



Wine Industry Interlaboratory Program

Summary Report #057 - Fall 2017

[Introduction to the Wine Program](#)

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

Analysis	Analysis Name
<u>901</u>	<u>Ethanol (% of volume)</u>
<u>902</u>	<u>Total Sulfur Dioxide</u>
<u>903</u>	<u>Free Sulfur Dioxide</u>
<u>904</u>	<u>Titratable Acidity</u>
<u>905</u>	<u>Volatile Acidity</u>
<u>906</u>	<u>Specific Gravity</u>
<u>907</u>	<u>pH</u>
<u>908</u>	<u>Residual Sugar</u>
<u>909</u>	<u>L-Malic Acid</u>
<u>910</u>	<u>Glucose + Fructose</u>
<u>911</u>	<u>Copper Content</u>
<u>912</u>	<u>Potassium Content</u>
<u>915</u>	<u>A420nm (1cm path)</u>
<u>916</u>	<u>A520nm (1cm path)</u>
<u>950</u>	<u>Research Property: Citric Acid Content</u>
<u>951</u>	<u>Research Property: Methanol Content</u>
<u>952</u>	<u>Research: Molecular SO₂ Content</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.

Analysis 901
Ethanol (% of volume)

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ	X	13.46	-0.15	-3.43	13.58	-0.13	-2.87
2ZMZ3R		13.67	0.06	1.52	13.79	0.08	1.73
38K3QN		13.63	0.02	0.57	13.75	0.03	0.74
3UW4XZ		13.65	0.04	1.04	13.75	0.04	0.85
3XDBDM		13.65	0.04	1.04	13.76	0.04	0.96
3Y3WRW		13.63	0.02	0.57	13.73	0.02	0.42
474BBC	X	14.19	0.58	13.75	14.32	0.60	13.22
4KZPB7		13.51	-0.09	-2.13	13.61	-0.10	-2.21
4M7BY7		13.59	-0.01	-0.25	13.70	-0.02	-0.35
689HTV		13.57	-0.04	-0.84	13.72	0.00	0.09
6AWUR2		13.62	0.02	0.46	13.74	0.03	0.63
6NGAXL	X	13.59	-0.01	-0.25	13.44	-0.27	-5.93
6UM4PW		13.63	0.03	0.69	13.73	0.01	0.31
6XJR74		13.57	-0.04	-0.84	13.68	-0.03	-0.68
7NRJFK	X	13.30	-0.30	-7.08	13.55	-0.16	-3.52
7ZMPFB	X	13.00	-0.60	-14.14	13.40	-0.31	-6.81
8KQP42		13.58	-0.03	-0.60	13.69	-0.03	-0.57
8VPL4H	X	13.35	-0.25	-5.90	13.50	-0.21	-4.62
9VLF2E		13.57	-0.03	-0.72	13.66	-0.05	-1.12
9WHZND	X	13.48	-0.12	-2.91	13.53	-0.18	-3.87
9WJQWG		13.63	0.02	0.57	13.71	-0.01	-0.13
A74JLJ		13.65	0.04	1.04	13.76	0.05	1.07
AJM44R		13.61	0.01	0.22	13.72	0.01	0.20
AKHPVW	X	13.95	0.35	8.22	14.20	0.49	10.70
AUA6K2		13.62	0.02	0.46	13.76	0.04	0.96
AX9J66		13.60	0.00	-0.01	13.70	-0.01	-0.24
BDV2RE	*	13.49	-0.11	-2.60	13.63	-0.09	-1.88
BNYAHC		13.61	0.00	0.10	13.72	0.01	0.20
BPUU6C	X	12.84	-0.77	-18.02	12.89	-0.83	-18.08
C92KWZ		13.64	0.04	0.93	13.74	0.03	0.63
CE4QC3	X	13.52	-0.09	-2.02	13.56	-0.15	-3.30
CEQ7LD		13.62	0.01	0.34	13.73	0.01	0.31
CKU4FC		13.63	0.03	0.69	13.72	0.01	0.20
DXFUDK		13.66	0.06	1.40	13.77	0.05	1.18
E8YTJG		13.60	0.00	-0.01	13.73	0.01	0.31

Analysis 901
Ethanol (% of volume)

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EGMPHW		13.65	0.05	1.16	13.79	0.08	1.73
EMC2HY		13.57	-0.03	-0.72	13.70	-0.01	-0.24
ET2GBC		13.61	0.01	0.22	13.71	0.00	-0.02
FBX86K		13.56	-0.05	-1.07	13.68	-0.03	-0.68
G3GBE6		13.63	0.02	0.57	13.70	-0.01	-0.24
GAXLR6	X	13.63	0.03	0.69	13.53	-0.19	-4.07
GQJAXU		13.64	0.04	0.93	13.79	0.07	1.62
H8PTBC		13.61	0.01	0.22	13.72	0.01	0.20
HGCURL		13.61	0.01	0.22	13.74	0.03	0.63
HKU289	X	13.46	-0.15	-3.43	13.60	-0.12	-2.54
JD8NPK		13.61	0.00	0.10	13.71	0.00	-0.02
JTLRAU		13.61	0.00	0.10	13.74	0.02	0.53
K2BWJ8		13.66	0.06	1.40	13.79	0.07	1.62
K8GT48		13.64	0.04	0.93	13.73	0.01	0.31
LFNRBN		13.59	-0.02	-0.37	13.73	0.01	0.31
MCHNXR		13.57	-0.04	-0.84	13.67	-0.05	-1.01
N3ACGN	X	13.57	-0.03	-0.72	13.75	0.04	0.85
NETQLB		13.51	-0.09	-2.13	13.62	-0.09	-1.99
NRRUNG		13.61	0.00	0.10	13.72	0.00	0.09
NYB34Z	X	13.55	-0.05	-1.19	13.50	-0.21	-4.62
P36CVD		13.62	0.02	0.46	13.75	0.04	0.85
P9XGPH		13.60	0.00	-0.01	13.70	-0.01	-0.24
PP3QTN	X	13.42	-0.19	-4.37	13.54	-0.17	-3.74
PQY2PR		13.60	-0.01	-0.13	13.72	0.00	0.09
Q4ZEZ9		13.62	0.02	0.46	13.71	0.00	-0.02
QCANPM	X	13.30	-0.30	-7.08	13.60	-0.11	-2.43
QDKLYX		13.52	-0.08	-1.90	13.65	-0.07	-1.44
R2RJWW		13.62	0.01	0.34	13.74	0.03	0.63
RAH8PD		13.56	-0.04	-0.96	13.68	-0.04	-0.79
UQ2GQ7		13.61	0.00	0.10	13.68	-0.03	-0.68
UTRN9H		13.64	0.03	0.81	13.72	0.00	0.09
UVBXZU		13.61	0.00	0.10	13.71	-0.01	-0.13
UVR2NU	X	14.00	0.40	9.40	13.67	-0.04	-0.90
VE2B9R		13.54	-0.07	-1.54	13.62	-0.09	-1.99
VHYYKT		13.65	0.05	1.16	13.77	0.05	1.18



Ethanol (% of volume)

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
WLKWV4		13.59	-0.02	-0.37	13.71	-0.01	-0.13
XAZ794		13.63	0.03	0.69	13.74	0.02	0.53
XGGHM6		13.50	-0.10	-2.37	13.60	-0.11	-2.43
XTUK7H		13.59	-0.01	-0.25	13.70	-0.01	-0.24
XTWABE		13.63	0.02	0.57	13.75	0.04	0.85
XU6K6X		13.62	0.02	0.46	13.73	0.02	0.42
YF8UNQ		13.60	0.00	-0.01	13.70	-0.01	-0.24
YU6476		13.59	-0.02	-0.37	13.69	-0.02	-0.46
Z24TMA		13.57	-0.03	-0.72	13.69	-0.02	-0.46
Z3DVBT		13.60	-0.01	-0.13	13.71	0.00	-0.02
ZJYL88		13.68	0.07	1.75	13.77	0.06	1.29
ZRUJWV	*	13.49	-0.11	-2.60	13.57	-0.14	-3.09

Grand Means		Summary Statistics	
	13.601 percent		13.711 percent
Std Dev Btwn Labs			0.046 percent
	0.042 percent	Statistics based on 65 of 82 reporting participants	

Wines tested: SA13: Chardonnay; SA14: Chardonnay

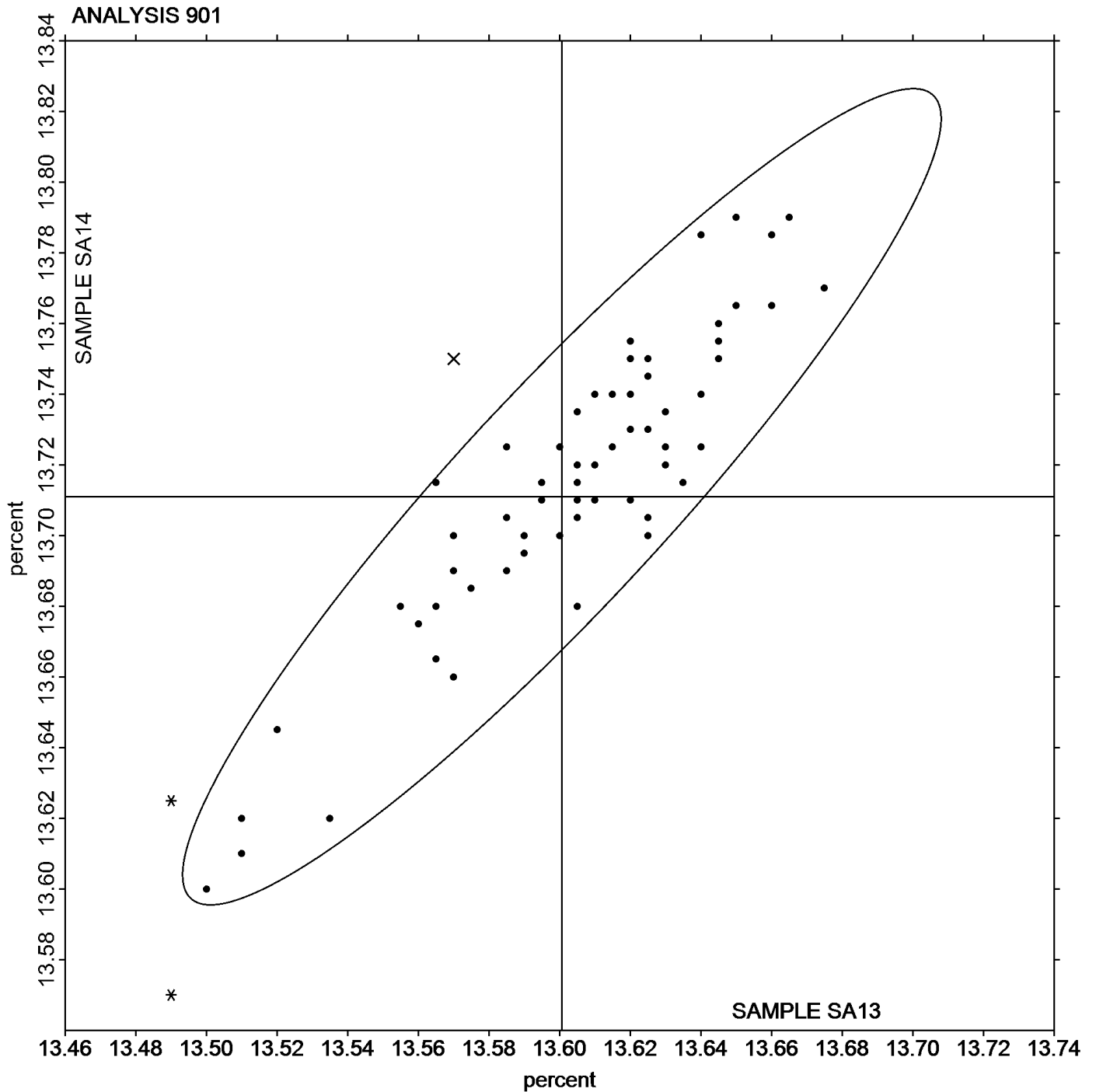


Comments on Assigned Data Flags for Test #901

- BPUU6C (X) - Data for both samples are low. Inconsistent within the determinations of sample SA14.
- 9WHZND (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA14.
- N3ACGN (X) - Inconsistent in testing between samples.
- AKHPVW (X) - Data for both samples are high. Inconsistent within the determinations of sample SA13.
- 7ZMPFB (X) - Data for both samples are low.
- 474BBC (X) - Data for both samples are high.
- CE4QC3 (X) - Inconsistent in Testing between sample, data for sample SA14 are low.
- PP3QTN (X) - Data for both samples are low. Possible Systematic Error.
- QCANPM (X) - Data for sample SA13 are low. Inconsistent within the determinations of sample SA13.
- 6NGAXL (X) - Inconsistent in testing between samples, data for sample SA14 are low.
- 8VPL4H (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA13.
- GAXLR6 (X) - Inconsistent in testing between samples, data for sample SA14 are low.
- 2R7PPQ (X) - Data for both samples are low. Possible Systematic Error.
- 7NRJFK (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA14.
- HKU289 (X) - Inconsistent in testing between samples, data for sample SA13 are low.
- NYB34Z (X) - Inconsistent in testing between samples, data for sample SA14 are low. Inconsistent within the determinations of sample SA13.
- UVR2NU (X) - Inconsistent in testing between samples, data for sample SA13 are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <i>Chardonnay</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Ebulliometer Method							0/5
Gas Chromatography Method	13.558	0.021	-0.04	13.673	0.049	-0.04	3/5
Near Infrared Method	13.606	0.034	0.01	13.717	0.039	0.01	50/53
Dist. / Density Method	13.565	0.056	-0.04	13.673	0.058	-0.04	5/9
FTIR	13.589	0.083	-0.01	13.698	0.075	-0.01	5/8
Other _____	13.640	0.014	0.04	13.745	0.028	0.03	2/2



Analysis 902
Total Sulfur Dioxide

Fall 2017

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
38K3QN		65.50	4.62	1.01	74.50	3.49	0.64
3UW4XZ		60.00	-0.88	-0.19	67.50	-3.51	-0.64
3XDBDM		63.20	2.32	0.51	72.05	1.04	0.19
3Y3WRW		58.00	-2.88	-0.63	71.00	-0.01	0.00
474BBC		52.50	-8.38	-1.83	65.00	-6.01	-1.10
4KZPB7	X	44.50	-16.38	-3.58	60.50	-10.51	-1.92
4M7BY7		66.00	5.12	1.12	80.00	8.99	1.64
689HTV		65.00	4.12	0.90	75.50	4.49	0.82
6AWUR2		60.50	-0.38	-0.08	68.00	-3.01	-0.55
6NGAXL		64.50	3.62	0.79	77.50	6.49	1.19
6UM4PW		60.72	-0.16	-0.03	76.50	5.49	1.00
6XJR74		69.50	8.62	1.88	82.00	10.99	2.01
7NRJFK		57.90	-2.98	-0.65	66.90	-4.11	-0.75
7ZMPFB	X	108.00	47.12	10.29	67.00	-4.01	-0.73
8KQP42		60.38	-0.51	-0.11	71.18	0.17	0.03
8VPL4H	*	48.00	-12.88	-2.81	61.00	-10.01	-1.83
9VLF2E	X	70.00	9.12	1.99	95.00	23.99	4.39
9WJQWG		56.50	-4.38	-0.96	68.00	-3.01	-0.55
A74JLJ		60.00	-0.88	-0.19	65.00	-6.01	-1.10
AJM44R		61.50	0.62	0.14	69.00	-2.01	-0.37
AKHPVW	X	44.00	-16.88	-3.69	55.00	-16.01	-2.93
AUA6K2		57.00	-3.88	-0.85	69.50	-1.51	-0.28
AX9J66		60.00	-0.88	-0.19	67.00	-4.01	-0.73
BDV2RE		68.00	7.12	1.55	73.50	2.49	0.46
BNYAHC		68.50	7.62	1.66	84.00	12.99	2.38
C92KWZ		56.00	-4.88	-1.07	72.50	1.49	0.27
CE4QC3		65.50	4.62	1.01	69.50	-1.51	-0.28
CEQ7LD	*	53.00	-7.88	-1.72	55.50	-15.51	-2.84
CKU4FC		67.00	6.12	1.34	82.00	10.99	2.01
DXFUDK		61.00	0.12	0.03	66.00	-5.01	-0.92
E8YTJG		60.50	-0.38	-0.08	70.50	-0.51	-0.09
EGMPHW		59.00	-1.88	-0.41	71.50	0.49	0.09
EMACD3	X	39.50	-21.38	-4.67	44.50	-26.51	-4.85
EMC2HY		62.50	1.62	0.35	69.50	-1.51	-0.28
ET2GBC		56.00	-4.88	-1.07	65.00	-6.01	-1.10



Total Sulfur Dioxide

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FBX86K		63.50	2.62	0.57	70.50	-0.51	-0.09
G3GBE6		60.50	-0.38	-0.08	71.50	0.49	0.09
GAXLR6		62.00	1.12	0.24	74.00	2.99	0.55
GQJAXU		62.50	1.62	0.35	76.50	5.49	1.00
H8PTBC		65.45	4.57	1.00	73.85	2.84	0.52
HGCURL		62.00	1.12	0.24	69.00	-2.01	-0.37
HKU289		65.10	4.22	0.92	76.15	5.14	0.94
JD8NPK		62.00	1.12	0.24	73.50	2.49	0.46
JTLRAU		65.50	4.62	1.01	77.00	5.99	1.10
K2BWJ8		57.00	-3.88	-0.85	69.00	-2.01	-0.37
LFNRBN		59.50	-1.38	-0.30	71.00	-0.01	0.00
MCHNXR		66.50	5.62	1.23	78.50	7.49	1.37
N3ACGN		59.50	-1.38	-0.30	75.50	4.49	0.82
NETQLB		58.85	-2.03	-0.44	71.69	0.68	0.12
NRRUNG		55.45	-5.43	-1.19	64.70	-6.31	-1.15
NYB34Z		62.50	1.62	0.35	71.00	-0.01	0.00
P36CVD		62.00	1.12	0.24	69.00	-2.01	-0.37
P9XGPH		66.00	5.12	1.12	75.50	4.49	0.82
PP3QTN		65.50	4.62	1.01	76.50	5.49	1.00
PQY2PR		63.00	2.12	0.46	74.50	3.49	0.64
Q4ZEZ9		56.00	-4.88	-1.07	64.00	-7.01	-1.28
QCANPM	X	27.50	-33.38	-7.29	33.50	-37.51	-6.86
QDKLYX		62.00	1.12	0.24	71.50	0.49	0.09
R2RJWW		56.00	-4.88	-1.07	65.00	-6.01	-1.10
RAH8PD		55.00	-5.88	-1.28	68.50	-2.51	-0.46
UQ2GQ7		58.00	-2.88	-0.63	66.00	-5.01	-0.92
UTRN9H		55.50	-5.38	-1.17	64.00	-7.01	-1.28
UVBXZU	*	74.00	13.12	2.87	85.00	13.99	2.56
VHYYKT		55.35	-5.53	-1.21	65.75	-5.26	-0.96
WLKWV4		63.00	2.12	0.46	69.00	-2.01	-0.37
XAZ794	X	74.00	13.12	2.87	77.00	5.99	1.10
XGGHM6	X	64.00	3.12	0.68	63.00	-8.01	-1.46
XTUK7H		58.90	-1.98	-0.43	69.30	-1.71	-0.31
XTWABE		55.00	-5.88	-1.28	65.00	-6.01	-1.10
XU6K6X		55.00	-5.88	-1.28	63.00	-8.01	-1.46



