nm (1cm path)**

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TQQZE		0.0840	-0.0001	-0.01	0.0800	-0.0013	-0.21
339UKH	*	0.0950	0.0109	1.74	0.0975	0.0162	2.67
3JFNED		0.0810	-0.0031	-0.49	0.0740	-0.0073	-1.20
3T3M7H		0.0715	-0.0126	-2.00	0.0695	-0.0118	-1.94
3W7KGB		0.0865	0.0024	0.39	0.0815	0.0002	0.03
4K87UJ		0.0875	0.0034	0.55	0.0830	0.0017	0.28
62RCG4		0.0890	0.0049	0.79	0.0825	0.0012	0.20
8637A7		0.0860	0.0019	0.31	0.0815	0.0002	0.03
8F8WD3		0.0810	-0.0031	-0.49	0.0780	-0.0033	-0.54
9DWC38		0.0940	0.0099	1.58	0.0850	0.0037	0.61
9KV2KB		0.0830	-0.0011	-0.17	0.0790	-0.0023	-0.38
ABYK9C	X	0.2935	0.2094	33.38	0.2700	0.1887	31.05
BK8CDZ		0.0810	-0.0031	-0.49	0.0810	-0.0003	-0.05
C7G34Z		0.0900	0.0059	0.95	0.0885	0.0072	1.19
CAGDYZ		0.0790	-0.0051	-0.81	0.0770	-0.0043	-0.71
CZV7ZB	X	0.0830	-0.0011	-0.17	0.0690	-0.0123	-2.02
DQK6EA		0.0805	-0.0036	-0.57	0.0810	-0.0003	-0.05
ECZ4YV	X	0.0717	-0.0124	-1.97	0.0836	0.0023	0.37
FL3LBX	X	0.0250	-0.0591	-9.41	0.0300	-0.0513	-8.44
FWL336		0.0905	0.0064	1.03	0.0851	0.0038	0.63
G2A6LV		0.0760	-0.0081	-1.28	0.0770	-0.0043	-0.71
HGW3ZV		0.0805	-0.0036	-0.57	0.0805	-0.0008	-0.13
JJ4G82		0.0790	-0.0051	-0.81	0.0770	-0.0043	-0.71
JZMM9Y		0.0900	0.0059	0.95	0.0900	0.0087	1.43
K3C7X4		0.0855	0.0014	0.23	0.0840	0.0027	0.45
L4GDD2	*	0.0985	0.0144	2.30	0.0890	0.0077	1.27



ASEV-CTS Wine Industry Interlaboratory Testing Program

**Report #051
Fall 2015**

**Analysis 915
A420nm (1cm path)**

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LD7YJZ		0.0855	0.0014	0.23	0.0825	0.0012	0.20
MKMUYU	X	0.1630	0.0789	12.58	0.1600	0.0787	12.95
N96D8M	X	0.1460	0.0619	9.87	0.1415	0.0602	9.91
NPUK3Z		0.0850	0.0009	0.15	0.0850	0.0037	0.61
NVEPQU		0.0700	-0.0141	-2.24	0.0700	-0.0113	-1.86
Q8794Q		0.0780	-0.0061	-0.97	0.0735	-0.0078	-1.28
QQEB3V		0.0870	0.0029	0.47	0.0865	0.0052	0.86
QUEMXV		0.0835	-0.0006	-0.09	0.0790	-0.0023	-0.38
RV8VJK		0.0800	-0.0041	-0.65	0.0800	-0.0013	-0.21
TA68RN		0.0890	0.0049	0.79	0.0860	0.0047	0.77
TQDXUT		0.0890	0.0049	0.79	0.0865	0.0052	0.86
TZELLQ		0.0845	0.0004	0.07	0.0795	-0.0018	-0.29
UQMM9P		0.0780	-0.0061	-0.97	0.0750	-0.0063	-1.03
UZ9QFP		0.0730	-0.0111	-1.76	0.0680	-0.0133	-2.19
VGF82H		0.0872	0.0031	0.50	0.0892	0.0079	1.30
XFXW2F		0.0830	-0.0011	-0.17	0.0820	0.0007	0.12
YZWK7G		0.0886	0.0045	0.72	0.0834	0.0021	0.35

Grand Means		Summary Statistics	
0.08406	Absorbance Units	0.08129	Absorbance Units
Std Dev Btwn Labs			
0.00627	Absorbance Units	0.00608	Absorbance Units
Statistics based on 37 of 43 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay



Analysis 915

A420nm (1cm path)

Comments on assigned Data Flags

ABYK9C (X) - Data for both samples are high.

