



Wine Industry Interlaboratory Program

Summary Report #071 - Summer 2022

[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: Conductivity @ 20C</u>
<u>951</u>	<u>Research: L-Lactic Acid</u>
<u>952</u>	<u>Research: Methanol 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 color, rubber, plastics, fasteners and metals, containerboard, paper, agriculture, hemp, and wine, 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 100 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

Report #071
Summer 2022

Analysis 901 Ethanol (% of volume)

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		12.75	-0.03	-0.46	12.75	-0.03	-0.49
2G3NXC	X	12.34	-0.43	-6.72	12.35	-0.44	-6.95
2WVLBM		12.81	0.04	0.55	12.82	0.03	0.55
4BPMPD		12.78	0.01	0.08	12.77	-0.01	-0.17
4HTULN	X	12.30	-0.47	-7.33	12.34	-0.44	-7.03
63U8T2		12.81	0.04	0.55	12.81	0.03	0.47
6BLMH6		12.81	0.03	0.47	12.81	0.02	0.39
6CJZ3C		12.79	0.02	0.24	12.79	0.01	0.15
6NARP2		12.84	0.06	0.93	12.83	0.05	0.79
6YWNTN	X	12.60	-0.17	-2.70	12.70	-0.08	-1.29
72D8VA		12.74	-0.04	-0.61	12.73	-0.06	-0.89
7CWLYC		12.75	-0.03	-0.46	12.75	-0.04	-0.57
7DPAG9		12.83	0.05	0.78	12.89	0.11	1.75
7KADNB	X	12.60	-0.17	-2.70	12.70	-0.08	-1.29
7WZU74	*	12.60	-0.17	-2.70	12.66	-0.12	-1.93
87NEYZ		12.83	0.05	0.78	12.82	0.03	0.55
88GXVE	X	14.80	2.03	31.31	14.80	2.02	32.23
89BNY9		12.90	0.13	1.94	12.90	0.12	1.90
8BFAQE	X	12.90	0.13	1.94	13.10	0.32	5.10
8C8BQB	X	13.30	0.53	8.12	13.20	0.42	6.69
8LW2BH		12.75	-0.02	-0.38	12.76	-0.03	-0.41
8MQPTD		12.78	0.00	0.01	12.78	0.00	-0.01
9TTQF7	*	12.99	0.21	3.30	12.95	0.17	2.69
AT9UHJ		12.75	-0.03	-0.46	12.75	-0.03	-0.49
AU3H2E	*	12.61	-0.17	-2.62	12.60	-0.18	-2.88
B48R4X		12.82	0.04	0.63	12.83	0.04	0.71
B4MNFb		12.78	0.01	0.08	12.78	0.00	-0.01
BRT8RA		12.76	-0.01	-0.22	12.79	0.00	0.07
CBZLE2		12.76	-0.02	-0.30	12.76	-0.03	-0.41
D364DX		12.80	0.03	0.39	12.77	-0.01	-0.17
DHUJN3		12.66	-0.12	-1.85	12.70	-0.09	-1.37
DR6B8R		12.77	-0.01	-0.15	12.76	-0.02	-0.33
ENHVEC		12.67	-0.10	-1.62	12.66	-0.12	-1.93
EPXBN7		12.76	-0.02	-0.30	12.75	-0.04	-0.57
ERXN66		12.83	0.06	0.86	12.86	0.08	1.27