Analysis 902
Total Sulfur Dioxide

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
YF8UNQ		61.00	0.12	0.03	69.00	-2.01	-0.37
YU6476		64.50	3.62	0.79	72.50	1.49	0.27
Z24TMA		57.00	-3.88	-0.85	74.00	2.99	0.55
Z3DVBT		64.00	3.12	0.68	70.50	-0.51	-0.09
ZJYL88		60.68	-0.21	-0.04	69.96	-1.05	-0.19

Grand Means		Summary Statistics	
	60.880 mg/L		71.008 mg/L
Std Dev Btwn Labs			5.470 mg/L
	4.579 mg/L		
Statistics based on 67 of 75 reporting participants			

Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #902

- 4KZPB7 (X) - Inconsistent in testing between samples, data for sample SA13 are low.
- AKHPVW (X) - Data for both samples are low. Possible Systematic Error.
- EMACD3 (X) - Data for both samples are low. Possible Systematic Error.
- 7ZMPFB (X) - Inconsistent in testing between samples, data for sample SA13 are high.
- QCANPM (X) - Data for both samples are low. Inconsistent within the determinations of sample SA14.
- XGGHM6 (X) - Inconsistent in testing between samples.
- XAZ794 (X) - Inconsistent in testing between samples, data for sample SA13 are high.
- 9VLF2E (X) - Inconsistent in testing between samples, data for sample SA14 are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <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	57.925	3.642	-2.96	66.875	1.591	-4.13	2/2
Ripper Method	59.447	4.542	-1.43	69.053	5.077	-1.95	30/31
Aeration Oxidation (AO) Method	61.104	4.186	0.22	72.130	4.117	1.12	13/17
Segmented Flow Analyzer	61.380	2.815	0.50	70.560	3.764	-0.45	5/5
Enzymatic Method	70.500	4.950	9.62	83.500	2.121	12.49	2/3
Colorimetric Analyzer	61.144	4.030	0.26	70.899	7.144	-0.11	5/5
FTIR	63.000	7.071	2.12	72.250	1.768	1.24	2/3
Flow Injection Analysis	63.219	3.201	2.34	74.461	5.017	3.45	8/9



Analysis 903

Fall 2017

Free Sulfur Dioxide

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ	*	18.55	2.20	0.90	16.90	-5.28	-1.95
2ZMZ3R		20.64	4.29	1.75	24.97	2.79	1.03
38K3QN		20.50	4.15	1.69	25.50	3.32	1.23
3UW4XZ		16.00	-0.35	-0.14	20.00	-2.18	-0.80
3XDBDM		13.05	-3.30	-1.34	19.20	-2.98	-1.10
3Y3WRW		19.00	2.65	1.08	25.00	2.82	1.04
474BBC		19.00	2.65	1.08	25.00	2.82	1.04
4KZPB7		16.00	-0.35	-0.14	23.00	0.82	0.30
4M7BY7		18.00	1.65	0.67	23.50	1.32	0.49
689HTV		17.00	0.65	0.27	24.00	1.82	0.67
6AWUR2		21.50	5.15	2.10	27.50	5.32	1.97
6NGAXL		17.00	0.65	0.27	25.50	3.32	1.23
6UM4PW		16.35	0.00	0.00	25.51	3.33	1.23
6XJR74		14.00	-2.35	-0.96	22.50	0.32	0.12
7NRJFK		18.00	1.65	0.67	24.45	2.27	0.84
7ZMPFB	X	62.00	45.65	18.60	18.00	-4.18	-1.54
8KQP42		15.58	-0.77	-0.31	20.24	-1.94	-0.72
8VPL4H		16.00	-0.35	-0.14	18.00	-4.18	-1.54
9VLF2E		19.00	2.65	1.08	20.00	-2.18	-0.80
9WJQWG		11.00	-5.35	-2.18	17.50	-4.68	-1.73
A74JLJ		17.00	0.65	0.27	20.50	-1.68	-0.62
AJM44R		17.00	0.65	0.27	21.50	-0.68	-0.25
AKHPVW		15.00	-1.35	-0.55	22.00	-0.18	-0.06
AUA6K2		18.50	2.15	0.88	25.00	2.82	1.04
AX9J66		14.50	-1.85	-0.75	19.50	-2.68	-0.99
BDV2RE		17.50	1.15	0.47	21.50	-0.68	-0.25
BNYAHC		16.00	-0.35	-0.14	25.00	2.82	1.04
C92KWZ		15.50	-0.85	-0.34	23.00	0.82	0.30
CE4QC3		13.00	-3.35	-1.36	20.50	-1.68	-0.62
CEQ7LD		15.20	-1.15	-0.47	17.95	-4.23	-1.56
CKU4FC		16.50	0.15	0.06	24.00	1.82	0.67
DXFUDK		20.50	4.15	1.69	23.00	0.82	0.30
E8YTJG		15.00	-1.35	-0.55	23.00	0.82	0.30
EGMPHW		18.50	2.15	0.88	27.00	4.82	1.78
EMACD3		15.50	-0.85	-0.34	19.00	-3.18	-1.17



Free Sulfur Dioxide

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EMC2HY		18.00	1.65	0.67	21.50	-0.68	-0.25
ET2GBC		21.50	5.15	2.10	24.00	1.82	0.67
FBX86K		21.00	4.65	1.90	25.00	2.82	1.04
G3GBE6		15.00	-1.35	-0.55	21.50	-0.68	-0.25
GAXLR6		14.50	-1.85	-0.75	21.50	-0.68	-0.25
GQJAXU		18.00	1.65	0.67	28.00	5.82	2.15
H8PTBC		18.15	1.80	0.73	23.15	0.97	0.36
HGCURL		16.00	-0.35	-0.14	19.00	-3.18	-1.17
HKU289		19.15	2.80	1.14	25.40	3.22	1.19
JD8NPK		15.50	-0.85	-0.34	24.00	1.82	0.67
JTLRAU		16.50	0.15	0.06	23.00	0.82	0.30
K2BWJ8		14.00	-2.35	-0.96	23.00	0.82	0.30
K8GT48		11.00	-5.35	-2.18	21.50	-0.68	-0.25
LFNRBN		14.50	-1.85	-0.75	23.00	0.82	0.30
MCHNXR		15.00	-1.35	-0.55	21.50	-0.68	-0.25
N3ACGN		13.00	-3.35	-1.36	24.00	1.82	0.67
NETQLB		14.98	-1.37	-0.56	24.61	2.43	0.90
NRRUNG		14.75	-1.60	-0.65	22.30	0.12	0.05
NYB34Z		15.50	-0.85	-0.34	20.00	-2.18	-0.80
P36CVD		19.00	2.65	1.08	24.00	1.82	0.67
P9XGPH		18.00	1.65	0.67	24.50	2.32	0.86
PQY2PR		17.50	1.15	0.47	24.50	2.32	0.86
Q4ZEZ9	*	9.60	-6.75	-2.75	17.60	-4.58	-1.69
QCANPM		17.00	0.65	0.27	22.50	0.32	0.12
QDKLYX		16.00	-0.35	-0.14	22.00	-0.18	-0.06
R2RJWW		17.00	0.65	0.27	22.50	0.32	0.12
RAH8PD		17.00	0.65	0.27	24.00	1.82	0.67
UQ2GQ7		12.30	-4.05	-1.65	18.50	-3.68	-1.36
UTRN9H		17.50	1.15	0.47	27.00	4.82	1.78
UVBXZU		17.50	1.15	0.47	21.50	-0.68	-0.25
UVR2NU		15.50	-0.85	-0.34	17.00	-5.18	-1.91
VHYYKT		14.80	-1.55	-0.63	21.30	-0.88	-0.32
WLKWV4		16.50	0.15	0.06	24.00	1.82	0.67
XAZ794		18.50	2.15	0.88	21.00	-1.18	-0.43
XGGHM6		18.00	1.65	0.67	19.00	-3.18	-1.17



WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XTUK7H		12.95	-3.40	-1.38	19.15	-3.03	-1.12
XTWABE		13.50	-2.85	-1.16	18.50	-3.68	-1.36
XU6K6X		14.00	-2.35	-0.96	18.50	-3.68	-1.36
YF8UNQ		18.00	1.65	0.67	24.00	1.82	0.67
YU6476		18.00	1.65	0.67	23.50	1.32	0.49
Z24TMA		15.00	-1.35	-0.55	23.00	0.82	0.30
Z3DVBT	*	18.50	2.15	0.88	17.50	-4.68	-1.73
ZJYL88		13.19	-3.16	-1.29	17.94	-4.24	-1.57
ZRUJWV		12.80	-3.55	-1.44	20.00	-2.18	-0.80

Grand Means		Summary Statistics	
	16.347 mg/L		22.175 mg/L
Std Dev Btwn Labs		2.709 mg/L	
	2.455 mg/L		
Statistics based on 78 of 79 reporting participants			

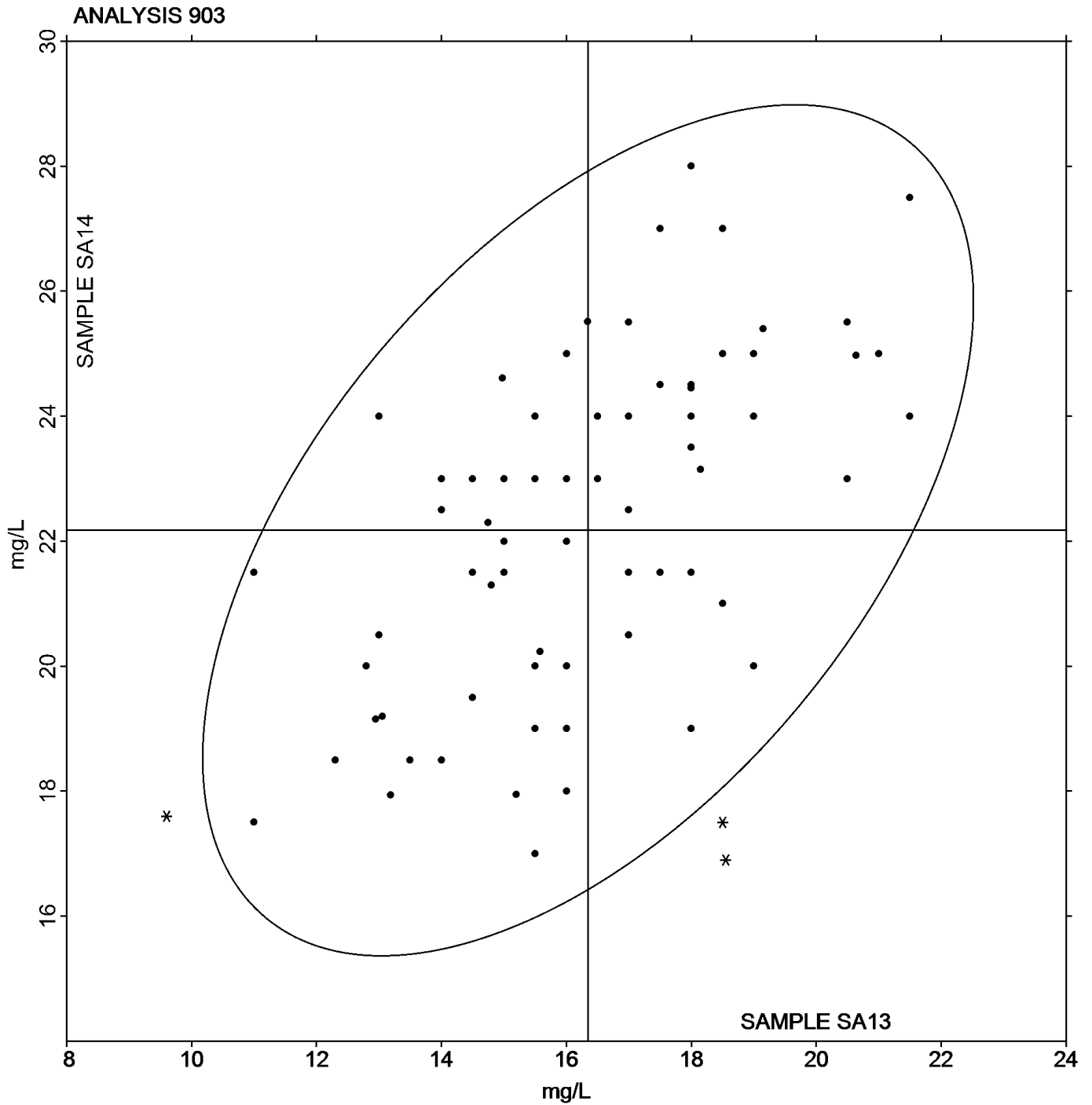
Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #903

7ZMPFB (X) - Extreme data for sample SA13 are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <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	18.150	4.738	1.80	24.400	4.384	2.22	2/2
Ripper Method	17.409	2.185	1.06	23.066	2.932	0.89	22/22
Aeration Oxidation (AO) Method	15.664	2.584	-0.68	21.790	2.382	-0.39	31/32
Segmented Flow Analyzer	15.917	2.110	-0.43	20.675	2.970	-1.50	6/6
Colorimetric Analyzer	17.069	2.393	0.72	22.902	2.634	0.73	5/5
Flow Injection Analysis	15.202	1.804	-1.14	21.097	2.631	-1.08	9/9
FTIR	17.500	1.500	1.15	23.167	1.756	0.99	3/3





Analysis 904
Titratable Acidity

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ		5.050	0.242	0.86	5.100	0.272	1.01
2ZMZ3R		5.125	0.317	1.13	5.040	0.212	0.79
38K3QN	*	4.570	-0.238	-0.85	4.430	-0.398	-1.48
3UW4XZ		5.150	0.342	1.22	5.100	0.272	1.01
3XDBDM		5.413	0.604	2.15	5.348	0.520	1.93
3Y3WRW		4.635	-0.173	-0.62	4.565	-0.263	-0.98
474BBC		5.180	0.372	1.32	5.240	0.412	1.53
4KZPB7		5.070	0.262	0.93	5.095	0.267	0.99
4M7BY7		4.645	-0.163	-0.58	4.630	-0.198	-0.73
689HTV		4.665	-0.143	-0.51	4.690	-0.138	-0.51
6NGAXL		5.000	0.192	0.68	4.900	0.072	0.27
6XJR74		4.628	-0.180	-0.64	4.694	-0.134	-0.50
7NRJFK		5.025	0.217	0.77	5.030	0.202	0.75
7ZMPFB	X	5.740	0.932	3.31	6.000	1.172	4.35
8KQP42	*	4.800	-0.008	-0.03	5.000	0.172	0.64
8VPL4H		4.700	-0.108	-0.38	4.750	-0.078	-0.29
9VLF2E		4.600	-0.208	-0.74	4.700	-0.128	-0.47
9WHZND		5.230	0.421	1.50	5.215	0.387	1.44
9WJQWG		4.700	-0.108	-0.38	4.600	-0.228	-0.85
A74JLJ		4.700	-0.108	-0.38	4.700	-0.128	-0.47
AJM44R		4.940	0.132	0.47	5.040	0.212	0.79
AKHPVW		4.770	-0.038	-0.14	4.820	-0.008	-0.03
AUA6K2		4.600	-0.208	-0.74	4.650	-0.178	-0.66
AX9J66		4.300	-0.508	-1.81	4.300	-0.528	-1.96
BDV2RE		4.840	0.032	0.11	4.875	0.047	0.18
BNYAHC		4.735	-0.073	-0.26	4.660	-0.168	-0.62
C92KWZ		4.545	-0.263	-0.94	4.545	-0.283	-1.05
CE4QC3		5.025	0.217	0.77	5.045	0.217	0.81
CEQ7LD		4.650	-0.158	-0.56	4.700	-0.128	-0.47
CKU4FC		5.500	0.692	2.46	5.450	0.622	2.31
DMTWMF	X	4.400	-0.408	-1.45	4.100	-0.728	-2.70
DXFUDK		5.400	0.592	2.10	5.420	0.592	2.20
E8YTJG		5.190	0.382	1.36	5.135	0.307	1.14
EGMPHW		4.735	-0.073	-0.26	4.775	-0.053	-0.20
EMACD3		4.575	-0.233	-0.83	4.745	-0.083	-0.31

Analysis 904
Titratable Acidity

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
EMC2HY		4.700	-0.108	-0.38	4.800	-0.028	-0.10
ET2GBC		5.400	0.592	2.10	5.350	0.522	1.94
FBX86K		5.150	0.342	1.22	5.200	0.372	1.38
G3GBE6		4.600	-0.208	-0.74	4.700	-0.128	-0.47
GAXLR6		4.765	-0.043	-0.15	4.730	-0.098	-0.36
GQJAXU		4.500	-0.308	-1.10	4.600	-0.228	-0.85
H8PTBC		4.935	0.127	0.45	5.025	0.197	0.73
HGCURL		5.000	0.192	0.68	5.000	0.172	0.64
HKU289		4.340	-0.468	-1.66	4.390	-0.438	-1.63
JD8NPK		4.800	-0.008	-0.03	4.900	0.072	0.27
JTLRAU		5.100	0.292	1.04	5.200	0.372	1.38
K2BWJ8		4.935	0.127	0.45	4.940	0.112	0.42
K8GT48		4.600	-0.208	-0.74	4.700	-0.128	-0.47
LFNRBN		4.840	0.032	0.11	4.840	0.012	0.05
MCHNXR		4.400	-0.408	-1.45	4.550	-0.278	-1.03
N3ACGN		4.500	-0.308	-1.10	4.600	-0.228	-0.85
NETQLB		4.200	-0.608	-2.16	4.200	-0.628	-2.33
NRRUNG		4.600	-0.208	-0.74	4.700	-0.128	-0.47
NYB34Z		4.640	-0.168	-0.60	4.645	-0.183	-0.68
P36CVD		4.455	-0.353	-1.26	4.500	-0.328	-1.22
P9XGPH		4.650	-0.158	-0.56	4.650	-0.178	-0.66
PP3QTN		4.900	0.092	0.33	4.900	0.072	0.27
PQY2PR	*	5.250	0.442	1.57	5.400	0.572	2.12
Q4ZEZ9	X	4.650	-0.158	-0.56	4.950	0.122	0.45
QCANPM		4.650	-0.158	-0.56	4.650	-0.178	-0.66
QDKLYX		5.205	0.397	1.41	5.055	0.227	0.84
R2RJWW		4.700	-0.108	-0.38	4.700	-0.128	-0.47
RAH8PD		4.500	-0.308	-1.10	4.600	-0.228	-0.85
UTRN9H		5.040	0.232	0.82	5.135	0.307	1.14
UVBXZU		4.900	0.092	0.33	4.800	-0.028	-0.10
UVR2NU		5.100	0.292	1.04	5.100	0.272	1.01
VHYYKT		4.775	-0.034	-0.12	4.787	-0.041	-0.15
WLKWV4		4.775	-0.033	-0.12	4.815	-0.013	-0.05
XAZ794		4.700	-0.108	-0.38	4.750	-0.078	-0.29
XGGHM6		4.290	-0.518	-1.84	4.325	-0.503	-1.87