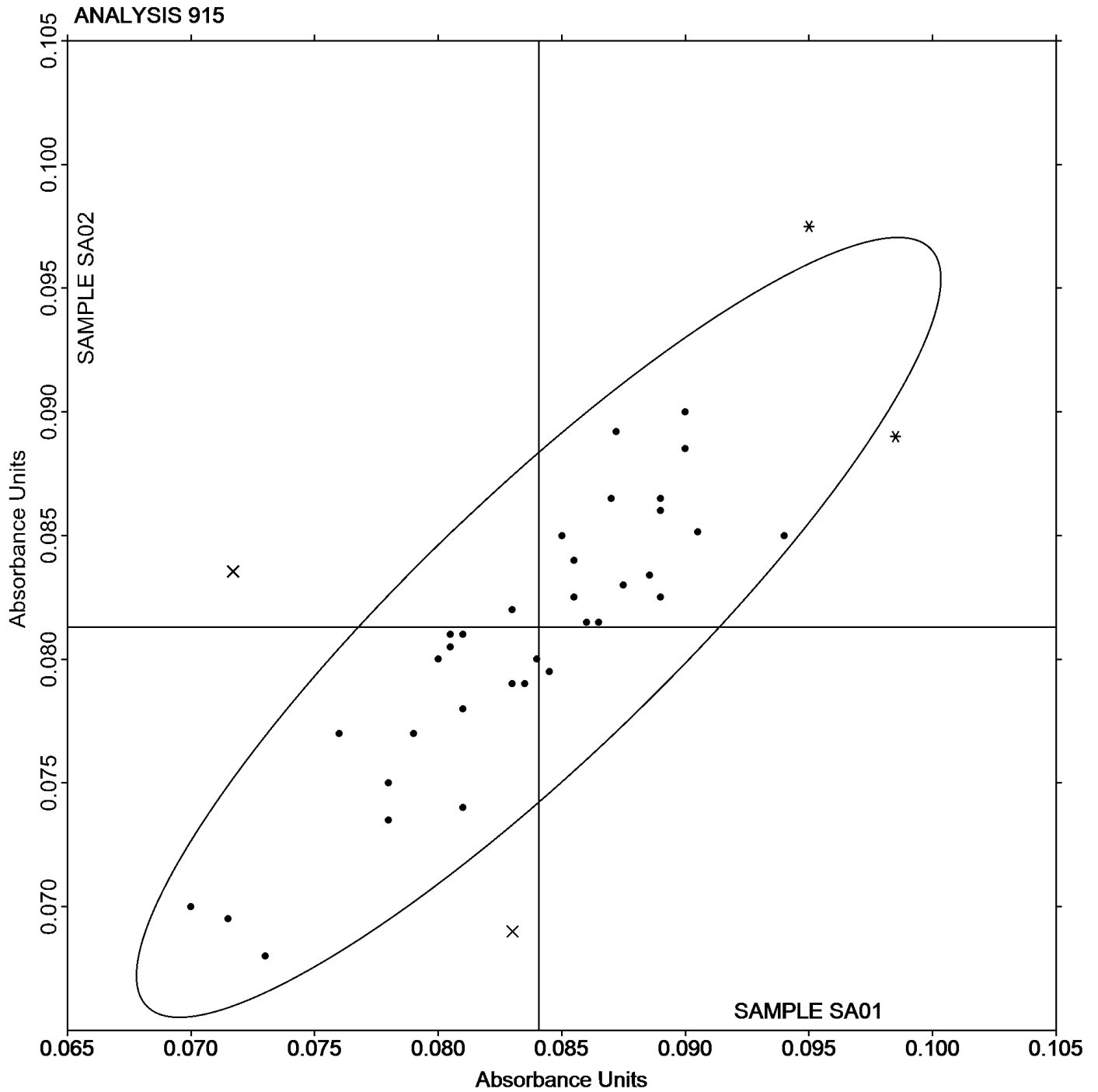
CZV7ZB (X) - Inconsistent in testing between samples.

ECZ4YV (X) - Inconsistent in testing between samples.

FL3LBX (X) - Data for both samples are low.

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

N96D8M (X) - Data for both samples are high.



**ASEV-CTS Wine Industry Interlaboratory Testing Program****Report #051****Analysis 916****Fall 2015****A520nm (1cm path)**