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WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ETU2RW		12.81	0.04	0.55	12.76	-0.03	-0.41
FKCHUV		12.77	0.00	-0.07	12.77	-0.01	-0.17
G3V2HA		12.80	0.03	0.39	12.80	0.02	0.31
GBMJUX		12.84	0.07	1.01	12.84	0.06	0.95
GP9YXW		12.82	0.05	0.70	12.82	0.04	0.63
GX2A8R		12.79	0.01	0.16	12.79	0.00	0.07
GXXMTY		12.73	-0.05	-0.77	12.72	-0.06	-0.97
H76DHZ		12.74	-0.03	-0.53	12.78	0.00	-0.01
HQDDQ2		12.80	0.03	0.39	12.79	0.01	0.15
HXEREM		12.83	0.06	0.86	12.81	0.02	0.39
JEGRZW		12.71	-0.06	-1.00	12.75	-0.03	-0.49
JHVUZT		12.83	0.06	0.86	12.82	0.04	0.63
JHYGD2		12.75	-0.02	-0.38	12.78	0.00	-0.01
JMU9P4		12.63	-0.15	-2.31	12.63	-0.16	-2.48
JUNF44		12.76	-0.02	-0.30	12.80	0.01	0.23
K4AYYM		12.83	0.06	0.86	12.84	0.05	0.87
K72Z3Q		12.84	0.06	0.93	12.84	0.06	0.95
KJ7N3R	X	13.05	0.28	4.26	12.10	-0.68	-10.86
LL8E2Y		12.81	0.03	0.47	12.81	0.03	0.47
LM6RKL		12.77	0.00	-0.07	12.77	-0.01	-0.17
LUK6AP		12.72	-0.05	-0.84	12.72	-0.06	-0.97
LYCCRZ		12.80	0.02	0.32	12.80	0.02	0.31
M4KKLU		12.75	-0.02	-0.38	12.77	-0.01	-0.17
M7E7G7	X	13.20	0.43	6.58	13.20	0.42	6.69
MH63GJ		12.75	-0.02	-0.38	12.79	0.00	0.07
N77NUR	*	12.75	-0.02	-0.38	12.84	0.05	0.87
N9XM9Q		12.80	0.03	0.39	12.79	0.01	0.15
NARBQL		12.90	0.13	1.94	12.90	0.12	1.90
NFGQFT	*	12.80	0.02	0.32	12.72	-0.06	-0.97
NR7MGQ		12.90	0.13	1.94	12.90	0.12	1.90
P29KHY		12.74	-0.03	-0.53	12.73	-0.05	-0.81
PPF4TX		12.79	0.02	0.24	12.79	0.01	0.15
PR4HFM		12.80	0.03	0.39	12.80	0.02	0.31
PYNF8G		12.79	0.02	0.24	12.80	0.02	0.31
Q3KJC9		12.76	-0.01	-0.22	12.76	-0.02	-0.33

**ASEV-CTS Wine Industry Interlaboratory Testing Program****Report #071
Summer 2022****Analysis 901
Ethanol (% of volume)**

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
Q7KU99	X	12.38	-0.40	-6.18	12.30	-0.48	-7.67
Q97G2V		12.74	-0.03	-0.53	12.77	-0.01	-0.17
QC8KQW		12.80	0.02	0.32	12.80	0.02	0.31
QK6M4M		12.83	0.06	0.86	12.83	0.04	0.71
QX8DKL		12.84	0.06	0.93	12.83	0.04	0.71
R92ET3	X	12.55	-0.22	-3.47	12.55	-0.23	-3.68
RC3RKE		12.81	0.03	0.47	12.78	-0.01	-0.09
RJJX9T		12.79	0.02	0.24	12.80	0.02	0.31
RTBEXW	X	12.57	-0.20	-3.16	12.78	0.00	-0.01
RZLNZVK		12.78	0.01	0.08	12.78	0.00	-0.01
TARCPT	X	12.70	-0.07	-1.15	12.60	-0.18	-2.88
TQH63L		12.77	-0.01	-0.15	12.80	0.02	0.31
TW6T2X		12.86	0.09	1.32	12.89	0.10	1.67
TXYGKT		12.76	-0.01	-0.22	12.75	-0.03	-0.49
U6G7JT		12.79	0.01	0.16	12.78	-0.01	-0.09
UJDM6K		12.87	0.10	1.48	12.91	0.13	2.06
UKB7FF		12.80	0.02	0.32	12.79	0.00	0.07
W4BTPW		12.78	0.00	0.01	12.77	-0.01	-0.17
W7JQGR		12.80	0.02	0.32	12.79	0.01	0.15
WHEY2F		12.88	0.10	1.55	12.88	0.10	1.59
WTUJ8B		12.82	0.05	0.70	12.85	0.07	1.11
XM7LAU		12.82	0.05	0.70	12.79	0.00	0.07
XNZATP	*	12.57	-0.21	-3.24	12.61	-0.18	-2.80
XU2NAK		12.72	-0.05	-0.84	12.72	-0.06	-0.97
XVX2WD		12.83	0.05	0.78	12.86	0.07	1.19
Y2FWBL		12.80	0.03	0.39	12.83	0.05	0.79
Y7CFGQ		12.68	-0.09	-1.46	12.67	-0.11	-1.77
Y7DFDK		12.82	0.04	0.63	12.83	0.04	0.71
YH7W7R		12.83	0.06	0.86	12.86	0.08	1.27
YQE22B		12.82	0.05	0.70	12.80	0.02	0.31
YW8BMP		12.79	0.01	0.16	12.79	0.00	0.07
Z76V3M		12.70	-0.07	-1.15	12.73	-0.05	-0.81
ZXGA7H		12.80	0.03	0.39	12.83	0.05	0.79