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 904
Titrateable Acidity

Report #057
Fall 2017

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XTUK7H		4.690	-0.118	-0.42	4.730	-0.098	-0.36
XTWABE		4.600	-0.208	-0.74	4.650	-0.178	-0.66
XU6K6X		4.590	-0.218	-0.78	4.640	-0.188	-0.70
YF8UNQ		5.100	0.292	1.04	5.000	0.172	0.64
YU6476		4.915	0.107	0.38	4.820	-0.008	-0.03
Z24TMA		4.730	-0.078	-0.28	4.625	-0.203	-0.75
Z3DVBT		4.890	0.082	0.29	4.875	0.047	0.18
ZJYL88		4.600	-0.208	-0.74	4.700	-0.128	-0.47
ZRUJWV		4.725	-0.083	-0.30	4.650	-0.178	-0.66

Grand Means		Summary Statistics	
	4.8082 g/L as tartaric acid		4.8278 g/L as tartaric acid
Std Dev Btwn Labs			0.2694 g/L as tartaric acid
	0.2813 g/L as tartaric acid		
Statistics based on 76 of 79 reporting participants			

Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #904

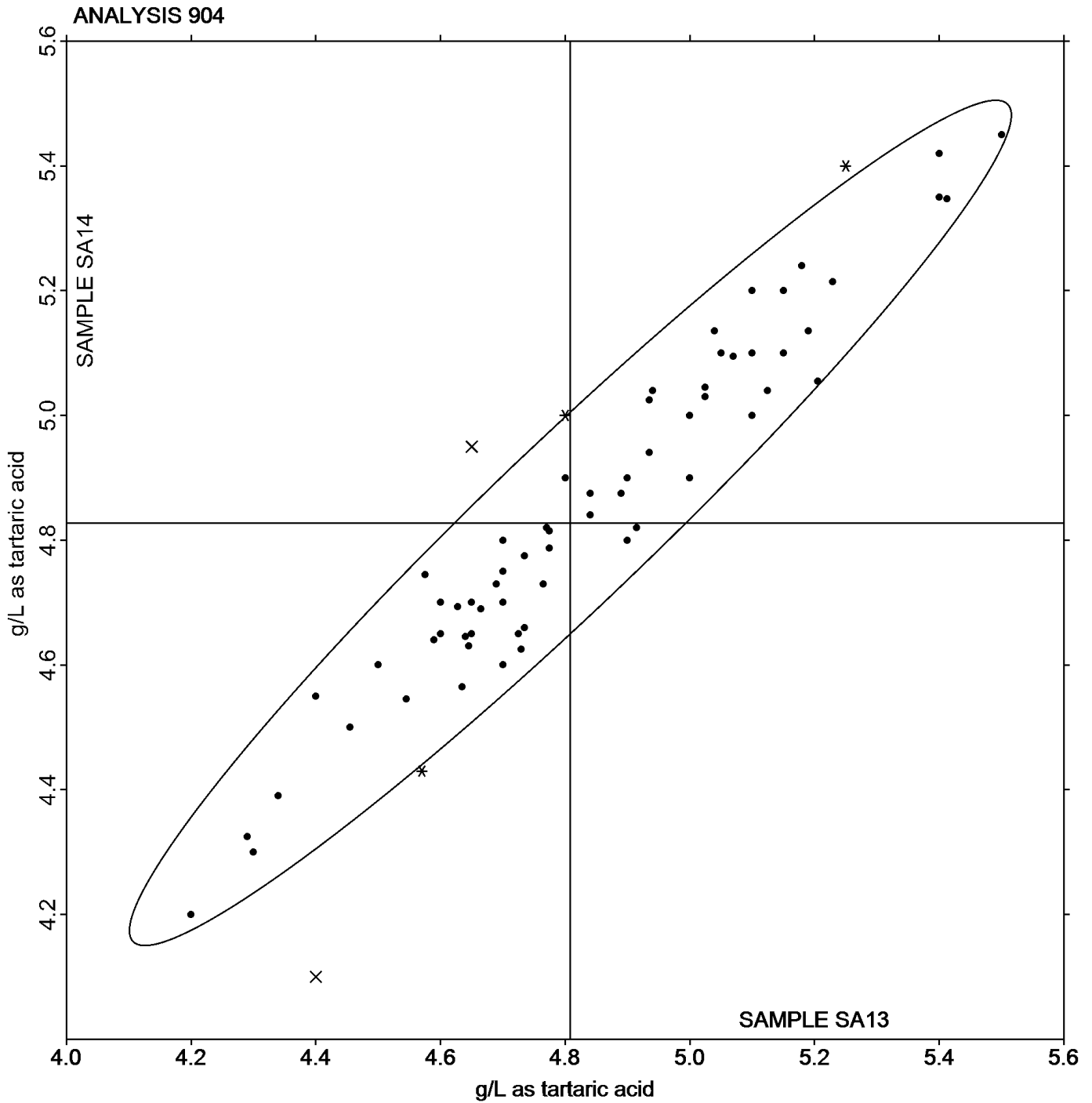
- 7ZMPFB (X) - Data for both samples are high. Possible Systematic Error.
- Q4ZEZ9 (X) - Inconsistent in testing between samples.
- DMTWMF (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA13.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <i>Chardonnay</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Autotitration	4.827	0.276	0.019	4.849	0.256	0.021	51/52
Manual Titration	4.725	0.243	-0.084	4.721	0.234	-0.107	16/18
FTIR	4.921	0.325	0.112	4.970	0.313	0.142	8/8
Segmented Flow Analyzer	4.300	0.000	-0.508	4.300	0.000	-0.528	1/1



Analysis 904
Titratable Acidity



Analysis 905
Volatile Acidity

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ		0.5400	0.0744	1.64	0.5400	0.0676	1.48
2ZMZ3R		0.4250	-0.0407	-0.89	0.4200	-0.0524	-1.15
38K3QN		0.4215	-0.0442	-0.97	0.4305	-0.0419	-0.92
3UW4XZ		0.4400	-0.0257	-0.56	0.4600	-0.0124	-0.27
3XDBDM		0.4850	0.0194	0.43	0.4950	0.0226	0.49
3Y3WRW		0.4900	0.0244	0.54	0.5000	0.0276	0.60
474BBC	X	0.7725	0.3069	6.75	0.6600	0.1876	4.10
4KZPB7		0.4850	0.0194	0.43	0.4800	0.0076	0.17
4M7BY7		0.4500	-0.0157	-0.34	0.4450	-0.0274	-0.60
6AWUR2		0.4600	-0.0057	-0.12	0.4800	0.0076	0.17
6NGAXL		0.5350	0.0694	1.53	0.5100	0.0376	0.82
6XJR74	X	0.4780	0.0124	0.27	0.5580	0.0856	1.87
8KQP42		0.4700	0.0044	0.10	0.4750	0.0026	0.06
8VPL4H		0.5200	0.0544	1.20	0.5300	0.0576	1.26
9VLF2E		0.4700	0.0044	0.10	0.4800	0.0076	0.17
9WJQWG		0.3900	-0.0757	-1.66	0.4200	-0.0524	-1.15
A74JLJ	*	0.5500	0.0844	1.86	0.5200	0.0476	1.04
AJM44R		0.4300	-0.0357	-0.78	0.4350	-0.0374	-0.82
AKHPVW		0.5100	0.0444	0.98	0.5400	0.0676	1.48
AUA6K2		0.5150	0.0494	1.09	0.5200	0.0476	1.04
AX9J66		0.4750	0.0094	0.21	0.5200	0.0476	1.04
BDV2RE		0.4750	0.0094	0.21	0.4750	0.0026	0.06
BNYAHC		0.4850	0.0194	0.43	0.4950	0.0226	0.49
C92KWZ	*	0.5100	0.0444	0.98	0.5600	0.0876	1.92
CE4QC3		0.4800	0.0144	0.32	0.4650	-0.0074	-0.16
CEQ7LD		0.3895	-0.0762	-1.68	0.3978	-0.0746	-1.63
CKU4FC		0.4200	-0.0457	-1.00	0.4350	-0.0374	-0.82
DMTWMF	X	0.3500	-0.1157	-2.54	0.6550	0.1826	4.00
DXFUDK		0.4400	-0.0257	-0.56	0.4450	-0.0274	-0.60
E8YTJG		0.4000	-0.0657	-1.44	0.4200	-0.0524	-1.15
EGMPHW		0.4950	0.0294	0.65	0.4750	0.0026	0.06
EMC2HY		0.4550	-0.0107	-0.23	0.4450	-0.0274	-0.60
ET2GBC		0.4350	-0.0307	-0.67	0.4500	-0.0224	-0.49
FBX86K		0.4350	-0.0307	-0.67	0.4500	-0.0224	-0.49
G3GBE6		0.4900	0.0244	0.54	0.4950	0.0226	0.49

Analysis 905
Volatile Acidity

Fall 2017

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
GAXLR6		0.4400	-0.0257	-0.56	0.4200	-0.0524	-1.15
GQJAXU		0.4735	0.0079	0.17	0.4690	-0.0034	-0.07
H8PTBC		0.4750	0.0094	0.21	0.4750	0.0026	0.06
HGCURL		0.5500	0.0844	1.86	0.5500	0.0776	1.70
HKU289		0.4190	-0.0467	-1.03	0.4260	-0.0464	-1.02
JD8NPK		0.4500	-0.0157	-0.34	0.4650	-0.0074	-0.16
JTLRAU		0.5250	0.0594	1.31	0.5400	0.0676	1.48
K2BWJ8		0.4450	-0.0207	-0.45	0.4450	-0.0274	-0.60
K8GT48		0.4650	-0.0007	-0.01	0.4700	-0.0024	-0.05
LFNRBN	*	0.3750	-0.0907	-1.99	0.4150	-0.0574	-1.26
MCHNXR	*	0.4350	-0.0307	-0.67	0.4000	-0.0724	-1.58
N3ACGN		0.4700	0.0044	0.10	0.4700	-0.0024	-0.05
NETQLB		0.4140	-0.0517	-1.14	0.4140	-0.0584	-1.28
NRRUNG		0.5150	0.0494	1.09	0.5500	0.0776	1.70
NYB34Z		0.4750	0.0094	0.21	0.4750	0.0026	0.06
P36CVD		0.4350	-0.0307	-0.67	0.4400	-0.0324	-0.71
P9XGPH		0.4800	0.0144	0.32	0.5100	0.0376	0.82
PQY2PR		0.4650	-0.0007	-0.01	0.4700	-0.0024	-0.05
Q4ZEZ9		0.4180	-0.0477	-1.05	0.4210	-0.0514	-1.13
QCANPM		0.4550	-0.0107	-0.23	0.4800	0.0076	0.17
QDKLYX		0.4500	-0.0157	-0.34	0.4600	-0.0124	-0.27
R2RJWW		0.3900	-0.0757	-1.66	0.4050	-0.0674	-1.48
RAH8PD		0.4400	-0.0257	-0.56	0.4800	0.0076	0.17
UQ2GQ7	X	0.3000	-0.1657	-3.64	0.3050	-0.1674	-3.66
UTRN9H		0.4400	-0.0257	-0.56	0.4500	-0.0224	-0.49
UVBXZU	X	0.4450	-0.0207	-0.45	0.3850	-0.0874	-1.91
UVR2NU		0.4550	-0.0107	-0.23	0.4550	-0.0174	-0.38
VHYYKT		0.4400	-0.0257	-0.56	0.4500	-0.0224	-0.49
WLKWV4		0.3950	-0.0707	-1.55	0.3950	-0.0774	-1.69
XAZ794		0.4300	-0.0357	-0.78	0.4200	-0.0524	-1.15
XGGHM6		0.4600	-0.0057	-0.12	0.4550	-0.0174	-0.38
XTUK7H		0.5650	0.0994	2.19	0.5650	0.0926	2.03
XTWABE	*	0.5050	0.0394	0.87	0.5500	0.0776	1.70
XU6K6X		0.4900	0.0244	0.54	0.4900	0.0176	0.38
YF8UNQ		0.4200	-0.0457	-1.00	0.4100	-0.0624	-1.37



Analysis 905
Volatile Acidity

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
YU6476		0.5200	0.0544	1.20	0.5300	0.0576	1.26
Z24TMA		0.5150	0.0494	1.09	0.5015	0.0291	0.64
Z3DVBT	*	0.5850	0.1194	2.63	0.5700	0.0976	2.14
ZJYL88		0.5250	0.0594	1.31	0.5300	0.0576	1.26
ZRUJWV		0.4200	-0.0457	-1.00	0.4400	-0.0324	-0.71

Grand Means		Summary Statistics	
	0.46565 g/L as acetic acid		0.47243 g/L as acetic acid
Std Dev Btwn Labs			
	0.04546 g/L as acetic acid		0.04570 g/L as acetic acid
Statistics based on 70 of 75 reporting participants			

Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #905

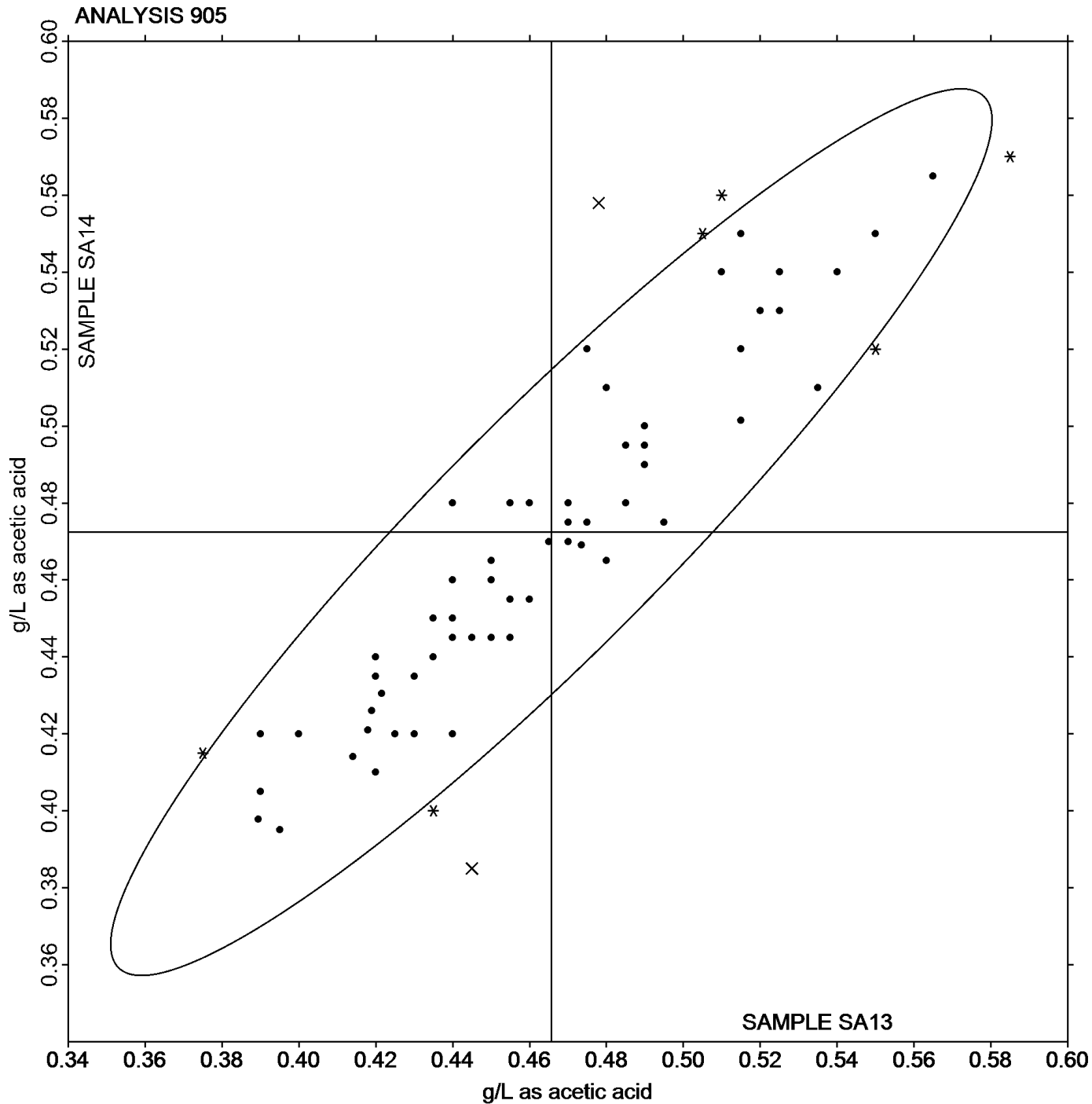
- 6XJR74 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA14.
- 474BBC (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample SA14.
- UQ2GQ7 (X) - Data for both samples are low. Possible Systematic Error.
- UVBXZU (X) - Inconsistent in testing between samples.
- DMTWMF (X) - Data for sample SA14 are high. Inconsistent within the determinations of sample SA14.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <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	0.495	0.045	0.0297	0.506	0.041	0.0338	14/16
Enzymatic method	0.452	0.042	-0.0139	0.458	0.041	-0.0148	38/41
HPLC	0.422	0.000	-0.0442	0.431	0.000	-0.0419	1/1
GC	0.425	0.015	-0.0412	0.407	0.010	-0.0654	2/2
Seg. Flow / Colorimetric Analyzer	0.464	0.018	-0.0020	0.485	0.028	0.0124	5/5
FTIR	0.490	0.044	0.0248	0.493	0.043	0.0202	10/10