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2TQQZE		0.0120	-0.0009	-0.28	0.0115	-0.0012	-0.39
339UKH	X	0.0205	0.0076	2.54	0.0250	0.0123	4.03
3JFNED		0.0095	-0.0034	-1.11	0.0085	-0.0042	-1.37
3T3M7H		0.0070	-0.0059	-1.94	0.0075	-0.0052	-1.70
3W7KGB		0.0135	0.0006	0.21	0.0125	-0.0002	-0.06
4K87UJ		0.0135	0.0006	0.21	0.0130	0.0003	0.10
62RCG4		0.0145	0.0016	0.55	0.0120	-0.0007	-0.23
8637A7		0.0130	0.0001	0.05	0.0115	-0.0012	-0.39
8F8WD3		0.0100	-0.0029	-0.95	0.0115	-0.0012	-0.39
9DWC38		0.0160	0.0031	1.04	0.0160	0.0033	1.08
9KV2KB		0.0130	0.0001	0.05	0.0115	-0.0012	-0.39
BK8CDZ		0.0100	-0.0029	-0.95	0.0130	0.0003	0.10
C7G34Z		0.0175	0.0046	1.54	0.0185	0.0058	1.90
CAGDYZ		0.0165	0.0036	1.21	0.0155	0.0028	0.92
CZV7ZB		0.0125	-0.0004	-0.12	0.0100	-0.0027	-0.88
DQK6EA		0.0105	-0.0024	-0.78	0.0110	-0.0017	-0.55
ECZ4YV	X	0.0056	-0.0073	-2.40	0.0144	0.0017	0.56
FWL336		0.0176	0.0047	1.56	0.0168	0.0041	1.34
G2A6LV		0.0120	-0.0009	-0.28	0.0115	-0.0012	-0.39
HGW3ZV		0.0100	-0.0029	-0.95	0.0120	-0.0007	-0.23
JJ4G82		0.0110	-0.0019	-0.61	0.0120	-0.0007	-0.23
JZMM9Y		0.0110	-0.0019	-0.61	0.0120	-0.0007	-0.23
K3C7X4		0.0130	0.0001	0.05	0.0120	-0.0007	-0.23
L4GDD2	X	0.0240	0.0111	3.70	0.0185	0.0058	1.90
LD7YJZ		0.0125	-0.0004	-0.12	0.0130	0.0003	0.10
MKMUYU	X	0.0855	0.0726	24.09	0.0860	0.0733	23.99



WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
N96D8M	X	0.0640	0.0511	16.96	0.0635	0.0508	16.63
NMQTAM	X	0.0020	-0.0109	-3.60	-0.0020	-0.0147	-4.81
NPUK3Z		0.0200	0.0071	2.37	0.0200	0.0073	2.39
Q8794Q		0.0070	-0.0059	-1.94	0.0055	-0.0072	-2.35
QQEB3V		0.0160	0.0031	1.04	0.0160	0.0033	1.08
QUEMXV		0.0140	0.0011	0.38	0.0130	0.0003	0.10
RV8VJK		0.0100	-0.0029	-0.95	0.0100	-0.0027	-0.88
TA68RN		0.0160	0.0031	1.04	0.0150	0.0023	0.76
TQDXUT		0.0160	0.0031	1.04	0.0160	0.0033	1.08
TZELLQ		0.0135	0.0006	0.21	0.0135	0.0008	0.27
UQMM9P		0.0100	-0.0029	-0.95	0.0090	-0.0037	-1.21
UZ9QFP		0.0095	-0.0034	-1.11	0.0090	-0.0037	-1.21
VGf82H		0.0157	0.0028	0.94	0.0155	0.0028	0.92
XFXW2F	*	0.0120	-0.0009	-0.28	0.0155	0.0028	0.92
YZWK7G		0.0141	0.0012	0.41	0.0133	0.0006	0.20

Grand Means		Summary Statistics	
0.01285	Absorbance Units	0.01269	Absorbance Units
Stnd Dev Btwn Labs			
0.00302	Absorbance Units	0.00306	Absorbance Units
Statistics based on 35 of 41 reporting participants			

Wines tested: SA01: Chardonnay; SA02: Chardonnay



Analysis 916

A520nm (1cm path)

Comments on assigned Data Flags

339UKH (X) - Inconsistent in testing between samples, data for Sample SA02 are high.