**Analysis 901
Ethanol (% of volume)**

Grand Means		Summary Statistics	
	12.775 percent		12.781 percent
Std Dev Btwn Labs			
	0.065 percent		0.063 percent
Statistics based on 90 of 103 reporting participants			

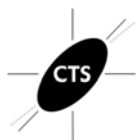
Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #901

- 7KADNB (X) - Inconsistent in testing between samples.
- KJ7N3R (X) - Inconsistent in testing between samples, data for sample SA41 are high and data for sample SA42 are low. Inconsistent within the determinations of both samples.
- 2G3NXC (X) - Data for both samples are low. Possible Systematic Error.
- TARCPT (X) - Inconsistent in testing between samples, data for sample SA42 are low. Inconsistent within the determinations of both samples.
- 8C8BQB (X) - Data for both samples are high. Possible Systematic Error.
- RTBEXW (X) - Inconsistent in testing between samples, data for sample SA41 are low.
- 8BFAQE (X) - Inconsistent in testing between samples, data for sample SA42 are high. Inconsistent within the determinations of sample SA41.
- 88GXVE (X) - Data for both samples are high.
- M7E7G7 (X) - Data for both samples are high. Possible Systematic Error.
- R92ET3 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA42.
- 6YWNTN (X) - Inconsistent in testing between samples.
- 4HTULN (X) - Data for both samples are low. Possible Systematic Error.
- Q7KU99 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA42.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Ebulliometer Method	12.763	0.194	-0.01	12.763	0.194	-0.02	2/8
Gas Chromatography Method	12.858	0.076	0.08	12.849	0.090	0.07	5/6
Near Infrared Method	12.785	0.051	0.01	12.792	0.049	0.01	66/68
Dist. / Density Method	12.746	0.094	-0.03	12.757	0.090	-0.02	10/12
FTIR	12.750	0.049	-0.02	12.744	0.050	-0.04	6/6
Other _____	12.785	0.000	0.01	12.785	0.000	0.00	1/3



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
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Analysis 902 Total Sulfur Dioxide

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		99.50	8.49	1.19	102.00	10.89	1.44
2G3NXC	X	145.50	54.49	7.63	140.00	48.89	6.48
2WVLBM		90.00	-1.01	-0.14	90.00	-1.11	-0.15
4BPMPD		106.50	15.49	2.17	109.00	17.89	2.37
4HTULN		93.00	1.99	0.28	94.20	3.09	0.41
63U8T2		86.50	-4.51	-0.63	86.00	-5.11	-0.68
6BLMH6		79.50	-11.51	-1.61	77.00	-14.11	-1.87
6CJZ3C		93.00	1.99	0.28	92.50	1.39	0.18
6NARP2		81.50	-9.51	-1.33	79.75	-11.36	-1.51
6YWNTN		82.00	-9.01	-1.26	80.00	-11.11	-1.47
72D8VA		102.00	10.99	1.54	102.00	10.89	1.44
7CWLYC		85.50	-5.51	-0.77	89.00	-2.11	-0.28
7DPAG9		83.00	-8.01	-1.12	80.00	-11.11	-1.47
7KADNB	X	110.00	18.99	2.66	103.00	11.89	1.58
7WZU74		85.60	-5.41	-0.76	85.60	-5.51	-0.73
87NEYZ		87.50	-3.51	-0.49	84.50	-6.61	-0.88
89BNY9		97.30	6.29	0.88	97.30	6.19	0.82
8BFAQE		88.50	-2.51	-0.35	88.00	-3.11	-0.41
8C8BQB	X	113.00	21.99	3.08	108.00	16.89	2.24
8LW2BH		89.59	-1.41	-0.20	88.65	-2.46	-0.33
8MQPTD		89.00	-2.01	-0.28	89.50	-1.61	-0.21
9TTQF7		79.56	-11.45	-1.60	79.38	-11.73	-1.56
APBD9B		88.89	-2.12	-0.30	88.47	-2.64	-0.35
AT9UHI		89.50	-1.51	-0.21	88.50	-2.61	-0.35
AU3H2E		94.00	2.99	0.42	92.50	1.39	0.18
B48R4X		88.00	-3.01	-0.42	86.00	-5.11	-0.68
B4MNF6		105.50	14.49	2.03	107.50	16.39	2.17
BRT8RA		99.50	8.49	1.19	99.00	7.89	1.05
CBZLE2		85.00	-6.01	-0.84	84.50	-6.61	-0.88
D364DX		86.00	-5.01	-0.70	84.00	-7.11	-0.94
DHUJN3		84.50	-6.51	-0.91	82.50	-8.61	-1.14
DR6B8R		91.50	0.49	0.07	93.00	1.89	0.25
ENHVEC		93.50	2.49	0.35	92.50	1.39	0.18
EPXBN7		82.00	-9.01	-1.26	83.00	-8.11	-1.08
ERXN66	*	99.50	8.49	1.19	94.50	3.39	0.45