Analysis 905
Volatile Acidity





Analysis 906
Specific Gravity

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ	X	0.9977	0.0058	12.58	0.9972	0.0057	11.70
2ZM3R		0.9921	0.0001	0.25	0.9918	0.0003	0.63
38K3QN		0.9920	0.0000	0.09	0.9917	0.0002	0.32
3UW4XZ		0.9924	0.0005	1.00	0.9920	0.0005	1.03
3XDBDM		0.9919	0.0000	-0.08	0.9915	0.0000	0.09
3Y3WRW		0.9920	0.0001	0.20	0.9917	0.0002	0.32
474BBC		0.9920	0.0000	0.03	0.9917	0.0002	0.43
4M7BY7		0.9919	0.0000	-0.08	0.9915	0.0000	0.01
689HTV		0.9922	0.0002	0.47	0.9918	0.0003	0.53
6AWUR2		0.9922	0.0002	0.53	0.9917	0.0002	0.43
6NGAXL	*	0.9904	-0.0015	-3.35	0.9901	-0.0014	-2.88
6XJR74		0.9908	-0.0011	-2.40	0.9905	-0.0010	-2.12
7NRJFK	X	0.9898	-0.0022	-4.69	0.9893	-0.0022	-4.57
8KQP42		0.9919	0.0000	-0.08	0.9917	0.0002	0.32
8VPL4H	X	0.9923	0.0004	0.80	0.9909	-0.0006	-1.33
9VLF2E	X	0.9933	0.0013	2.87	0.9913	-0.0002	-0.40
9WHZND		0.9921	0.0001	0.30	0.9917	0.0002	0.43
9WJQWG		0.9918	-0.0001	-0.32	0.9908	-0.0007	-1.47
A74JLJ		0.9924	0.0004	0.91	0.9922	0.0007	1.46
AJM44R		0.9926	0.0007	1.45	0.9924	0.0009	1.87
AKHPVW	*	0.9928	0.0009	1.89	0.9918	0.0003	0.63
AUA6K2		0.9921	0.0002	0.45	0.9915	0.0000	0.05
AX9J66		0.9920	0.0001	0.14	0.9916	0.0001	0.22
BDV2RE		0.9920	0.0001	0.14	0.9916	0.0001	0.22
BNYAHC		0.9920	0.0000	0.05	0.9916	0.0001	0.21
C92KWZ		0.9920	0.0000	0.09	0.9916	0.0002	0.31
CE4QC3	X	0.9896	-0.0024	-5.21	0.9889	-0.0026	-5.47
CEQ7LD		0.9920	0.0000	0.06	0.9917	0.0002	0.36
CKU4FC		0.9918	-0.0001	-0.30	0.9915	0.0000	-0.09
DXFUDK		0.9916	-0.0004	-0.80	0.9912	-0.0003	-0.67
E8YTJG		0.9921	0.0001	0.29	0.9917	0.0002	0.45
EGMPHW		0.9924	0.0004	0.91	0.9918	0.0003	0.63
EMC2HY		0.9921	0.0001	0.25	0.9917	0.0002	0.32
G3GBE6	X	0.9920	0.0001	0.14	0.9906	-0.0009	-1.95
GAXLR6		0.9923	0.0004	0.88	0.9921	0.0006	1.23



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

Report #057
Fall 2017

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
GQJAXU		0.9920	0.0001	0.20	0.9916	0.0001	0.23
H8PTBC		0.9913	-0.0006	-1.39	0.9909	-0.0006	-1.23
HGCURL		0.9921	0.0002	0.36	0.9917	0.0002	0.43
HKU289	*	0.9906	-0.0013	-2.92	0.9902	-0.0013	-2.68
JD8NPK	X	0.9915	-0.0005	-0.99	0.9893	-0.0022	-4.58
JTLRAU		0.9920	0.0001	0.24	0.9917	0.0002	0.37
K2BWJ8		0.9922	0.0003	0.58	0.9918	0.0003	0.53
LFNRBN		0.9925	0.0005	1.12	0.9918	0.0003	0.53
MCHNXR		0.9920	0.0001	0.13	0.9918	0.0003	0.64
N3ACGN		0.9921	0.0001	0.29	0.9917	0.0002	0.37
NETQLB		0.9915	-0.0004	-0.95	0.9905	-0.0010	-2.06
NRRUNG		0.9921	0.0002	0.36	0.9917	0.0002	0.43
NYB34Z	X	0.9903	-0.0017	-3.68	0.9900	-0.0015	-3.20
P36CVD		0.9923	0.0004	0.80	0.9920	0.0005	0.94
P9XGPH		0.9920	0.0001	0.15	0.9916	0.0001	0.30
PP3QTN		0.9920	0.0001	0.22	0.9916	0.0001	0.28
Q4ZEZ9		0.9920	0.0001	0.14	0.9916	0.0001	0.22
QCANPM	X	0.9970	0.0051	11.06	0.9940	0.0025	5.18
R2RJWW		0.9922	0.0003	0.58	0.9918	0.0003	0.63
RAH8PD		0.9920	0.0000	0.08	0.9916	0.0001	0.16
UQ2GQ7		0.9922	0.0003	0.58	0.9921	0.0006	1.25
UTRN9H		0.9920	0.0001	0.13	0.9916	0.0001	0.24
VHYYKT		0.9922	0.0003	0.57	0.9917	0.0003	0.52
WLKWV4	X	0.9915	-0.0005	-1.06	0.9922	0.0007	1.36
XAZ794		0.9921	0.0002	0.36	0.9915	0.0000	-0.09
XTUK7H		0.9921	0.0002	0.36	0.9917	0.0002	0.43
XTWABE		0.9921	0.0001	0.28	0.9917	0.0002	0.37
YF8UNQ	*	0.9904	-0.0015	-3.35	0.9900	-0.0015	-3.09
YU6476		0.9922	0.0003	0.58	0.9920	0.0005	1.05
Z24TMA		0.9920	0.0001	0.23	0.9916	0.0001	0.22
Z3DVBT		0.9920	0.0000	0.03	0.9916	0.0001	0.22



Analysis 906
Specific Gravity

Grand Means	Summary Statistics
0.99194 sp gr 20/20 C	0.99149 sp gr 20/20 C
Stnd Dev Btwn Labs	
0.00046 sp gr 20/20 C	0.00048 sp gr 20/20 C
Statistics based on 56 of 66 reporting participants	

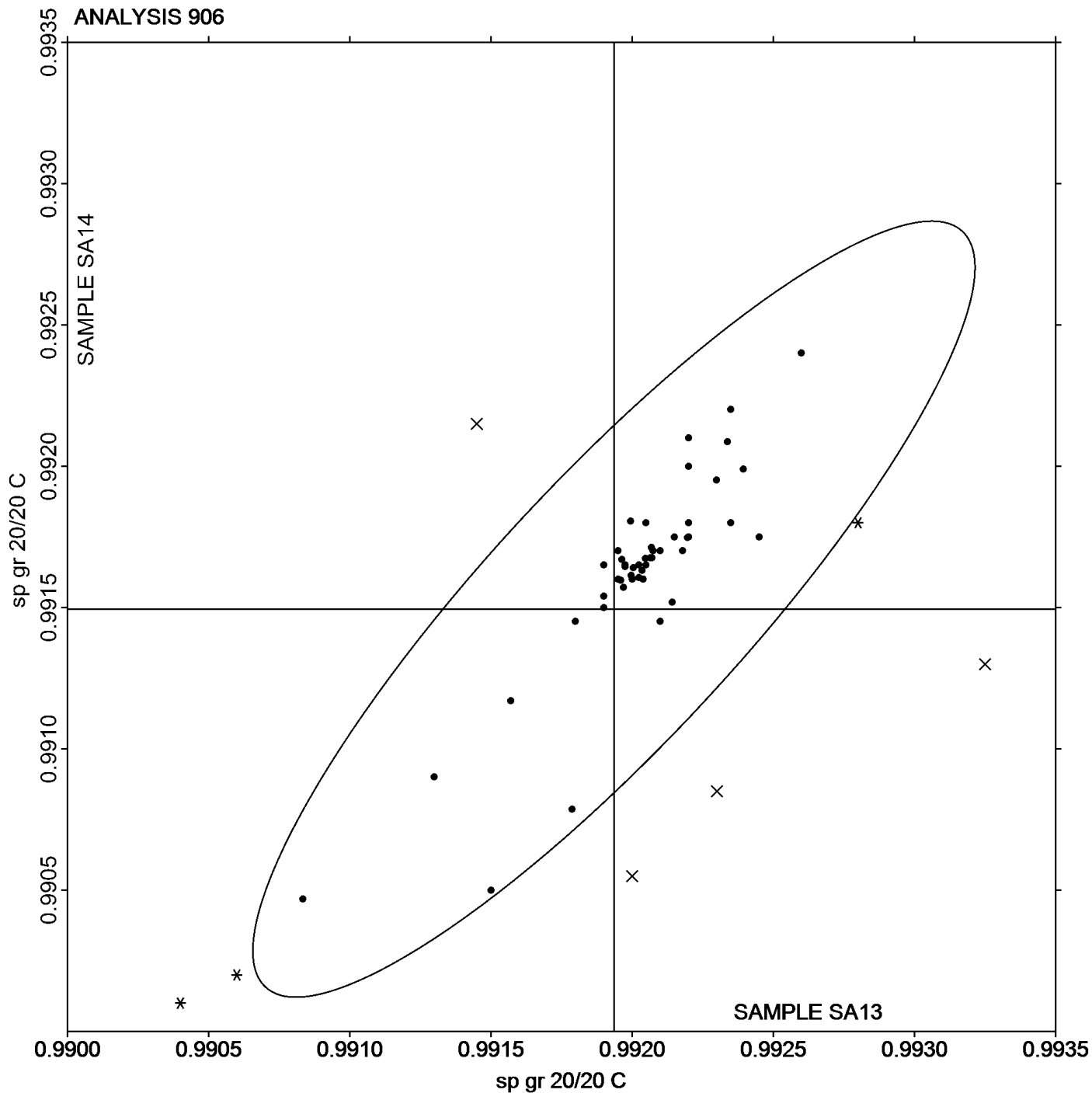
Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #906

- CE4QC3 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA13.
- QCANPM (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample SA14.
- WLKWV4 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA13.
- JD8NPK (X) - Data for sample SA14 are low. Inconsistent within the determinations of sample SA13.
- 8VPL4H (X) - Inconsistent in testing between samples.
- 9VLF2E (X) - Data for sample SA13 are high.
- G3GBE6 (X) - Inconsistent in testing between samples.
- 2R7PPQ (X) - Data for both samples are high. Possible Systematic Error.
- 7NRJFK (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA14.
- NYB34Z (X) - Data for both samples are low. Possible Systematic Error.



Analysis 906
Specific Gravity





ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #057

Analysis 907

Fall 2017

pH

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ	*	3.665	0.066	1.98	3.680	0.082	2.32
2ZMZ3R		3.647	0.047	1.42	3.654	0.055	1.57
38K3QN	X	3.715	0.116	3.49	3.735	0.137	3.88
3UW4XZ	*	3.540	-0.059	-1.79	3.520	-0.078	-2.22
3XDBDM	X	3.529	-0.070	-2.12	3.586	-0.012	-0.35
3Y3WRW	*	3.530	-0.069	-2.09	3.540	-0.058	-1.65
474BBC		3.585	-0.014	-0.43	3.590	-0.008	-0.23
4KZPB7		3.590	-0.009	-0.28	3.590	-0.008	-0.23
4M7BY7		3.595	-0.004	-0.13	3.590	-0.008	-0.23
689HTV		3.563	-0.037	-1.11	3.561	-0.037	-1.06
6AWUR2		3.590	-0.009	-0.28	3.585	-0.013	-0.38
6NGAXL		3.620	0.021	0.62	3.615	0.017	0.47
6XJR74		3.615	0.016	0.47	3.600	0.002	0.05
7NRJFK		3.600	0.001	0.02	3.600	0.002	0.05
7ZMPFB		3.640	0.041	1.23	3.640	0.042	1.18
8KQP42		3.600	0.001	0.02	3.595	-0.003	-0.09
8VPL4H		3.625	0.026	0.77	3.625	0.027	0.76
9VLF2E		3.550	-0.049	-1.49	3.540	-0.058	-1.65
9WJQWG		3.630	0.031	0.92	3.630	0.032	0.90
A74JLJ	X	3.530	-0.069	-2.09	3.580	-0.018	-0.52
AJM44R		3.605	0.006	0.17	3.595	-0.003	-0.09
AKHPVW		3.587	-0.012	-0.37	3.585	-0.014	-0.39
AUA6K2		3.600	0.001	0.02	3.600	0.002	0.05
BDV2RE		3.600	0.001	0.02	3.600	0.002	0.05
BNYAHC		3.590	-0.009	-0.28	3.585	-0.013	-0.38
C92KWZ		3.620	0.021	0.62	3.615	0.017	0.47
CE4QC3		3.570	-0.029	-0.88	3.555	-0.043	-1.23
CEQ7LD	*	3.589	-0.010	-0.31	3.611	0.013	0.36
CKU4FC		3.610	0.011	0.32	3.610	0.012	0.33
DMTWMF		3.615	0.016	0.47	3.595	-0.003	-0.09
DXFUDK		3.615	0.016	0.47	3.615	0.017	0.47
E8YTJG		3.610	0.011	0.32	3.610	0.012	0.33
EGMPHW		3.600	0.001	0.02	3.600	0.002	0.05
EMACD3		3.627	0.028	0.83	3.646	0.047	1.34
EMC2HY	*	3.515	-0.084	-2.54	3.525	-0.073	-2.08



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #057

Analysis 907

Fall 2017

pH

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ET2GBC		3.610	0.011	0.32	3.610	0.012	0.33
FBX86K		3.590	-0.009	-0.28	3.590	-0.008	-0.23
G3GBE6		3.605	0.006	0.17	3.600	0.002	0.05
GAXLR6		3.600	0.001	0.02	3.600	0.002	0.05
GQJAXU		3.640	0.041	1.23	3.635	0.037	1.04
H8PTBC		3.530	-0.069	-2.09	3.530	-0.068	-1.94
HGCURL		3.580	-0.019	-0.58	3.570	-0.028	-0.80
HKU289	X	3.755	0.156	4.69	3.760	0.162	4.59
JD8NPK		3.605	0.006	0.17	3.605	0.007	0.19
JTLRAU		3.600	0.001	0.02	3.600	0.002	0.05
K2BWJ8		3.620	0.021	0.62	3.630	0.032	0.90
K8GT48		3.610	0.011	0.32	3.615	0.017	0.47
LFNRBN	*	3.685	0.086	2.58	3.680	0.082	2.32
MCHNXR		3.580	-0.019	-0.58	3.595	-0.003	-0.09
N3ACGN		3.605	0.006	0.17	3.610	0.012	0.33
NETQLB		3.680	0.081	2.43	3.680	0.082	2.32
NRRUNG		3.625	0.026	0.77	3.620	0.022	0.62
NYB34Z		3.585	-0.014	-0.43	3.600	0.002	0.05
P36CVD		3.660	0.061	1.83	3.660	0.062	1.75
P9XGPH		3.590	-0.009	-0.28	3.590	-0.008	-0.23
PQY2PR		3.610	0.011	0.32	3.610	0.012	0.33
Q4ZEZ9		3.570	-0.029	-0.88	3.550	-0.048	-1.37
QCANPM	*	3.500	-0.099	-2.99	3.490	-0.108	-3.07
QDKLYX		3.590	-0.009	-0.28	3.590	-0.008	-0.23
R2RJWW		3.600	0.001	0.02	3.600	0.002	0.05
RAH8PD		3.600	0.001	0.02	3.600	0.002	0.05
UTRN9H		3.555	-0.044	-1.34	3.560	-0.038	-1.09
UVBXZU		3.590	-0.009	-0.28	3.580	-0.018	-0.52
UVR2NU		3.610	0.011	0.32	3.595	-0.003	-0.09
VHYYKT	X	3.725	0.126	3.79	3.710	0.112	3.17
WLKWV4		3.600	0.001	0.02	3.610	0.012	0.33
XAZ794		3.590	-0.009	-0.28	3.590	-0.008	-0.23
XGGHM6		3.575	-0.024	-0.73	3.580	-0.018	-0.52
XTUK7H		3.610	0.011	0.32	3.610	0.012	0.33
XTWABE		3.585	-0.014	-0.43	3.580	-0.018	-0.52