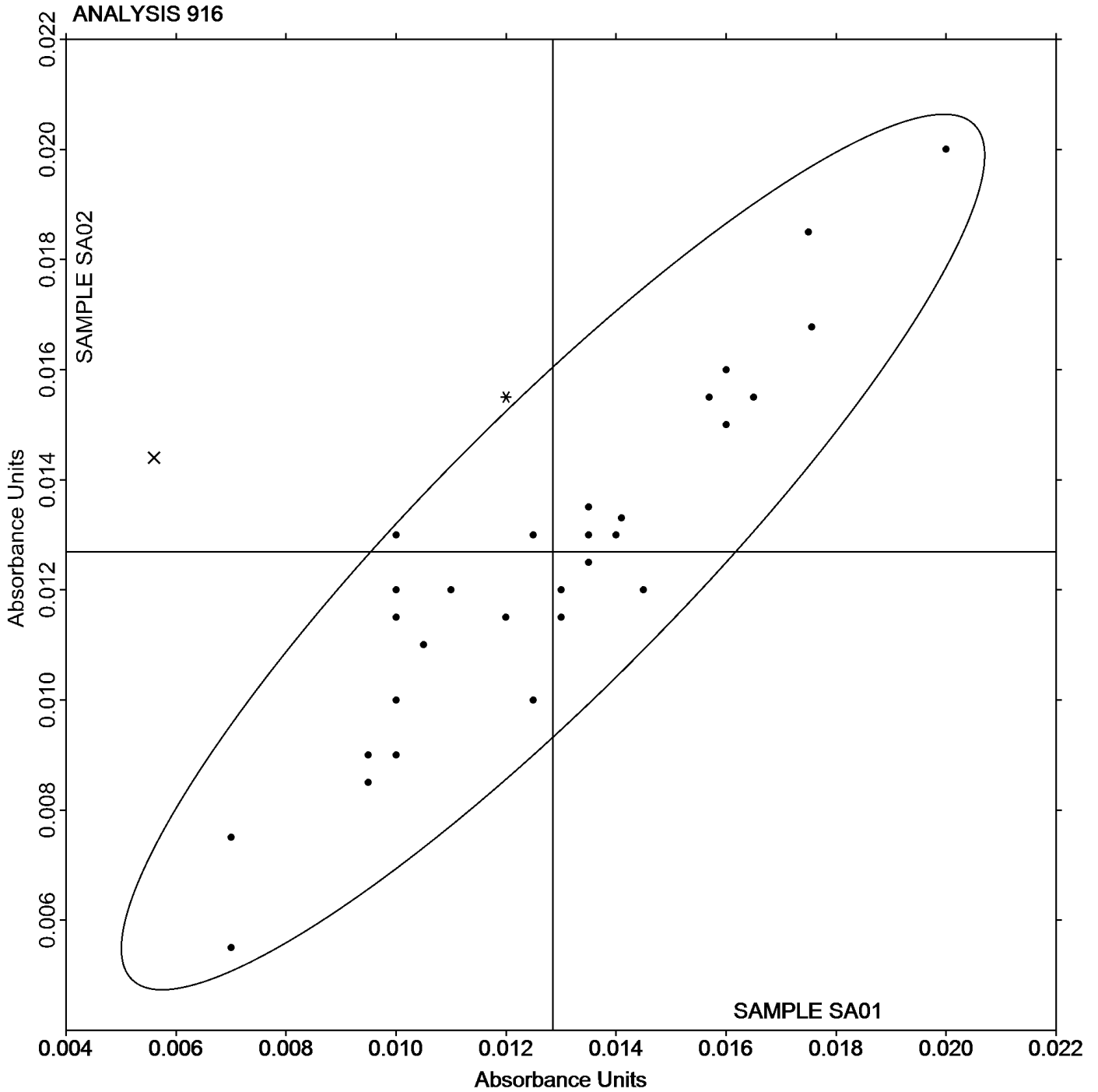
ECZ4YV (X) - Inconsistent in testing between samples, data for Sample SA01 are low.

L4GDD2 (X) - Inconsistent in testing between samples, data for Sample SA01 are high.

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

N96D8M (X) - Data for both samples are high.

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

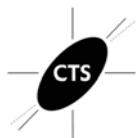




ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 950
Research Property - Turbidity

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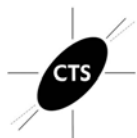
WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
2TC4QC		0.1710	-0.1348	-44.1%	0.1660	-0.1213	-42.2%
2TQQZE		0.1200	-0.1858	-60.8%	0.0700	-0.2173	-75.6%
339UKH	X	0.9800	0.6742	220.5%	0.8100	0.5227	181.9%
3EPE6E		0.4560	0.1502	49.1%	0.3395	0.0522	18.2%
3JFNED		0.2260	-0.0798	-26.1%	0.2500	-0.0373	-13.0%
3K8WEG		0.3850	0.0792	25.9%	0.3250	0.0377	13.1%
3T3M7H	M	0.0100	-0.2958	-96.7%	No data reported for this sample		
3W7KGB		0.4250	0.1192	39.0%	0.3800	0.0927	32.3%
62RCG4		0.3450	0.0392	12.8%	0.3060	0.0187	6.5%
6PFM38		0.1450	-0.1608	-52.6%	0.1400	-0.1473	-51.3%
8637A7		0.2770	-0.0288	-9.4%	0.1885	-0.0988	-34.4%
8F8WD3		0.3180	0.0122	4.0%	0.3275	0.0402	14.0%
9DWC38		0.3460	0.0402	13.1%	0.3405	0.0532	18.5%
BJCWZ4		0.4350	0.1292	42.2%	0.3050	0.0177	6.2%
BK8CDZ		0.3545	0.0487	15.9%	0.3485	0.0612	21.3%
C7G34Z		0.4180	0.1122	36.7%	0.4890	0.2017	70.2%
CAGDYZ		0.2830	-0.0228	-7.5%	0.2555	-0.0318	-11.1%
CZV7ZB	X	0.8050	0.4992	163.2%	0.3400	0.0527	18.3%
DQK6EA		0.3320	0.0262	8.6%	0.2930	0.0057	2.0%
E39TPZ		0.3795	0.0737	24.1%	0.4350	0.1477	51.4%
ECZ4YV		0.3230	0.0172	5.6%	0.2820	-0.0053	-1.8%
FGBGGU		0.3200	0.0142	4.6%	0.2650	-0.0223	-7.8%
FL3LBX	X	0.8450	0.5392	176.3%	0.5300	0.2427	84.5%