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Summer 2022

Analysis 902 Total Sulfur Dioxide

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ETU2RW	X	94.00	2.99	0.42	115.50	24.39	3.23
F3VGZU		93.00	1.99	0.28	92.50	1.39	0.18
FKCHUV	X	123.00	31.99	4.48	125.50	34.39	4.56
G3V2HA		74.50	-16.51	-2.31	75.00	-16.11	-2.14
GBMJUX		95.00	3.99	0.56	95.50	4.39	0.58
GP9YXW		92.50	1.49	0.21	93.50	2.39	0.32
H76DHZ		84.50	-6.51	-0.91	85.00	-6.11	-0.81
HQDDQ2		87.50	-3.51	-0.49	89.50	-1.61	-0.21
HXEREM		92.00	0.99	0.14	92.00	0.89	0.12
JEGRZW		88.00	-3.01	-0.42	91.00	-0.11	-0.01
JHVUZT		97.30	6.29	0.88	95.45	4.34	0.58
JHYGD2		93.00	1.99	0.28	94.00	2.89	0.38
JMU9P4		97.50	6.49	0.91	97.50	6.39	0.85
JUNF44		101.00	9.99	1.40	101.50	10.39	1.38
K4AYYM		89.00	-2.01	-0.28	90.50	-0.61	-0.08
K72Z3Q		82.00	-9.01	-1.26	82.01	-9.10	-1.21
LL8E2Y		97.50	6.49	0.91	99.00	7.89	1.05
LM6RKL		89.00	-2.01	-0.28	89.50	-1.61	-0.21
LUK6AP		93.70	2.69	0.38	94.75	3.64	0.48
LYCCRZ		91.00	-0.01	0.00	93.50	2.39	0.32
M4KKLU	*	101.50	10.49	1.47	96.50	5.39	0.71
M7E7G7		92.00	0.99	0.14	90.00	-1.11	-0.15
MH63GJ		89.50	-1.51	-0.21	91.00	-0.11	-0.01
N77NUR		89.50	-1.51	-0.21	90.00	-1.11	-0.15
N9XM9Q		91.00	-0.01	0.00	86.00	-5.11	-0.68
NARBQL		87.00	-4.01	-0.56	88.00	-3.11	-0.41
NFGQFT		93.00	1.99	0.28	91.00	-0.11	-0.01
NR7MGQ	*	95.00	3.99	0.56	89.50	-1.61	-0.21
P29KHY		93.00	1.99	0.28	89.00	-2.11	-0.28
PPF4TX		88.50	-2.51	-0.35	90.50	-0.61	-0.08
PR4HFM	X	115.50	24.49	3.43	116.00	24.89	3.30
PYNF8G		85.00	-6.01	-0.84	87.00	-4.11	-0.54
Q3KJC9		94.00	2.99	0.42	95.00	3.89	0.52
Q7KU99		93.70	2.69	0.38	93.20	2.09	0.28
Q97G2V		102.00	10.99	1.54	104.00	12.89	1.71