ASEV-CTS Wine Industry Interlaboratory Testing Program
Analysis 907
pH

Report #057
Fall 2017

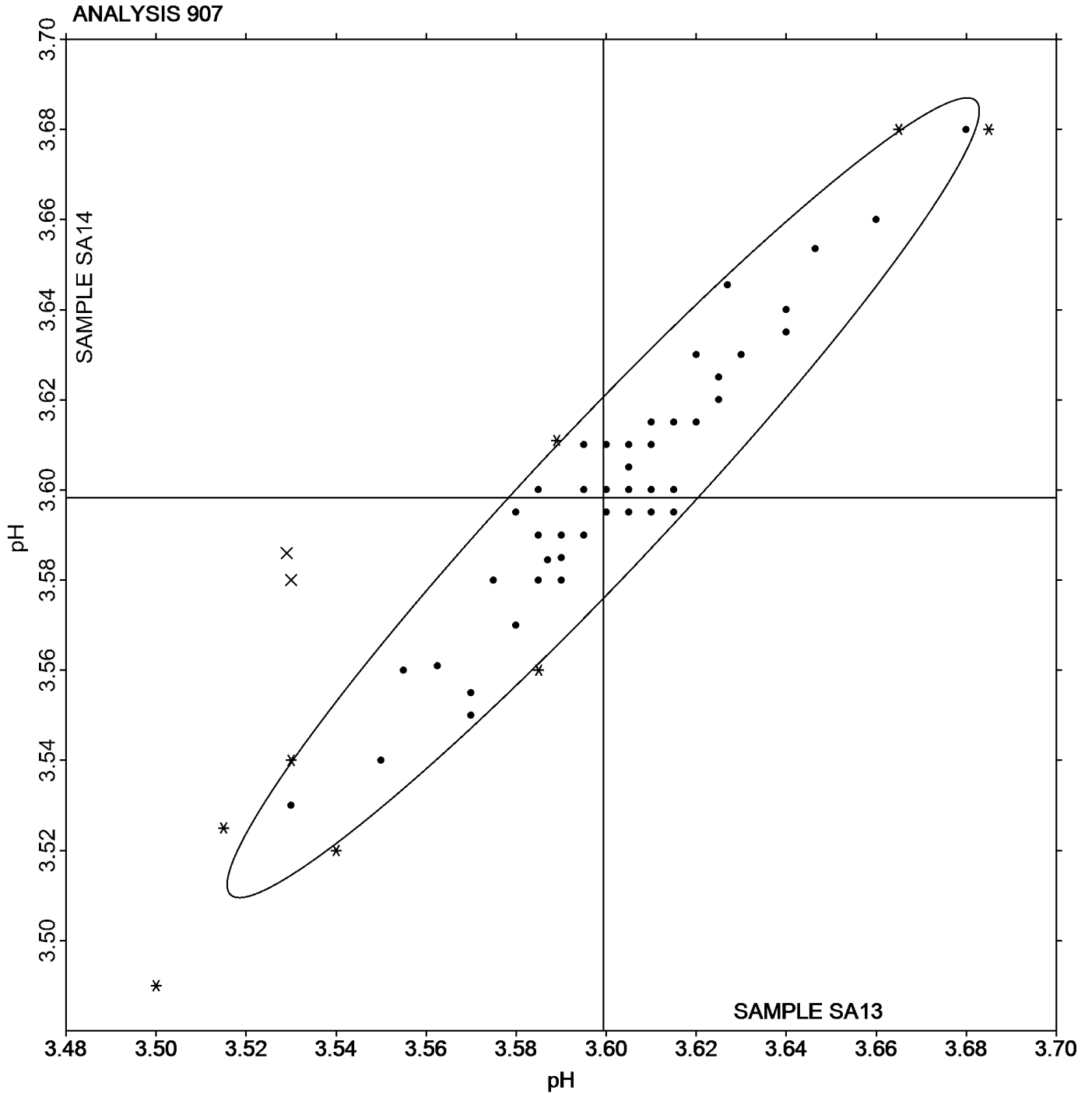
WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XU6K6X		3.610	0.011	0.32	3.600	0.002	0.05
YF8UNQ		3.600	0.001	0.02	3.600	0.002	0.05
YU6476		3.585	-0.014	-0.43	3.580	-0.018	-0.52
Z24TMA	*	3.585	-0.014	-0.43	3.560	-0.038	-1.09
Z3DVBT		3.595	-0.004	-0.13	3.610	0.012	0.33
ZJYL88		3.595	-0.004	-0.13	3.600	0.002	0.05
ZRUJWV		3.660	0.061	1.83	3.660	0.062	1.75

Grand Means	Summary Statistics
3.5993 pH	3.5983 pH
Std Dev Btwn Labs	
0.0332 pH	0.0352 pH
Statistics based on 72 of 77 reporting participants	

Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #907

- 38K3QN (X) - Data for both samples are high. Possible Systematic Error.
- A74JLJ (X) - Inconsistent in testing between samples.
- HKU289 (X) - Data for both samples are high. Possible Systematic Error.
- 3XDBDM (X) - Inconsistent in testing between samples.
- VHYYKT (X) - Data for both samples are high. Possible Systematic Error.





Analysis 908
Residual Sugar

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
38K3QN		4.435	-0.400	-0.39	3.690	-0.467	-0.50
3Y3WRW		5.495	0.660	0.65	4.565	0.408	0.44
6AWUR2		5.200	0.365	0.36	4.300	0.143	0.15
6UM4PW		4.668	-0.167	-0.16	4.494	0.337	0.36
9WJQWG		2.500	-2.335	-2.29	2.600	-1.557	-1.67
AX9J66		5.300	0.465	0.46	4.600	0.443	0.48
BDV2RE		5.000	0.165	0.16	4.200	0.043	0.05
CE4QC3	*	2.625	-2.210	-2.17	1.710	-2.447	-2.63
ET2GBC		5.750	0.915	0.90	4.900	0.743	0.80
HGCURL		5.700	0.865	0.85	4.700	0.543	0.58
NETQLB		5.800	0.965	0.95	5.200	1.043	1.12
P9XGPH		6.200	1.365	1.34	5.400	1.243	1.33
Q4ZEZ9		5.500	0.665	0.65	4.800	0.643	0.69
XGGHM6		4.515	-0.320	-0.31	4.490	0.333	0.36
XTWABE		4.650	-0.185	-0.18	3.850	-0.307	-0.33
YU6476		4.505	-0.330	-0.32	3.615	-0.542	-0.58
ZJYL88		4.350	-0.485	-0.48	3.550	-0.607	-0.65

Grand Means		Summary Statistics	
	4.8349 g/L		4.1567 g/L
Std Dev Btwn Labs			0.9317 g/L
	1.0198 g/L		
Statistics based on 17 of 17 reporting participants			

Wines tested: SA13: Chardonnay; SA14: Chardonnay

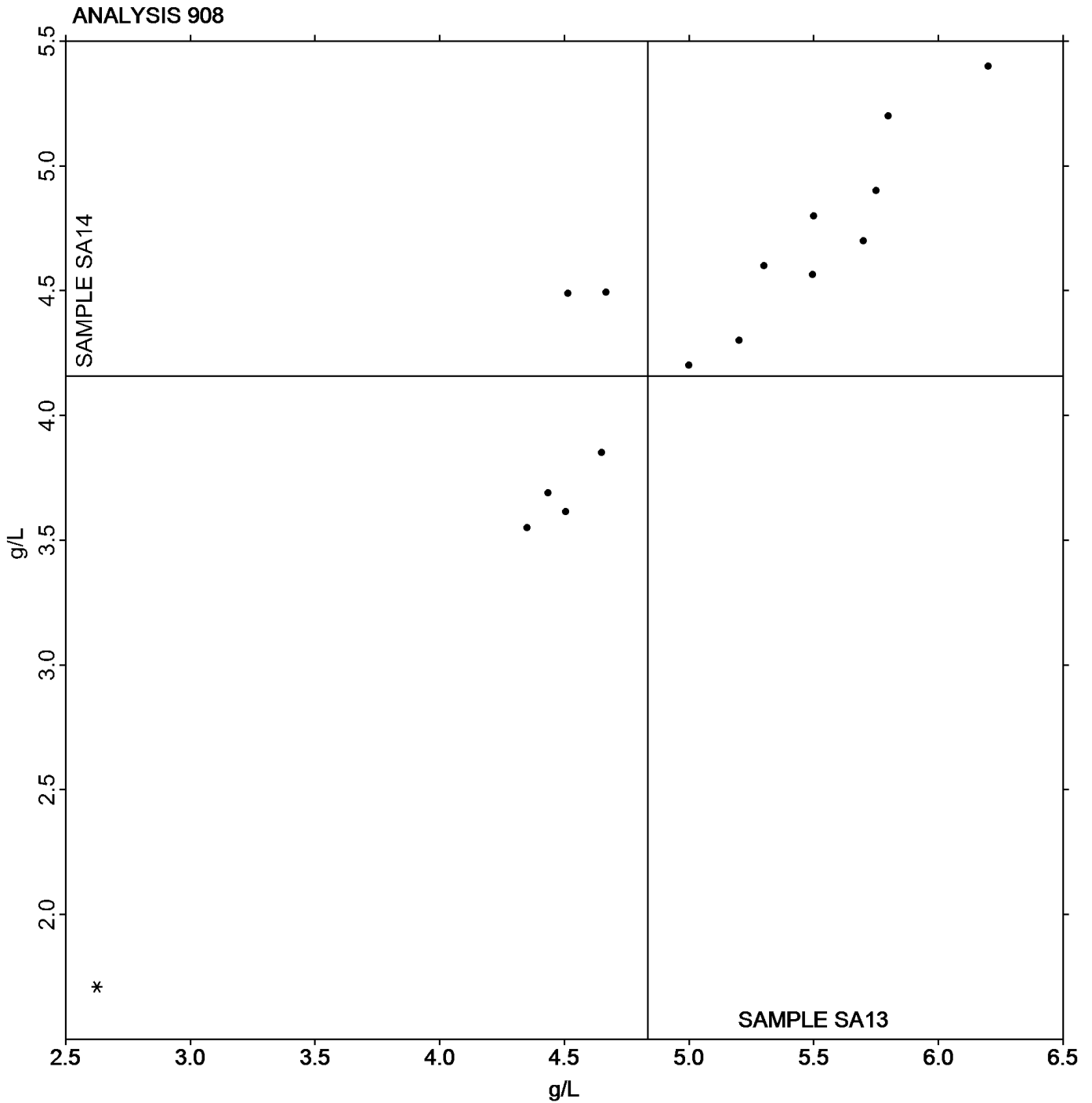
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <i>Chardonnay</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Cu Reduction Method	5.261	0.595	0.426	4.595	0.543	0.438	6/6
Segmented Flow	5.750	0.636	0.915	5.000	0.566	0.843	2/2
FTIR	4.289	1.254	-0.546	3.559	1.056	-0.598	7/7
Other _____	4.551	0.164	-0.284	4.092	0.569	-0.065	2/2



Analysis 908
Residual Sugar

Fall 2017



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



Analysis 909

Fall 2017

L-Malic Acid

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ		0.6875	-0.1075	-1.95	0.6895	-0.1060	-1.89
2ZMZ3R		0.8050	0.0100	0.18	0.7900	-0.0055	-0.10
38K3QN	*	0.8285	0.0335	0.61	0.8980	0.1025	1.83
3UW4XZ		0.7600	-0.0350	-0.63	0.7500	-0.0455	-0.81
3XDBDM		0.7600	-0.0350	-0.63	0.7700	-0.0255	-0.46
3Y3WRW		0.7950	0.0000	0.00	0.8350	0.0395	0.71
474BBC		0.7250	-0.0700	-1.27	0.7700	-0.0255	-0.46
4KZPB7		0.7250	-0.0700	-1.27	0.7050	-0.0905	-1.62
4M7BY7		0.7900	-0.0050	-0.09	0.7800	-0.0155	-0.28
6AWUR2		0.8000	0.0050	0.09	0.7500	-0.0455	-0.81
6NGAXL		0.8710	0.0760	1.38	0.8215	0.0260	0.46
6UM4PW		0.7255	-0.0695	-1.26	0.7395	-0.0560	-1.00
6XJR74		0.7455	-0.0495	-0.90	0.7385	-0.0570	-1.02
8KQP42		0.8905	0.0955	1.73	0.8705	0.0750	1.34
8VPL4H		0.8750	0.0800	1.45	0.8300	0.0345	0.62
9VLF2E		0.7400	-0.0550	-1.00	0.7550	-0.0405	-0.72
9WJQWG		0.7700	-0.0250	-0.45	0.7700	-0.0255	-0.46
A74JLJ		0.7600	-0.0350	-0.63	0.7400	-0.0555	-0.99
AJM44R		0.7685	-0.0265	-0.48	0.7685	-0.0270	-0.48
AUA6K2		0.7400	-0.0550	-1.00	0.7600	-0.0355	-0.63
BDV2RE		0.7450	-0.0500	-0.91	0.7750	-0.0205	-0.37
BNYAHC		0.8450	0.0500	0.91	0.8350	0.0395	0.71
C92KWZ		0.7850	-0.0100	-0.18	0.8000	0.0045	0.08
CE4QC3	X	0.5650	-0.2300	-4.17	0.5800	-0.2155	-3.85
CEQ7LD		0.7800	-0.0150	-0.27	0.7750	-0.0205	-0.37
CKU4FC		0.7950	0.0000	0.00	0.7950	-0.0005	-0.01
DMTWMF		0.8012	0.0061	0.11	0.7939	-0.0016	-0.03
DXFUDK		0.7500	-0.0450	-0.82	0.7550	-0.0405	-0.72
E8YTJG		0.7200	-0.0750	-1.36	0.7100	-0.0855	-1.53
EGMPHW		0.7850	-0.0100	-0.18	0.8050	0.0095	0.17
EMC2HY		0.8140	0.0190	0.34	0.8190	0.0235	0.42
ET2GBC		0.8275	0.0325	0.59	0.8160	0.0205	0.37
FBX86K		0.8335	0.0385	0.70	0.8325	0.0370	0.66
G3GBE6		0.8500	0.0550	1.00	0.8300	0.0345	0.62
GAXLR6		0.8150	0.0200	0.36	0.8150	0.0195	0.35



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

Report #057
Fall 2017

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
H8PTBC		0.8150	0.0200	0.36	0.8200	0.0245	0.44
HGCURL	*	0.8500	0.0550	1.00	0.9100	0.1145	2.04
HKU289	X	1.1550	0.3600	6.52	1.1400	0.3445	6.15
JD8NPK		0.7900	-0.0050	-0.09	0.7850	-0.0105	-0.19
JTLRAU	X	0.8750	0.0800	1.45	1.2250	0.4295	7.67
K2BWJ8		0.7750	-0.0200	-0.36	0.7550	-0.0405	-0.72
K8GT48		0.8050	0.0100	0.18	0.8100	0.0145	0.26
LFNRBN		0.7850	-0.0100	-0.18	0.7700	-0.0255	-0.46
MCHNXR		0.8400	0.0450	0.81	0.8150	0.0195	0.35
N3ACGN		0.8315	0.0365	0.66	0.8370	0.0415	0.74
NETQLB	X	0.1169	-0.6781	-12.29	0.1188	-0.6767	-12.09
NRRUNG		0.9250	0.1300	2.35	0.9250	0.1295	2.31
NYB34Z		0.8500	0.0550	1.00	0.8400	0.0445	0.79
P36CVD		0.7900	-0.0050	-0.09	0.7850	-0.0105	-0.19
PQY2PR		0.8235	0.0285	0.52	0.8240	0.0285	0.51
Q4ZEZ9		0.7770	-0.0180	-0.33	0.7270	-0.0685	-1.22
QCANPM		0.7650	-0.0300	-0.54	0.8100	0.0145	0.26
QDKLYX	*	0.9360	0.1410	2.55	0.9265	0.1310	2.34
R2RJWW		0.7450	-0.0500	-0.91	0.7350	-0.0605	-1.08
RAH8PD		0.8040	0.0090	0.16	0.8005	0.0050	0.09
UQ2GQ7		0.7200	-0.0750	-1.36	0.6850	-0.1105	-1.97
UTRN9H		0.7100	-0.0850	-1.54	0.6950	-0.1005	-1.79
UVBXZU		0.8800	0.0850	1.54	0.8600	0.0645	1.15
UVR2NU		0.8350	0.0400	0.72	0.8300	0.0345	0.62
WLKWW4		0.7500	-0.0450	-0.82	0.7450	-0.0505	-0.90
XAZ794		0.7950	0.0000	0.00	0.8000	0.0045	0.08
XGGHM6		0.8100	0.0150	0.27	0.8000	0.0045	0.08
XTUK7H		0.7610	-0.0340	-0.62	0.7840	-0.0115	-0.21
XTWABE	*	0.7550	-0.0400	-0.73	0.8350	0.0395	0.71
XU6K6X		0.9100	0.1150	2.08	0.9000	0.1045	1.87
YF8UNQ		0.8420	0.0470	0.85	0.8200	0.0245	0.44
Z24TMA	*	0.8245	0.0295	0.53	0.9015	0.1060	1.89
Z3DVBT	*	0.6600	-0.1350	-2.45	0.7050	-0.0905	-1.62
ZRUJWV		0.8100	0.0150	0.27	0.7850	-0.0105	-0.19



Grand Means		Summary Statistics	
0.79504 g/L		0.79551 g/L	
Std Dev Btwn Labs			
0.05520 g/L		0.05599 g/L	

Statistics based on 65 of 69 reporting participants

Wines tested: SA13: Chardonnay; SA14: Chardonnay

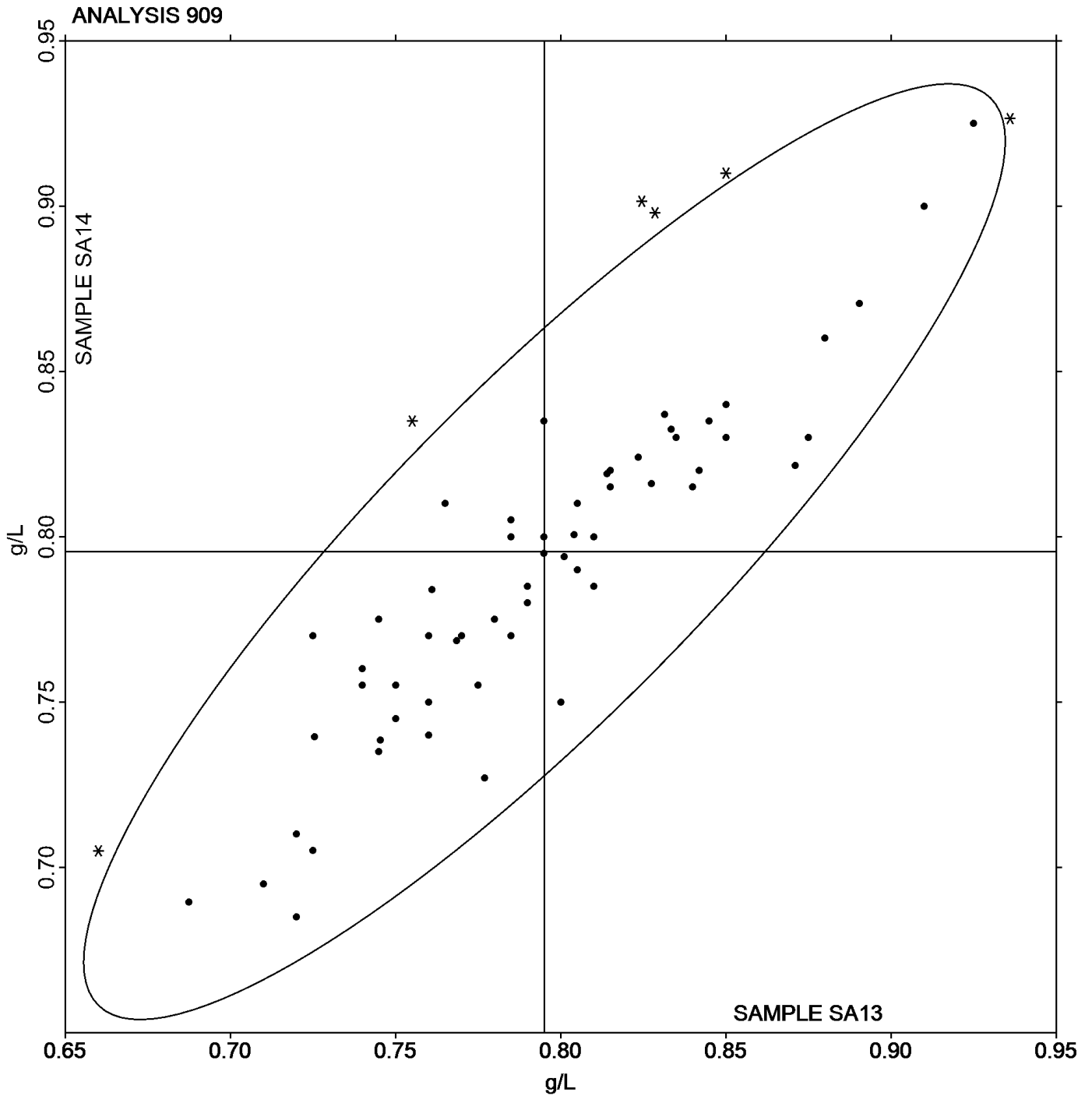
Comments on Assigned Data Flags for Test #909

CE4QC3 (X) - Data for both samples are low. Possible Systematic Error.