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

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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
FR6X7V		0.1585	-0.1473	-48.2%	0.1310	-0.1563	-54.4%
FR9HUX		0.3800	0.0742	24.3%	0.2750	-0.0123	-4.3%
FWL336		0.4040	0.0982	32.1%	0.3885	0.1012	35.2%
FYN2DX		0.2400	-0.0658	-21.5%	0.2400	-0.0473	-16.5%
G2A6LV		0.3310	0.0252	8.2%	0.3440	0.0567	19.7%
HGW3ZV		0.2350	-0.0708	-23.2%	0.2400	-0.0473	-16.5%
J4LX4Y	X	1.2600	0.9542	312.0%	1.2900	1.0027	349.0%
JJ4G82		0.2440	-0.0618	-20.2%	0.2730	-0.0143	-5.0%
JZMM9Y		0.3200	0.0142	4.6%	0.3550	0.0677	23.6%
K3C7X4	*	0.5950	0.2892	94.6%	0.5200	0.2327	81.0%
KXH6WP		0.4100	0.1042	34.1%	0.4950	0.2077	72.3%
L4GDD2	X	0.3385	0.0327	10.7%	0.6560	0.3687	128.3%
LD7YJZ		0.2190	-0.0868	-28.4%	0.2415	-0.0458	-15.9%
LEMVBY		0.3200	0.0142	4.6%	0.3050	0.0177	6.2%
MKMUYU		0.4700	0.1642	53.7%	0.4600	0.1727	60.1%
MTDF6T		0.3000	-0.0058	-1.9%	0.2000	-0.0873	-30.4%
N96D8M		0.3000	-0.0058	-1.9%	0.2000	-0.0873	-30.4%
NVEPQU	X	0.6650	0.3592	117.5%	0.5950	0.3077	107.1%
PZBREU		0.2780	-0.0278	-9.1%	0.3505	0.0632	22.0%
Q8794Q		0.3810	0.0752	24.6%	0.3365	0.0492	17.1%
QQEB3V		0.2000	-0.1058	-34.6%	0.2000	-0.0873	-30.4%
QUEMXV		0.2320	-0.0738	-24.1%	0.2270	-0.0603	-21.0%
RV8VJK		0.2000	-0.1058	-34.6%	0.3000	0.0127	4.4%



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

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WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
TA68RN	X	0.5000	0.1942	63.5%	0.7000	0.4127	143.6%
TQDXUT		0.1150	-0.1908	-62.4%	0.0850	-0.2023	-70.4%
TZELLQ		0.2410	-0.0648	-21.2%	0.1440	-0.1433	-49.9%
UPCMDG		0.3335	0.0277	9.1%	0.3280	0.0407	14.2%
UQMM9P		0.3500	0.0442	14.5%	0.2700	-0.0173	-6.0%
UZ9QFP		0.2560	-0.0498	-16.3%	0.2540	-0.0333	-11.6%
VGf82H		0.2900	-0.0158	-5.2%	0.2800	-0.0073	-2.5%
WDWCYP	X	0.5350	0.2292	75.0%	0.6750	0.3877	134.9%
XFXW2F		0.2225	-0.0833	-27.2%	0.2710	-0.0163	-5.7%
ZGYKUB		0.2700	-0.0358	-11.7%	0.2000	-0.0873	-30.4%
ZPVER9		0.3230	0.0172	5.6%	0.3720	0.0847	29.5%

Research Property Target Value		
Target Value	0.30580 NTU	0.28730 NTU
<p align="center"><i>For Test 950, CTS has chosen not to designate a target value for this property instead of using an average value.</i></p>		

Wines tested: SA01: Chardonnay; SA02: Chardonnay

Consensus Average (may differ from target value)	0.30578 NTU	0.28733 NTU
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This consensus average is based on 48 reporting participants.



Comments on assigned Data Flags

339UKH (X) - Data for both samples are high.

3T3M7H (M) - Laboratory did not submit data for Sample SA02. Low data for Sample SA01.

CZV7ZB (X) - High data for Sample SA01.

FL3LBX (X) - High data for Sample SA01.