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 902 Total Sulfur Dioxide

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
QC8KQW		86.00	-5.01	-0.70	87.00	-4.11	-0.54
QK6M4M		90.50	-0.51	-0.07	89.50	-1.61	-0.21
QX8DKL		88.50	-2.51	-0.35	90.50	-0.61	-0.08
R92ET3	X	118.40	27.39	3.83	110.40	19.29	2.56
RC3RKE		90.50	-0.51	-0.07	89.50	-1.61	-0.21
RJX9T		84.00	-7.01	-0.98	86.00	-5.11	-0.68
RTBEXW	*	71.50	-19.51	-2.73	72.50	-18.61	-2.47
RZNVVK		87.80	-3.21	-0.45	89.30	-1.81	-0.24
TARCPT		83.50	-7.51	-1.05	83.00	-8.11	-1.08
TQH63L		86.45	-4.56	-0.64	87.00	-4.11	-0.54
TW6T2X	X	108.50	17.49	2.45	100.00	8.89	1.18
TXYGKT		77.00	-14.01	-1.96	77.00	-14.11	-1.87
U6G7JT		103.50	12.49	1.75	106.50	15.39	2.04
UJDM6K	*	103.00	11.99	1.68	108.00	16.89	2.24
UKB7FF		90.50	-0.51	-0.07	94.00	2.89	0.38
W4BTPW		97.50	6.49	0.91	102.50	11.39	1.51
W7JQGR		105.50	14.49	2.03	105.00	13.89	1.84
WHEY2F		94.50	3.49	0.49	92.50	1.39	0.18
WTUJ8B		92.40	1.39	0.19	92.85	1.74	0.23
XM7LAU		100.50	9.49	1.33	102.50	11.39	1.51
XNZATP		91.00	-0.01	0.00	92.00	0.89	0.12
XU2NAK		85.50	-5.51	-0.77	88.00	-3.11	-0.41
XVX2WD		81.00	-10.01	-1.40	80.50	-10.61	-1.41
Y2FWBL		101.00	9.99	1.40	98.00	6.89	0.91
Y7CFGQ	X	160.00	68.99	9.66	175.00	83.89	11.12
Y7DFDK		87.00	-4.01	-0.56	87.00	-4.11	-0.54
YH7W7R		95.00	3.99	0.56	93.00	1.89	0.25
YQE22B		88.50	-2.51	-0.35	90.50	-0.61	-0.08
YW8BMP	*	94.00	2.99	0.42	100.00	8.89	1.18
Z76V3M	X	117.00	25.99	3.64	111.00	19.89	2.64
ZXGA7H	*	106.50	15.49	2.17	104.00	12.89	1.71



**Analysis 902
Total Sulfur Dioxide**

Grand Means	Summary Statistics
91.009 mg/L	91.109 mg/L
Std Dev Btwn Labs	
7.144 mg/L	7.542 mg/L
Statistics based on 91 of 101 reporting participants	