JTLRAU (X) - Data for sample SA14 are high. Inconsistent within the determinations of sample SA14.

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

HKU289 (X) - Data for both samples are high. Possible Systematic Error.



**ASEV-CTS Wine Industry Interlaboratory Testing Program****Report #057****Analysis 910****Fall 2017****Glucose + Fructose**

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ		4.520	-0.048	-0.17	3.755	-0.048	-0.20
2ZMZ3R		4.485	-0.083	-0.29	3.730	-0.073	-0.30
38K3QN		4.435	-0.133	-0.46	3.690	-0.113	-0.46
3UW4XZ		4.700	0.132	0.46	3.900	0.097	0.40
3XDBDM	*	4.600	0.032	0.11	3.550	-0.253	-1.04
3Y3WRW	*	3.900	-0.668	-2.33	3.400	-0.403	-1.65
474BBC	X	3.800	-0.768	-2.67	3.000	-0.803	-3.29
4KZPB7		4.600	0.032	0.11	3.800	-0.003	-0.01
4M7BY7		4.450	-0.118	-0.41	3.700	-0.103	-0.42
689HTV		5.000	0.432	1.50	4.100	0.297	1.22
6AWUR2	*	4.400	-0.168	-0.58	3.900	0.097	0.40
6NGAXL		4.750	0.182	0.63	3.890	0.087	0.36
6UM4PW		4.751	0.183	0.64	3.827	0.024	0.10
6XJR74		4.337	-0.231	-0.81	3.685	-0.118	-0.48
8KQP42		5.000	0.432	1.50	4.150	0.347	1.42
8VPL4H	*	4.785	0.217	0.76	4.210	0.407	1.67
9VLF2E		4.650	0.082	0.29	3.950	0.147	0.60
9WJQWG		4.600	0.032	0.11	3.800	-0.003	-0.01
A74JLJ		4.600	0.032	0.11	4.000	0.197	0.81
AJM44R		4.500	-0.068	-0.24	3.850	0.047	0.19
AUA6K2		4.400	-0.168	-0.58	3.700	-0.103	-0.42
AX9J66		4.350	-0.218	-0.76	3.550	-0.253	-1.04
BDV2RE		4.745	0.177	0.62	3.985	0.182	0.75
BNYAHC		4.575	0.007	0.02	3.770	-0.033	-0.13
C92KWZ		4.605	0.037	0.13	3.905	0.102	0.42
CEQ7LD		3.940	-0.628	-2.19	3.220	-0.583	-2.39
CKU4FC		4.510	-0.058	-0.20	3.760	-0.043	-0.18
DMTWMF		4.540	-0.028	-0.10	3.785	-0.018	-0.07
DXFUDK		4.550	-0.018	-0.06	3.850	0.047	0.19
E8YTJG		3.950	-0.618	-2.15	3.350	-0.453	-1.86
EGMPHW		4.700	0.132	0.46	4.000	0.197	0.81
EMC2HY		4.900	0.332	1.16	4.100	0.297	1.22
ET2GBC		5.100	0.532	1.85	4.150	0.347	1.42
FBX86K		4.950	0.382	1.33	3.950	0.147	0.60
G3GBE6		4.600	0.032	0.11	3.845	0.042	0.17



Analysis 910

Fall 2017

Glucose + Fructose

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
GAXLR6		4.400	-0.168	-0.58	3.630	-0.173	-0.71
H8PTBC		4.600	0.032	0.11	3.820	0.017	0.07
HGCURL		4.500	-0.068	-0.24	3.900	0.097	0.40
HKU289		4.105	-0.463	-1.61	3.320	-0.483	-1.98
JD8NPK		4.580	0.012	0.04	3.635	-0.168	-0.69
JTLRAU		4.810	0.242	0.84	4.015	0.212	0.87
K2BWJ8		4.780	0.212	0.74	3.930	0.127	0.52
K8GT48		4.520	-0.048	-0.17	3.720	-0.083	-0.34
LFNRBN		4.760	0.192	0.67	3.985	0.182	0.75
MCHNXR		4.345	-0.223	-0.78	3.600	-0.203	-0.83
N3ACGN		5.000	0.432	1.50	4.100	0.297	1.22
NRRUNG		4.250	-0.318	-1.11	3.550	-0.253	-1.04
NYB34Z		4.465	-0.103	-0.36	3.830	0.027	0.11
P36CVD		4.600	0.032	0.11	3.800	-0.003	-0.01
PP3QTN		4.650	0.082	0.29	3.900	0.097	0.40
PQY2PR		4.950	0.382	1.33	4.100	0.297	1.22
QCANPM		4.740	0.172	0.60	3.860	0.057	0.23
QDKLYX		5.000	0.432	1.50	4.150	0.347	1.42
R2RJWW		4.300	-0.268	-0.93	3.450	-0.353	-1.45
RAH8PD		4.600	0.032	0.11	3.900	0.097	0.40
UQ2GQ7	*	3.700	-0.868	-3.02	3.050	-0.753	-3.08
UTRN9H		4.350	-0.218	-0.76	3.650	-0.153	-0.63
UVBXZU		4.525	-0.043	-0.15	3.775	-0.028	-0.11
UVR2NU		4.900	0.332	1.16	4.040	0.237	0.97
VHYYKT		4.580	0.012	0.04	3.770	-0.033	-0.13
WLKWV4		4.225	-0.343	-1.19	3.475	-0.328	-1.34
XAZ794		4.565	-0.003	-0.01	3.740	-0.063	-0.26
XTUK7H	*	4.730	0.162	0.56	4.165	0.362	1.48
XTWABE		4.815	0.247	0.86	4.050	0.247	1.01
XU6K6X		4.400	-0.168	-0.58	3.600	-0.203	-0.83
YF8UNQ		5.000	0.432	1.50	4.100	0.297	1.22
YU6476	X	5.375	0.807	2.81	4.190	0.387	1.59
Z24TMA		4.085	-0.483	-1.68	3.450	-0.353	-1.45
Z3DVBT		4.990	0.422	1.47	4.135	0.332	1.36
ZRUJWV		4.315	-0.253	-0.88	3.585	-0.218	-0.89



Analysis 910
Glucose + Fructose

Grand Means		Summary Statistics	
	4.5678 g/L		3.8028 g/L
Std Dev Btwn Labs			0.2440 g/L
	0.2872 g/L		
Statistics based on 68 of 70 reporting participants			

Wines tested: SA13: Chardonnay; SA14: Chardonnay

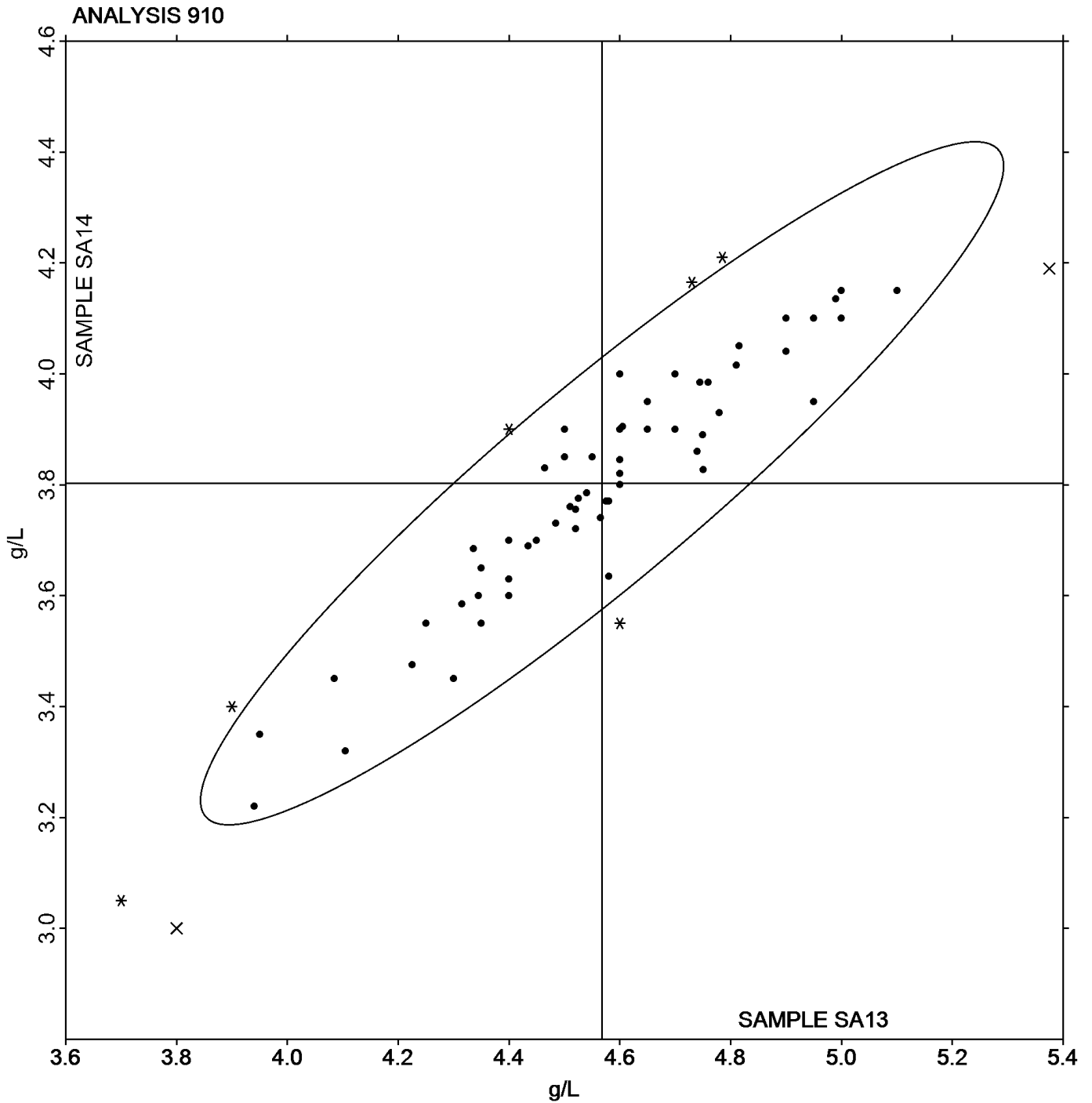
Comments on Assigned Data Flags for Test #910

474BBC (X) - Inconsistent in testing between samples, data for sample SA14 are low.

YU6476 (X) - Inconsistent in testing between samples, data for sample SA13 are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <i>Chardonnay</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
HPLC	4.500	0.212	-0.068	3.725	0.247	-0.078	2/2
Enzymatic/Spectrophotometric	4.591	0.278	0.023	3.822	0.239	0.019	62/64
FTIR	4.239	0.303	-0.329	3.543	0.222	-0.260	4/4





Analysis 911
Copper Content

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
38K3QN		0.0085	-0.0202	-0.84	0.0065	-0.0213	-0.88
3Y3WRW		0.0155	-0.0132	-0.55	0.0130	-0.0148	-0.61
4M7BY7		0.0275	-0.0012	-0.05	0.0280	0.0003	0.01
6AWUR2		0.0200	-0.0087	-0.36	0.0200	-0.0078	-0.32
8KQP42		0.0050	-0.0237	-0.98	0.0005	-0.0273	-1.12
AUA6K2	M				0.0127	-0.0151	-0.62
AX9J66		0.0200	-0.0087	-0.36	0.0200	-0.0078	-0.32
C92KWZ		0.0200	-0.0087	-0.36	0.0200	-0.0078	-0.32
EGMPHW		0.0125	-0.0162	-0.67	0.0120	-0.0158	-0.65
EMC2HY		0.0535	0.0248	1.03	0.0490	0.0213	0.88
HGCURL	*	0.0500	0.0213	0.89	0.0600	0.0323	1.33
JD8NPK		0.0200	-0.0087	-0.36	0.0200	-0.0078	-0.32
MCHNXR		0.0305	0.0018	0.08	0.0320	0.0043	0.18
N3ACGN	*	0.1000	0.0713	2.96	0.1000	0.0723	2.98
P36CVD		0.0130	-0.0157	-0.65	0.0135	-0.0143	-0.59
P9XGPH		0.0200	-0.0087	-0.36	0.0200	-0.0078	-0.32
UTRN9H		0.0250	-0.0037	-0.15	0.0200	-0.0078	-0.32
Z24TMA		0.0100	-0.0187	-0.77	0.0100	-0.0178	-0.73
ZJYL88		0.0650	0.0363	1.51	0.0550	0.0273	1.12

Grand Means		Summary Statistics	
	0.02867 mg/L		0.02775 mg/L
Std Dev Btwn Labs			0.02427 mg/L
	0.02409 mg/L		

Statistics based on 18 of 19 reporting participants

Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #911

AUA6K2 (M) - Participant did not submit data for sample SA13.



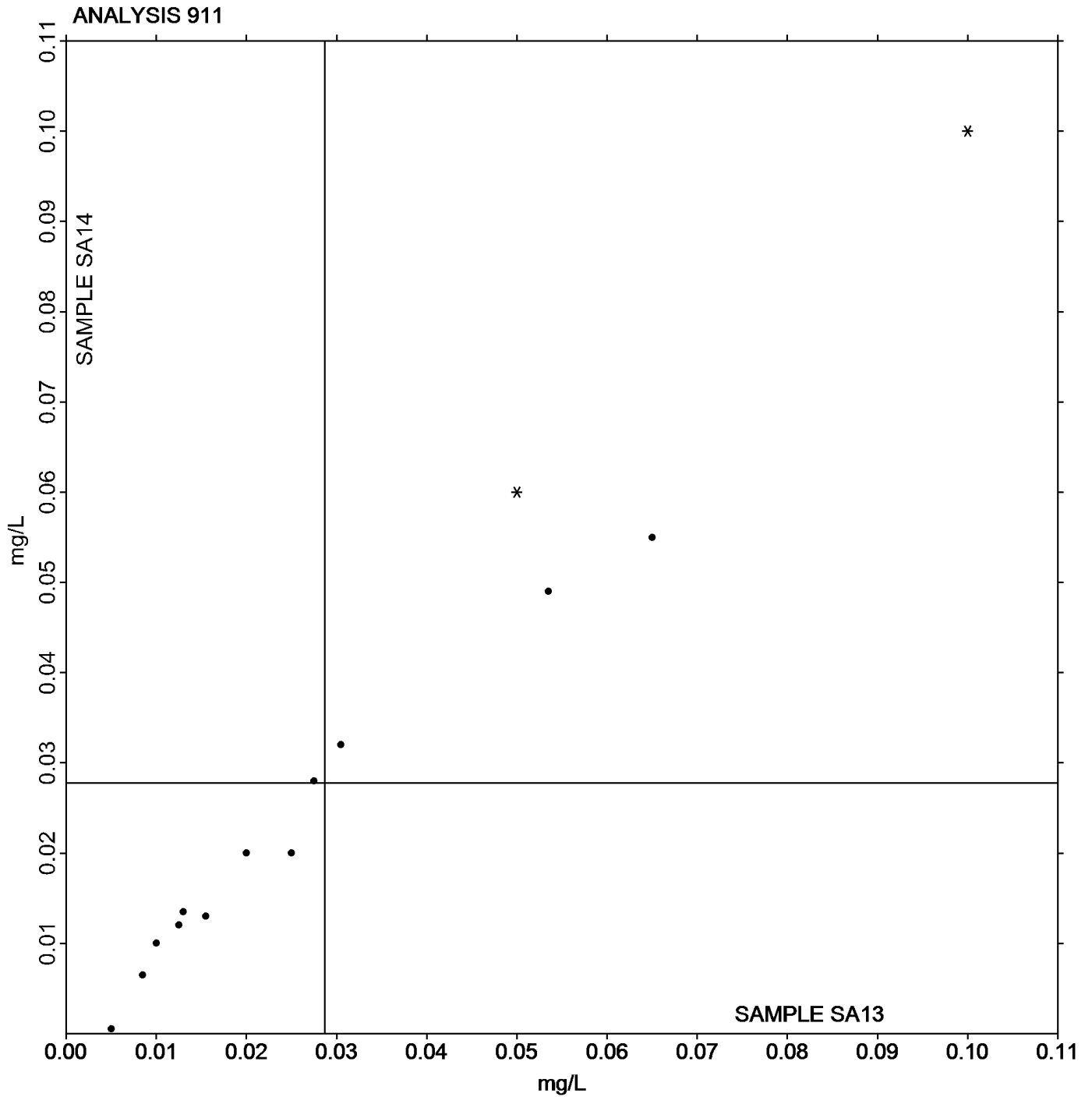
**Analysis 911
Copper Content**

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <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							0/1
Atomic Absorption Spectroscopy	0.033	0.022	0.0040	0.032	0.022	0.0041	8/8
ICP-OES	0.028	0.035	-0.0004	0.028	0.036	-0.0003	6/6
Other _____	0.021	0.003	-0.0074	0.020	0.000	-0.0078	4/4



Analysis 911
Copper Content



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 SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
38K3QN		600.0	-91.9	-0.81	589.5	-101.6	-0.78
3Y3WRW		710.0	18.1	0.16	670.0	-21.1	-0.16
6AWUR2		620.0	-71.9	-0.64	625.0	-66.1	-0.51
9WHZND		580.6	-111.3	-0.98	588.4	-102.7	-0.79
AUA6K2	M				644.0	-47.1	-0.36
AX9J66		585.0	-106.9	-0.95	590.0	-101.1	-0.77
C92KWZ		661.5	-30.4	-0.27	671.0	-20.1	-0.15
EGMPHW		906.8	214.9	1.90	883.2	192.1	1.47
HGCURL		740.0	48.1	0.43	765.0	73.9	0.57
JD8NPK		840.0	148.1	1.31	977.0	285.9	2.19
MCHNXR	X	1,433.0	741.1	6.55	1,421.0	729.9	5.59
N3ACGN		605.5	-86.4	-0.76	619.5	-71.6	-0.55
P36CVD		607.5	-84.4	-0.75	636.5	-54.6	-0.42
QCANPM		884.0	192.1	1.70	916.0	224.9	1.72
XTWABE		788.5	96.6	0.85	631.5	-59.6	-0.46
Z24TMA		627.5	-64.4	-0.57	610.0	-81.1	-0.62
Z3DVBT		622.0	-70.0	-0.62	594.5	-96.7	-0.74

Grand Means		Summary Statistics	
	691.93 mg/L		691.14 mg/L
Std Dev Btwn Labs			130.54 mg/L
	113.07 mg/L		
Statistics based on 15 of 17 reporting participants			

Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #912

AUA6K2 (M) - Participant did not submit data for sample SA13.