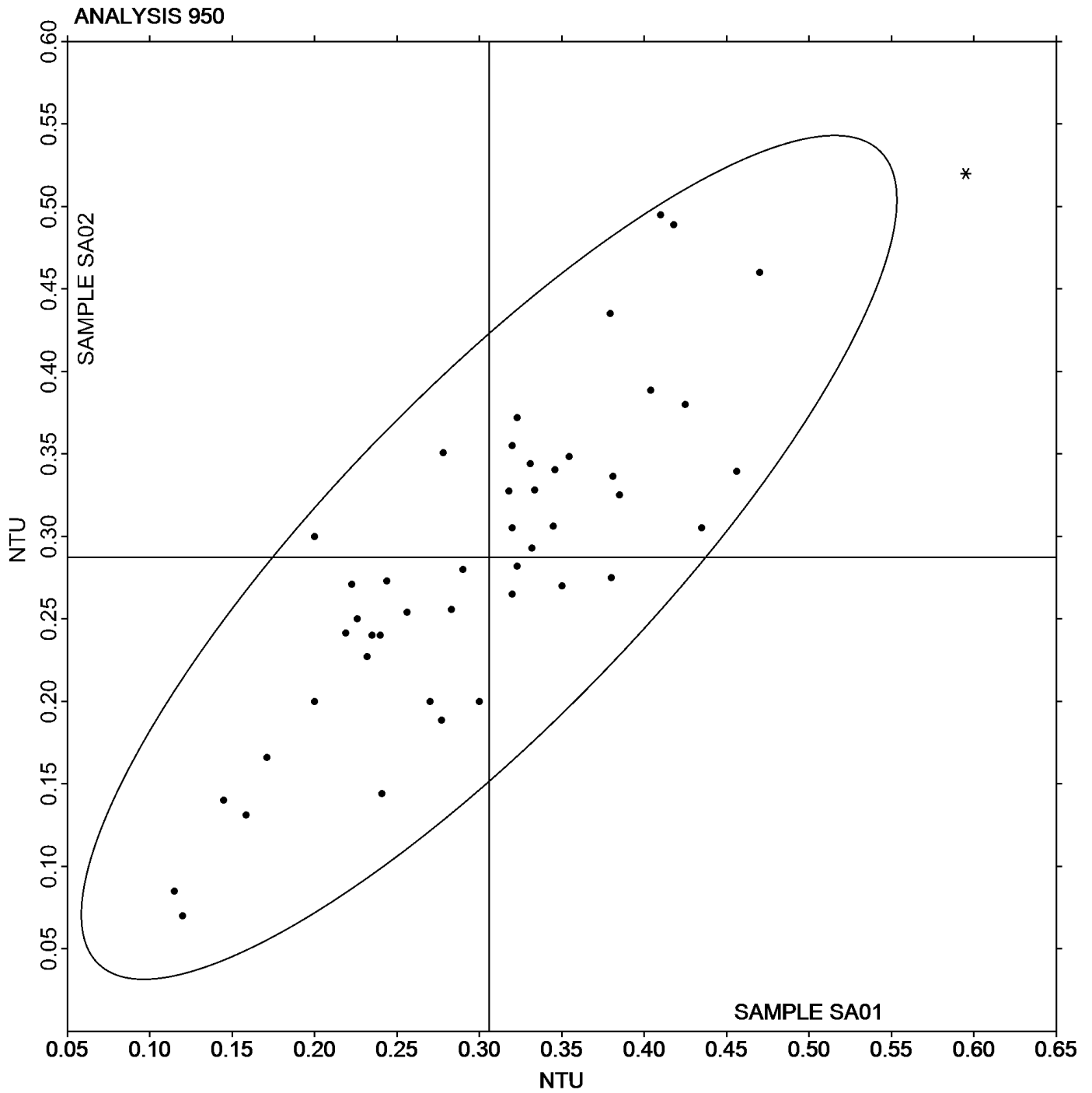
J4LX4Y (X) - Data for both samples are high.

L4GDD2 (X) - High data for Sample SA02.

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

TA68RN (X) - High data for Sample SA02.

WDWCYP (X) - High data for Sample SA02.





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

Report #051
Fall 2015

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
3JFNED		57.87	7.49	14.9%	58.85	19.09	48.0%
6PFM38		49.50	-0.88	-1.7%	50.50	10.74	27.0%
8637A7		47.50	-2.88	-5.7%	40.50	0.74	1.9%
C7G34Z		60.93	10.54	20.9%	62.83	23.07	58.0%
FL3LBX	X	160.00	109.62	217.6%	155.00	115.24	289.9%
LD7YJZ		48.13	-2.25	-4.5%	47.65	7.89	19.8%
P66LCV		50.00	-0.38	-0.8%	50.50	10.74	27.0%
QQEB3V		44.00	-6.38	-12.7%	45.00	5.24	13.2%
QUEMXV		49.50	-0.88	-1.7%	50.00	10.24	25.8%
YHGEUK		46.00	-4.38	-8.7%	42.00	2.24	5.6%

Research Property Target Value		
Target Value	50.380 mg/L	39.759 mg/L
<p align="center"><i>For Test 951, CTS has chosen not to designate a target value for this property instead of using an average value.</i></p>		