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #902

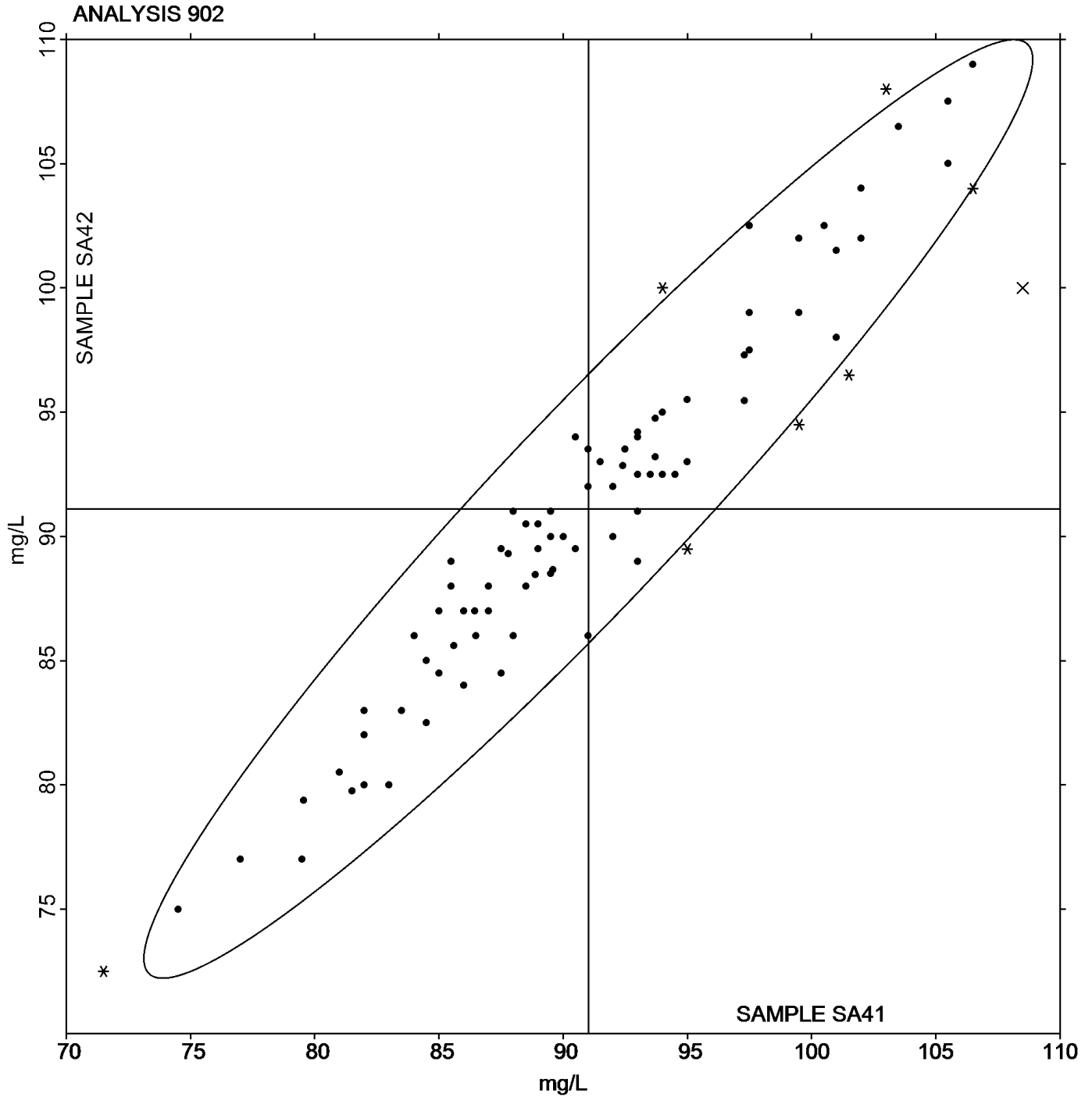
- 7KADNB (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.
- 2G3NXC (X) - Data for both samples are high. Possible Systematic Error.
- FKCHUV (X) - Data for both samples are high. Possible Systematic Error.
- PR4HFM (X) - Data for both samples are high. Possible Systematic Error.
- ETU2RW (X) - Inconsistent in testing between samples, data for sample SA42 are high.
- 8C8BQB (X) - Inconsistent in testing between samples, data for sample SA41 are high.
- Z76V3M (X) - Inconsistent in testing between samples, data for sample SA41 are high.
- R92ET3 (X) - Inconsistent in testing between samples, data for sample SA41 are high.
- Y7CFGQ (X) - Data for both samples are high.
- TW6T2X (X) - Inconsistent in testing between samples.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Ripper Method	92.874	7.784	1.87	93.547	8.315	2.44	31/40
Aeration Oxidation (AO) Method	87.166	3.526	-3.84	87.371	3.613	-3.74	15/15
Segmented Flow Analyzer	88.786	2.878	-2.22	89.864	2.956	-1.24	7/7
Enzymatic Method	95.855	7.220	4.85	95.373	8.246	4.26	11/11
Colorimetric Analyzer	92.689	6.852	1.68	92.836	6.532	1.73	14/15
FTIR	88.700	5.507	-2.31	87.000	6.195	-4.11	5/5
Flow Injection Analysis	84.769	6.533	-6.24	83.441	5.616	-7.67	8/8