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

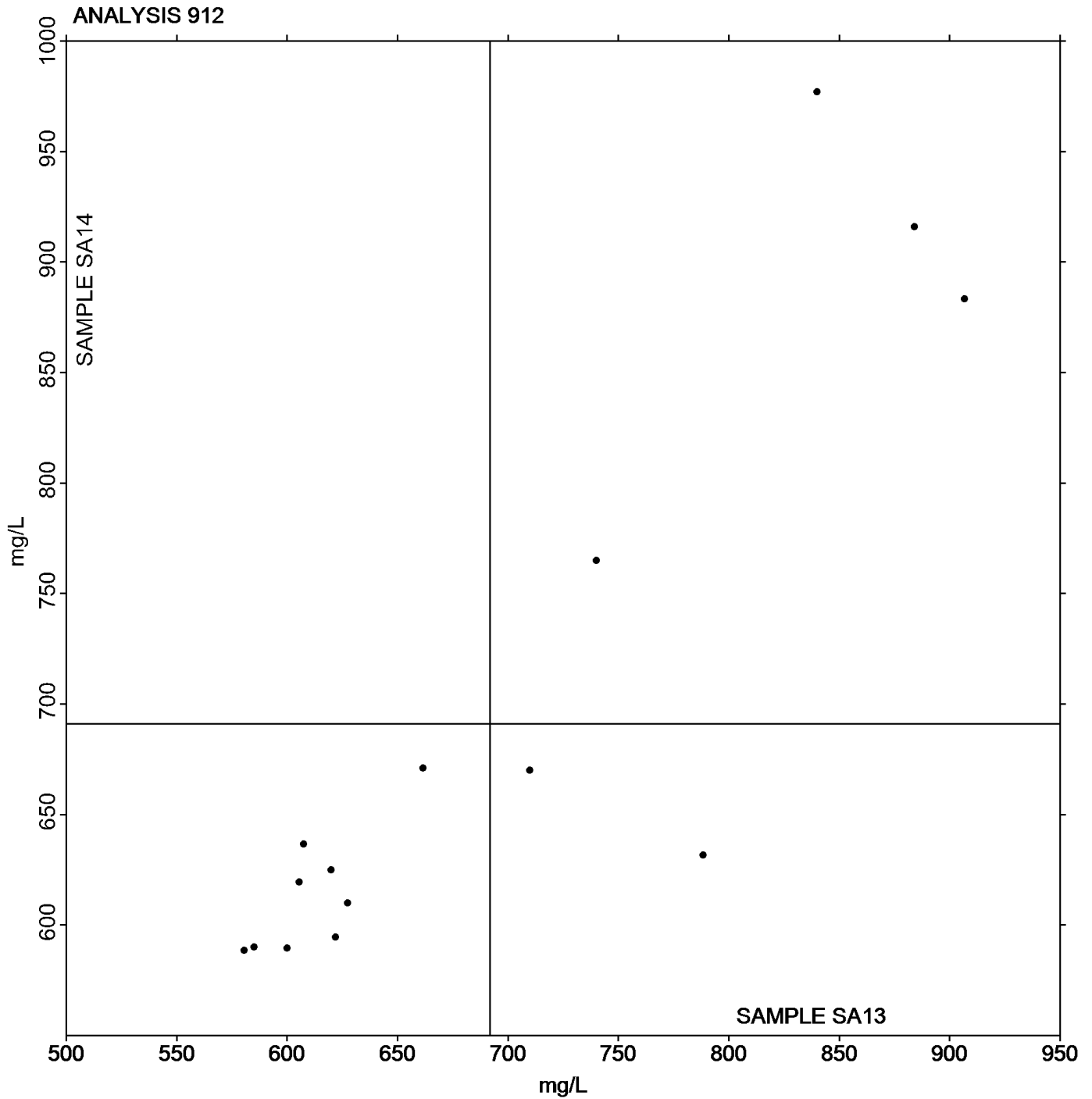


Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA13 <i>Chardonnay</i>			Sample SA14 <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							0/1
Atomic Absorption Spectroscopy	623.200	40.621	-68.7	623.133	42.838	-68.0	3/4
ICP-OES	667.967	133.731	-24.0	670.746	120.044	-20.4	5/5
FTIR	725.000	21.213	33.1	717.500	67.175	26.4	2/2
Other _____	743.893	133.201	52.0	741.794	188.799	50.7	5/5



Analysis 912
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 #057

Analysis 915 A420nm (1cm path)

Fall 2017

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ		0.1190	-0.0014	-0.29	0.1105	-0.0032	-0.60
38K3QN	*	0.1280	0.0076	1.56	0.1290	0.0153	2.89
3UW4XZ	X	0.0916	-0.0288	-5.93	0.0979	-0.0158	-2.99
3XDBDM	X	0.0210	-0.0994	-20.48	0.0205	-0.0932	-17.61
3Y3WRW		0.1120	-0.0084	-1.73	0.1050	-0.0087	-1.64
474BBC		0.1190	-0.0014	-0.29	0.1145	0.0008	0.16
4KZPB7		0.1285	0.0081	1.67	0.1150	0.0013	0.25
4M7BY7		0.1225	0.0021	0.43	0.1150	0.0013	0.25
6XJR74		0.1140	-0.0064	-1.32	0.1075	-0.0062	-1.17
7NRJFK		0.1210	0.0006	0.12	0.1120	-0.0017	-0.31
9VLF2E		0.1190	-0.0014	-0.29	0.1110	-0.0027	-0.50
A74JLJ	X	0.1660	0.0456	9.39	0.1380	0.0243	4.60
AJM44R	*	0.1210	0.0006	0.12	0.1045	-0.0092	-1.73
AKHPVW	X	0.1225	0.0021	0.43	0.1330	0.0193	3.66
C92KWZ		0.1210	0.0006	0.12	0.1130	-0.0007	-0.13
CE4QC3	X	0.0960	-0.0244	-5.03	0.0890	-0.0247	-4.66
CEQ7LD	X	0.1580	0.0376	7.74	0.1490	0.0353	6.68
DXFUDK	X	0.1000	-0.0204	-4.20	0.1000	-0.0137	-2.58
E8YTJG	X	0.0845	-0.0359	-7.40	0.0790	-0.0347	-6.55
EGMPHW		0.1170	-0.0034	-0.70	0.1115	-0.0022	-0.41
EMACD3		0.1115	-0.0089	-1.83	0.1030	-0.0107	-2.02
GAXLR6		0.1220	0.0016	0.33	0.1135	-0.0002	-0.03
HGCURL		0.1200	-0.0004	-0.08	0.1220	0.0083	1.58
JD8NPK		0.1175	-0.0029	-0.60	0.1125	-0.0012	-0.22
JTLRAU		0.1205	0.0001	0.02	0.1150	0.0013	0.25
K2BWJ8		0.1235	0.0031	0.64	0.1170	0.0033	0.63
LFNRBN		0.1215	0.0011	0.23	0.1180	0.0043	0.82
N3ACGN		0.1185	-0.0019	-0.39	0.1145	0.0008	0.16
NETQLB		0.1292	0.0088	1.81	0.1198	0.0061	1.16
NRRUNG	X	0.1880	0.0676	13.92	0.1475	0.0338	6.40
NYB34Z		0.1205	0.0001	0.02	0.1150	0.0013	0.25
P36CVD		0.1265	0.0061	1.26	0.1195	0.0058	1.10
Q4ZEZ9		0.1210	0.0006	0.12	0.1100	-0.0037	-0.69
QCANPM		0.1210	0.0006	0.12	0.1150	0.0013	0.25
RAH8PD		0.1115	-0.0089	-1.83	0.1060	-0.0077	-1.45



Analysis 915
A420nm (1cm path)

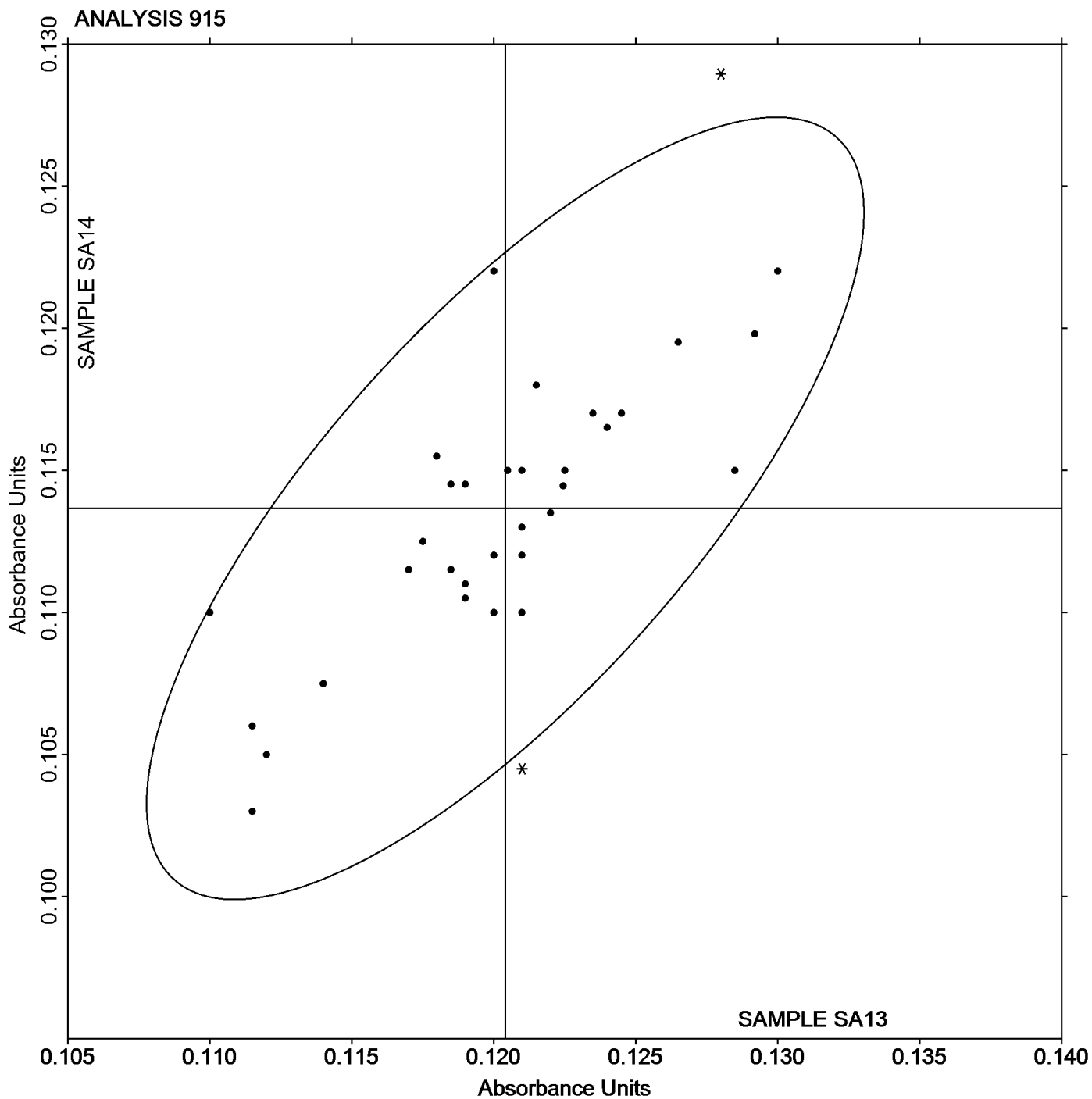
Table with columns: WebCode, Data Flag, Sample SA13 (Lab Mean, Diff from Grand Mean, CPV), Sample SA14 (Lab Mean, Diff from Grand Mean, CPV). Includes data for various web codes like UTRN9H, XAZ794, etc.

Summary Statistics table with columns: Grand Means, Std Dev Btwn Labs. Values: 0.12040 Absorbance Units, 0.11366 Absorbance Units, 0.00485 Absorbance Units, 0.00529 Absorbance Units. Note: Statistics based on 35 of 45 reporting participants.

Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #915

- AKHPVW (X) - Data for sample SA14 are high.
CE4QC3 (X) - Data for both samples are low.
XTUK7H (X) - Data for both samples are high.
DXFUDK (X) - Data for sample SA13 are low.
NRRUNG (X) - Data for both samples are high.
3UW4XZ (X) - Data for both samples are low.
E8YTJG (X) - Data for both samples are low.
A74JLJ (X) - Data for both samples are high.
CEQ7LD (X) - Data for both samples are high.
3XDBDM (X) - Data for both samples are low.



**ASEV-CTS Wine Industry Interlaboratory Testing Program****Report #057****Analysis 916****Fall 2017****A520nm (1cm path)**

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2R7PPQ	X	0.2200	0.1977	66.10	0.2250	0.2037	43.70
38K3QN		0.0264	0.0040	1.34	0.0262	0.0049	1.04
3UW4XZ	*	0.0166	-0.0058	-1.93	0.0075	-0.0138	-2.96
3XDBDM	X	-0.0095	-0.0318	-10.64	-0.0100	-0.0313	-6.71
3Y3WRW		0.0165	-0.0058	-1.95	0.0155	-0.0058	-1.24
474BBC		0.0230	0.0007	0.22	0.0230	0.0017	0.37
4M7BY7		0.0225	0.0002	0.06	0.0200	-0.0013	-0.28
6XJR74		0.0195	-0.0028	-0.95	0.0185	-0.0028	-0.60
7NRJFK		0.0210	-0.0013	-0.45	0.0230	0.0017	0.37
9VLF2E		0.0210	-0.0013	-0.45	0.0215	0.0002	0.05
A74JLJ	X	0.0790	0.0567	18.95	0.0570	0.0357	7.66
AJM44R		0.0205	-0.0018	-0.61	0.0140	-0.0073	-1.56
AKHPVW	*	0.0255	0.0032	1.06	0.0340	0.0127	2.73
C92KWZ		0.0275	0.0052	1.73	0.0240	0.0027	0.58
CE4QC3	X	0.0085	-0.0138	-4.63	0.0055	-0.0158	-3.39
CEQ7LD	X	0.0580	0.0357	11.93	0.0580	0.0367	7.88
DXFUDK		0.0200	-0.0023	-0.78	0.0250	0.0037	0.80
E8YTJG	X	-0.0090	-0.0313	-10.48	-0.0090	-0.0303	-6.50
EGMPHW		0.0210	-0.0013	-0.45	0.0190	-0.0023	-0.49
EMACD3		0.0215	-0.0008	-0.28	0.0190	-0.0023	-0.49
GAXLR6	*	0.0300	0.0077	2.56	0.0240	0.0027	0.58
HGCURL		0.0250	0.0027	0.89	0.0270	0.0057	1.23
JD8NPK		0.0235	0.0012	0.39	0.0215	0.0002	0.05
JTLRAU		0.0225	0.0002	0.06	0.0205	-0.0008	-0.17
K2BWJ8		0.0225	0.0002	0.06	0.0200	-0.0013	-0.28
LFNRBN		0.0225	0.0002	0.06	0.0230	0.0017	0.37
N3ACGN		0.0200	-0.0023	-0.78	0.0180	-0.0033	-0.70
NETQLB		0.0286	0.0063	2.10	0.0263	0.0050	1.08
NRRUNG	X	0.0555	0.0332	11.09	0.0445	0.0232	4.98
NYB34Z		0.0200	-0.0023	-0.78	0.0180	-0.0033	-0.70
P36CVD		0.0250	0.0027	0.89	0.0250	0.0037	0.80
Q4ZEZ9		0.0220	-0.0003	-0.11	0.0180	-0.0033	-0.70
QCANPM		0.0210	-0.0013	-0.45	0.0205	-0.0008	-0.17
RAH8PD		0.0235	0.0012	0.39	0.0170	-0.0043	-0.92
UTRN9H	X	0.0355	0.0132	4.40	0.0235	0.0022	0.48



**Analysis 916
A520nm (1cm path)**

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XAZ794		0.0195	-0.0028	-0.95	0.0190	-0.0023	-0.49
XGGHM6		0.0200	-0.0023	-0.78	0.0220	0.0007	0.15
XTWABE		0.0225	0.0002	0.06	0.0205	-0.0008	-0.17
XU6K6X	*	0.0200	-0.0023	-0.78	0.0300	0.0087	1.87
YU6476		0.0250	0.0027	0.89	0.0235	0.0022	0.48
Z24TMA		0.0230	0.0007	0.22	0.0190	-0.0023	-0.49
Z3DVBT		0.0200	-0.0023	-0.78	0.0200	-0.0013	-0.28
ZJYL88		0.0231	0.0008	0.26	0.0220	0.0007	0.15

Grand Means		Summary Statistics	
0.02233	Absorbance Units	0.02128	Absorbance Units
Std Dev Btwn Labs			
0.00299	Absorbance Units	0.00466	Absorbance Units
Statistics based on 35 of 43 reporting participants			