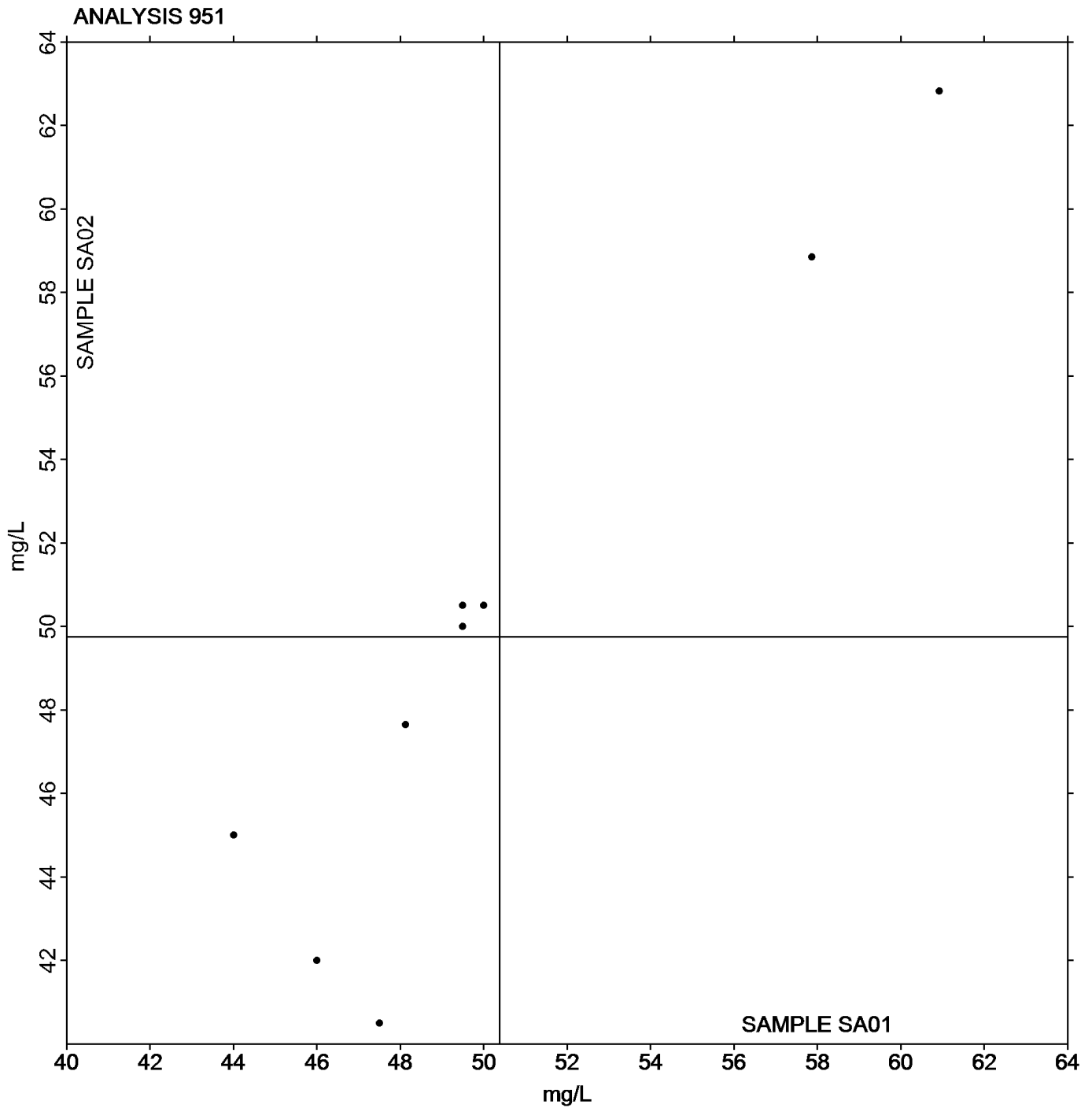
Wines tested: SA01: Chardonnay; SA02: Chardonnay

Consensus Average (may differ from target value) 50.380 mg/L 49.759 mg/L

This consensus average is based on 9 reporting participants.

Comments on assigned Data Flags

FL3LBX (X) - Data for both samples are high.