Analysis 902
Total Sulfur Dioxide





ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 903 Free Sulfur Dioxide

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		31.50	-0.24	-0.08	33.00	1.37	0.47
2G3NXC		33.50	1.76	0.60	32.50	0.87	0.30
2WVLBM		31.00	-0.74	-0.25	32.00	0.37	0.13
4BPMPD		35.50	3.76	1.29	36.00	4.37	1.49
4HTULN		30.25	-1.49	-0.51	30.25	-1.38	-0.47
63U8T2		33.00	1.26	0.43	33.00	1.37	0.47
6BLMH6		32.00	0.26	0.09	33.00	1.37	0.47
6CJZ3C		30.00	-1.74	-0.59	30.00	-1.63	-0.56
6NARP2		30.40	-1.34	-0.46	29.85	-1.78	-0.61
6YWNTN		27.00	-4.74	-1.62	26.00	-5.63	-1.93
72D8VA	*	35.50	3.76	1.29	33.00	1.37	0.47
7CWLYC		30.00	-1.74	-0.59	30.00	-1.63	-0.56
7DPAG9	*	28.00	-3.74	-1.28	26.00	-5.63	-1.93
7KADNB		31.50	-0.24	-0.08	31.00	-0.63	-0.22
7WZU74		38.52	6.78	2.32	38.52	6.89	2.36
87NEYZ		35.50	3.76	1.29	36.50	4.87	1.67
88GXVE		30.80	-0.94	-0.32	32.55	0.92	0.31
89BNY9		38.40	6.66	2.28	38.40	6.77	2.32
8BFAQE		34.45	2.71	0.93	32.20	0.57	0.19
8C8BQB		30.00	-1.74	-0.59	28.00	-3.63	-1.24
8LW2BH		27.28	-4.46	-1.53	26.99	-4.64	-1.59
8MQPTD		28.50	-3.24	-1.11	28.50	-3.13	-1.07
9TTQF7	*	24.30	-7.44	-2.54	24.35	-7.29	-2.49
APBD9B	X	22.10	-9.64	-3.29	27.35	-4.28	-1.47
AT9UHI		27.50	-4.24	-1.45	27.00	-4.63	-1.59
AU3H2E		31.00	-0.74	-0.25	30.50	-1.13	-0.39
B48R4X		30.50	-1.24	-0.42	31.00	-0.63	-0.22
B4MNF8		35.00	3.26	1.11	35.00	3.37	1.15
BRT8RA		31.50	-0.24	-0.08	31.50	-0.13	-0.05
CBZLE2		34.00	2.26	0.77	34.00	2.37	0.81
D364DX		35.00	3.26	1.11	35.00	3.37	1.15
DHUN3		31.50	-0.24	-0.08	30.00	-1.63	-0.56
DR6B8R		31.00	-0.74	-0.25	31.00	-0.63	-0.22
ENHVEC		31.50	-0.24	-0.08	31.50	-0.13	-0.05
EPXBN7		28.00	-3.74	-1.28	30.00	-1.63	-0.56

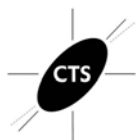


ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 903 Free Sulfur Dioxide

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ERXN66		32.00	0.26	0.09	31.00	-0.63	-0.22
ETU2RW	X	18.50	-13.24	-4.52	20.50	-11.13	-3.81
FKCHUV	X	46.00	14.26	4.87	46.50	14.87	5.09
G3V2HA		29.00	-2.74	-0.94	29.00	-2.63	-0.90
GBMJUX		34.00	2.26	0.77	33.33	1.70	0.58
GP9YXW		33.25	1.51	0.52	34.90	3.27	1.12
GX2A8R		32.00	0.26	0.09	33.00	1.37	0.47
GXXMTY		35.00	3.26	1.11	35.00	3.37	1.15
H76DHZ		29.00	-2.74	-0.94	28.00	-3.63	-1.24
HQDDQ2	*	34.00	2.26	0.77	36.50	4.87	1.67
HXEREM		31.00	-0.74	-0.25	31.00	-0.63	-0.22
JEGRZW		30.60	-1.14	-0.39	31.05	-0.58	-0.20
JHVUZT		33.20	1.46	0.50	32.95	1.32	0.45
JHYGD2		35.00	3.26	1.11	34.00	2.37	0.81
JMU9P4		28.80	-2.94	-1.00	28.80	-2.83	-0.97
JUNF44		33.00	1.26	0.43	33.50	1.87	0.64
K4AYYM		30.00	-1.74	-0.59	29.50	-2.13	-0.73
K72Z3Q		28.30	-3.44	-1.18	27.70	-3.93	-1.35
KJ7N3R	X	44.00	12.26	4.19	40.00	8.37	2.86
LL8E2Y		33.00	1.26	0.43	33.00	1.37	0.47
LM6RKL		35.00	3.26	1.11	36.00	4.37	1.49
LUK6AP		32.35	0.61	0.21	33.95	2.32	0.79
LYCCRX		32.00	0.26	0.09	32.00	0.37	0.13
M4KKLU	*	39.50	7.76	2.65	37.50	5.87	2.01
M7E7G7		31.00	-0.74	-0.25	31.00	-0.63	-0.22
MH63GJ		31.00	-0.74	-0.25	31.00	-0.63	-0.22
N77NUR		32.00	0.26	0.09	32.00	0.37	0.13
N9XM9Q		29.50	-2.24	-0.77	30.50	-1.13	-0.39
NARBQL		31.00	-0.74	-0.25	32.00	0.37	0.13
NFGQFT		36.50	4.76	1.63	35.00	3.37	1.15
NR7MGQ		31.00	-0.74	-0.25	30.00	-1.63	-0.56
P29KHY	X	22.00	-9.74	-3.33	23.00	-8.63	-2.95
PPF4TX		27.50	-4.24	-1.45	27.00	-4.63	-1.59
PR4HFM		27.00	-4.74	-1.62	27.00	-4.63	-1.59
PYNF8G		29.00	-2.74	-0.94	30.00	-1.63	-0.56