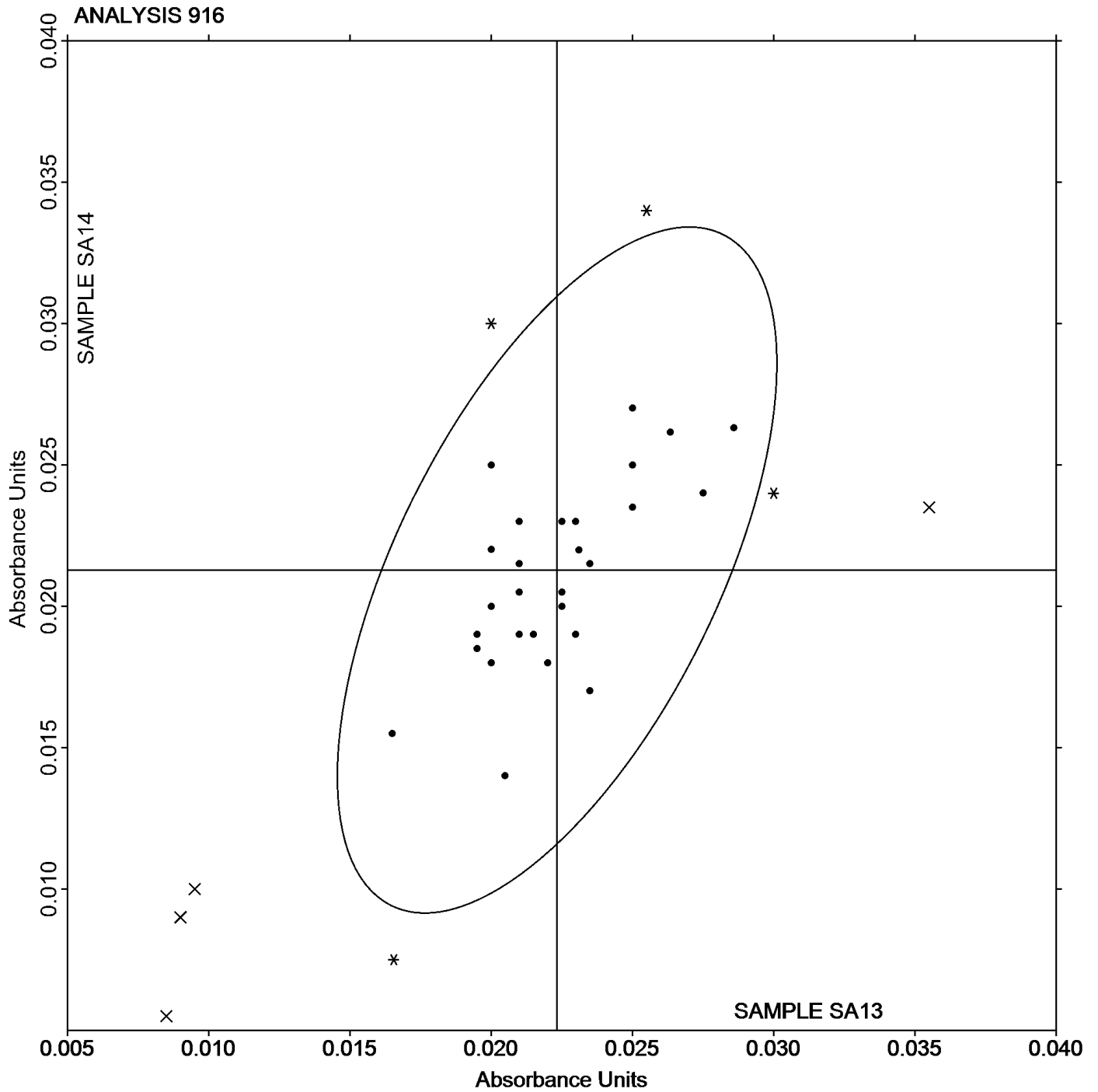
Wines tested: SA13: Chardonnay; SA14: Chardonnay

Comments on Assigned Data Flags for Test #916

- UTRN9H (X) - Data for sample SA13 are high.
- CE4QC3 (X) - Data for both samples are low.
- NRRUNG (X) - Data for both samples are high.
- E8YTJG (X) - Data for both samples are low.
- A74JLJ (X) - Data for both samples are high.
- 2R7PPQ (X) - Data for both samples are high. Inconsistent within the determinations of sample SA14. Data may be off by a factor of 10.
- CEQ7LD (X) - Data for both samples are high.
- 3XDBDM (X) - Data for both samples are low.



Analysis 916
A520nm (1cm path)





ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 950
Research Property - Citric Acid Content

Report #057
Fall 2017

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
38K3QN		0.2645	0.0601	1.33	0.2630	0.0531	1.65
3XDBDM		0.1800	-0.0244	-0.54	0.1750	-0.0349	-1.08
3Y3WRW		0.3100	0.1056	2.33	0.2700	0.0601	1.86
4M7BY7		0.2000	-0.0044	-0.10	0.2000	-0.0099	-0.31
BDV2RE		0.1650	-0.0394	-0.87	0.1750	-0.0349	-1.08
HGCURL		0.1900	-0.0144	-0.32	0.2000	-0.0099	-0.31
JD8NPK		0.1800	-0.0244	-0.54	0.2000	-0.0099	-0.31
N3ACGN		0.1775	-0.0269	-0.59	0.1855	-0.0244	-0.76
P36CVD		0.1600	-0.0444	-0.98	0.1950	-0.0149	-0.46
XTWABE		0.2110	0.0066	0.15	0.2155	0.0056	0.17
Z24TMA		0.2100	0.0056	0.12	0.2300	0.0201	0.62

Research Property Consensus Value

Consensus Average

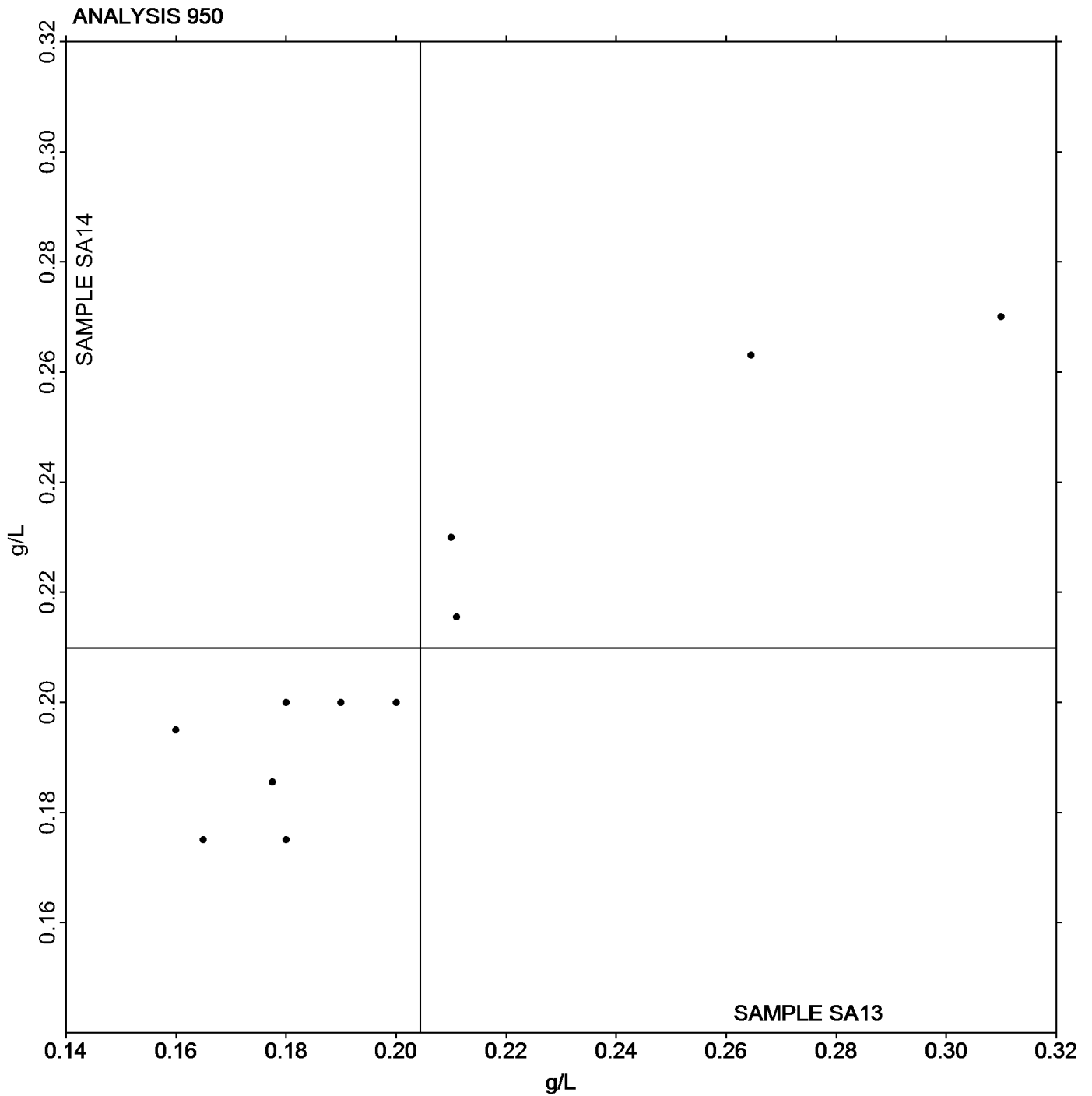
0.20436 g/L

0.20991 g/L

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

Wines tested: SA13: Chardonnay; SA14: Chardonnay

This consensus average is based on 11 reporting participants.



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



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

Report #057
Fall 2017

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
38K3QN		34.43	-10.97	-0.60	35.15	-10.90	-0.59
3Y3WRW		98.50	53.10	2.90	100.00	53.95	2.93
6AWUR2		49.00	3.60	0.20	51.00	4.95	0.27
AX9J66		36.50	-8.90	-0.49	35.00	-11.05	-0.60
C92KWZ		44.00	-1.40	-0.08	42.50	-3.55	-0.19
EGMPHW		33.00	-12.40	-0.68	37.00	-9.05	-0.49
HGCURL		36.00	-9.40	-0.51	34.00	-12.05	-0.65
JD8NPK		59.50	14.10	0.77	58.50	12.45	0.68
N3ACGN		36.50	-8.90	-0.49	37.00	-9.05	-0.49
P36CVD		41.00	-4.40	-0.24	41.00	-5.05	-0.27
P9XGPH		40.00	-5.40	-0.30	40.00	-6.05	-0.33
Z3DVBT		36.38	-9.02	-0.49	41.49	-4.57	-0.25

Research Property Consensus Value

Consensus Average

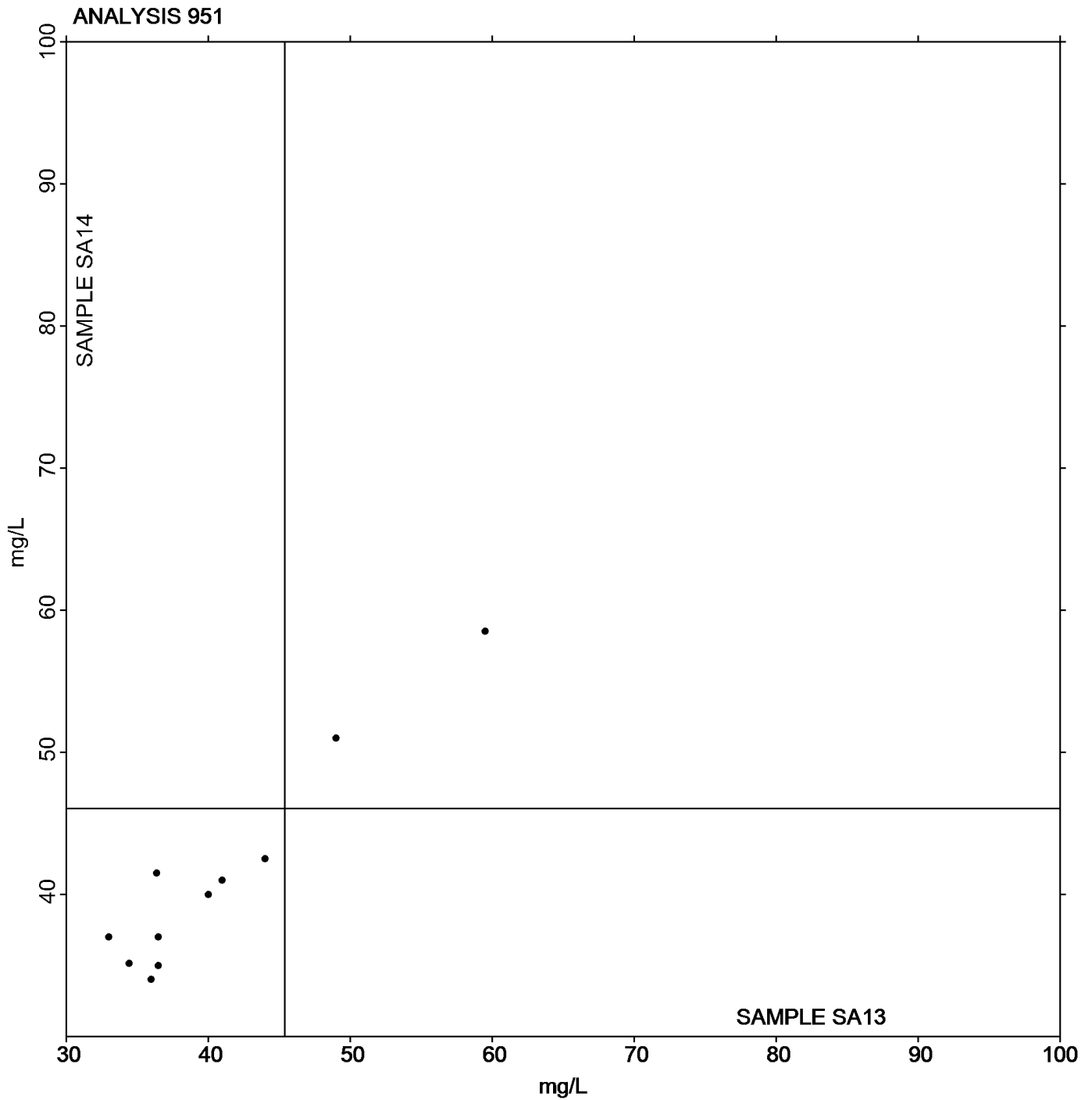
45.401 mg/L

46.053 mg/L

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

Wines tested: SA13: Chardonnay; SA14: Chardonnay

This consensus average is based on 12 reporting participants.



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



Analysis 952

Research Property: Molecular SO2 Content

WebCode	Data Flag	Sample SA13			Sample SA14		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
38K3QN		0.3750	0.1014	1.48	0.4500	0.0861	1.14
3XDBDM		0.4100	0.1364	1.99	0.5350	0.1711	2.26
3Y3WRW		0.2850	0.0114	0.17	0.3750	0.0111	0.15
AJM44R		0.2700	-0.0036	-0.05	0.3450	-0.0189	-0.25
BDV2RE		0.2750	0.0014	0.02	0.3400	-0.0239	-0.32
C92KWZ		0.2350	-0.0386	-0.56	0.3550	-0.0089	-0.12
GAXLR6		0.2350	-0.0386	-0.56	0.3450	-0.0189	-0.25
GQJAXU		0.1900	-0.0836	-1.22	0.2900	-0.0739	-0.98
H8PTBC		0.3550	0.0814	1.19	0.4500	0.0861	1.14
HGCURL		0.2500	-0.0236	-0.34	0.3000	-0.0639	-0.84
K2BWJ8		0.2100	-0.0636	-0.93	0.3400	-0.0239	-0.32
Z24TMA		0.2600	-0.0136	-0.20	0.4200	0.0561	0.74
Z3DVBT		0.3050	0.0314	0.46	0.2750	-0.0889	-1.17
ZRUJWV		0.1750	-0.0986	-1.44	0.2750	-0.0889	-1.17

Research Property Consensus Value

Consensus Average

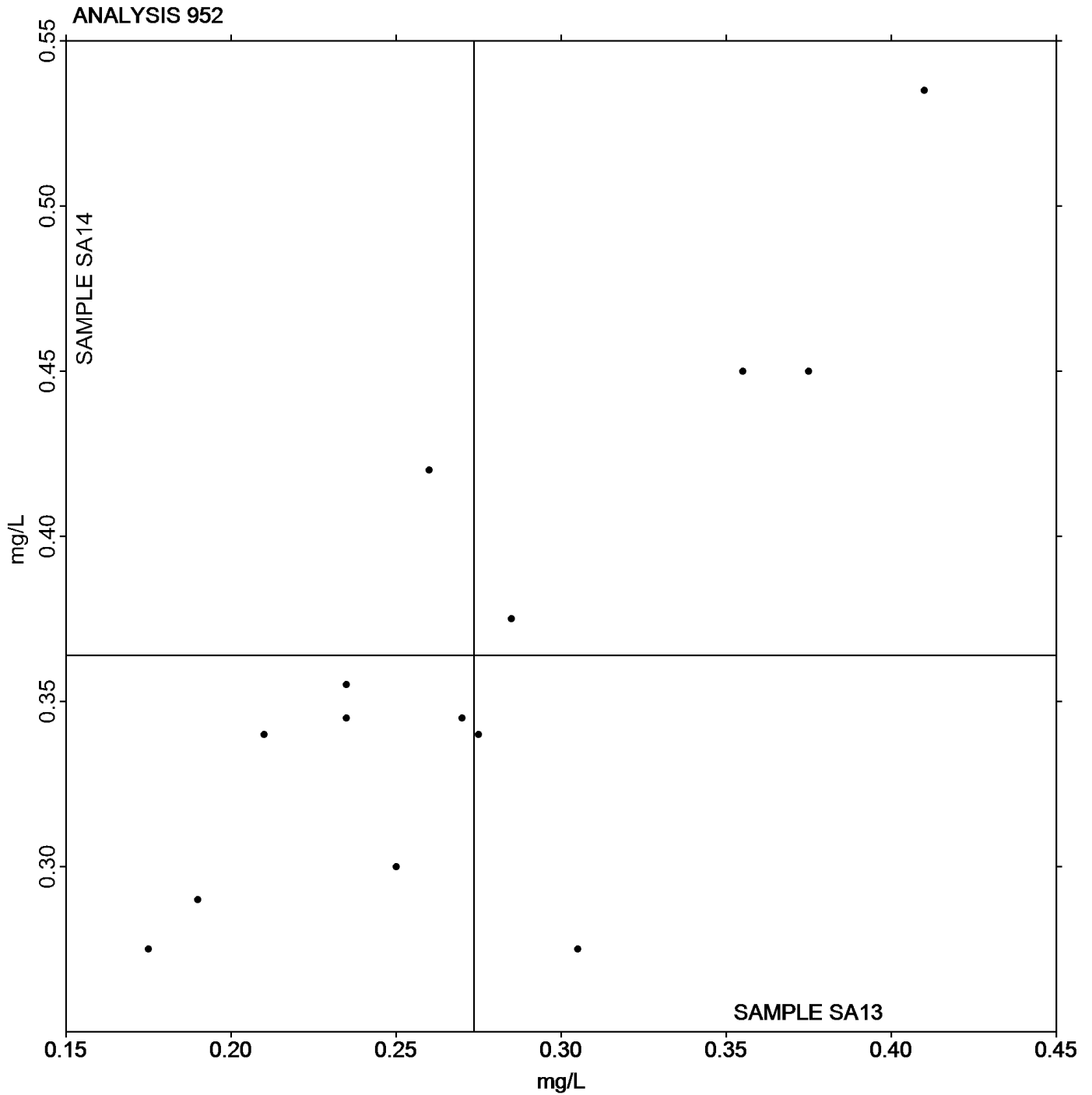
0.27357 mg/L

0.36393 mg/L

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

Wines tested: SA13: Chardonnay; SA14: Chardonnay

This consensus average is based on 14 reporting participants.



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