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



Research Property: Ethanol (% of Volume) using Dist. / Density Method

WebCode	Data Flag	Sample SA01			Sample SA02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3JFNED		12.53	0.05	0.75	12.51	0.03	0.45
6PFM38		12.52	0.04	0.53	12.52	0.04	0.61
BPE3F7		12.40	-0.08	-1.16	12.50	0.02	0.30
FL3LBX		12.50	0.02	0.31	12.40	-0.08	-1.28
GMPMQ7		12.40	-0.08	-1.16	12.40	-0.08	-1.28
JJ4G82	M	12.47	-0.01	-0.13	No data reported for this sample		
MKMUYU		12.45	-0.03	-0.43	12.45	-0.03	-0.49
P66LCV		12.60	0.12	1.78	12.60	0.12	1.87
VGF82H		12.42	-0.06	-0.94	12.45	-0.03	-0.49
YHGEUK		12.50	0.02	0.31	12.50	0.02	0.30

Research Property Target Value

Target Value **12.479** Percent of volume **12.481** Percent of volume

For Test 952, CTS has chosen not to designate a target value for this property instead of using an average value.

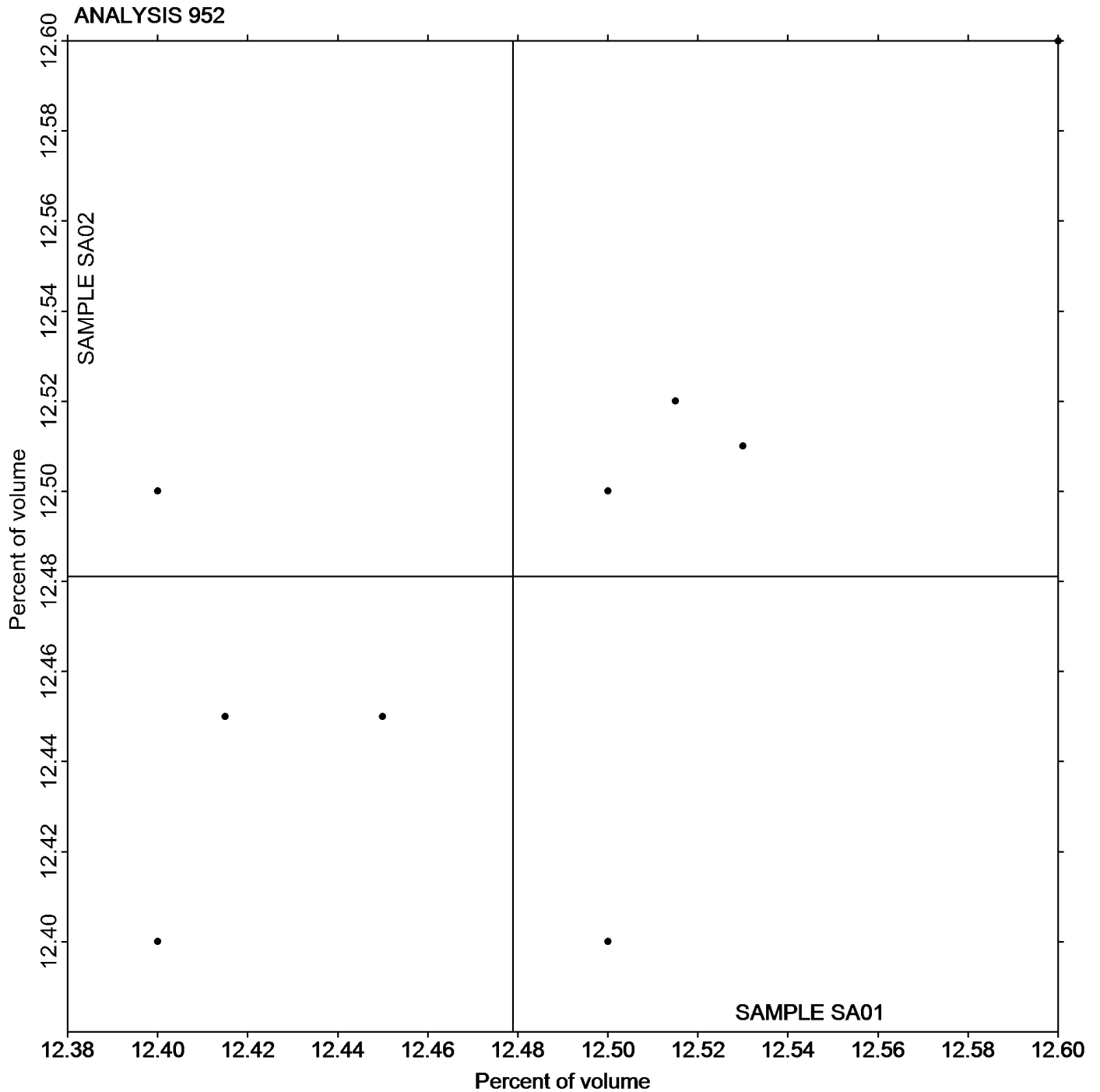
Wines tested: SA01: Chardonnay; SA02: Chardonnay

Consensus Average 12.479 Percent of volume 12.481 Percent of volume
 (may differ from target value)

This consensus average is based on 9 reporting participants.

Comments on assigned Data Flags

JJ4G82 (M) - Laboratory did not submit data for Sample SA02.



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