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Analysis 903 Free Sulfur Dioxide

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
Q3KJC9		36.00	4.26	1.46	35.00	3.37	1.15
Q7KU99		34.19	2.45	0.84	34.33	2.69	0.92
Q97G2V		35.50	3.76	1.29	34.00	2.37	0.81
QC8KQW		33.00	1.26	0.43	32.50	0.87	0.30
QK6M4M		33.50	1.76	0.60	33.50	1.87	0.64
QX8DKL		34.00	2.26	0.77	33.50	1.87	0.64
R92ET3	X	43.50	11.76	4.02	40.35	8.72	2.98
RC3RKE		30.50	-1.24	-0.42	32.00	0.37	0.13
RJX9T		30.00	-1.74	-0.59	29.50	-2.13	-0.73
RTBEXW		31.00	-0.74	-0.25	29.00	-2.63	-0.90
RZNVZVK		30.15	-1.59	-0.54	30.70	-0.93	-0.32
TARCPT	X	20.45	-11.29	-3.86	33.50	1.87	0.64
TQH63L		30.55	-1.19	-0.41	29.55	-2.08	-0.71
TW6T2X		36.50	4.76	1.63	35.00	3.37	1.15
TXYGKT		26.00	-5.74	-1.96	26.00	-5.63	-1.93
U6G7JT		32.50	0.76	0.26	33.00	1.37	0.47
UJDM6K		29.00	-2.74	-0.94	30.00	-1.63	-0.56
UKB7FF		30.50	-1.24	-0.42	30.50	-1.13	-0.39
W4BTPW		30.50	-1.24	-0.42	31.00	-0.63	-0.22
W7JQGR		31.50	-0.24	-0.08	31.00	-0.63	-0.22
WHEY2F		34.10	2.36	0.81	33.75	2.12	0.72
WTUJ8B		31.50	-0.24	-0.08	30.00	-1.63	-0.56
XM7LAU		26.00	-5.74	-1.96	26.50	-5.13	-1.76
XNZATP		35.50	3.76	1.29	35.00	3.37	1.15
XU2NAK		28.00	-3.74	-1.28	28.50	-3.13	-1.07
XVX2WD	X	32.50	0.76	0.26	29.00	-2.63	-0.90
Y2FWBL		31.50	-0.24	-0.08	30.00	-1.63	-0.56
Y7CFGQ	X	24.00	-7.74	-2.64	28.00	-3.63	-1.24
Y7DFDK		31.50	-0.24	-0.08	32.00	0.37	0.13
YH7W7R		30.00	-1.74	-0.59	31.00	-0.63	-0.22
YW8BMP		36.00	4.26	1.46	35.50	3.87	1.32
Z76V3M	X	37.00	5.26	1.80	41.00	9.37	3.21
ZXGA7H		33.85	2.11	0.72	34.15	2.52	0.86



Analysis 903
Free Sulfur Dioxide

Grand Means		Summary Statistics	
	31.739 mg/L		31.632 mg/L
Std Dev Btwn Labs			
	2.927 mg/L		2.922 mg/L
Statistics based on 93 of 103 reporting participants			

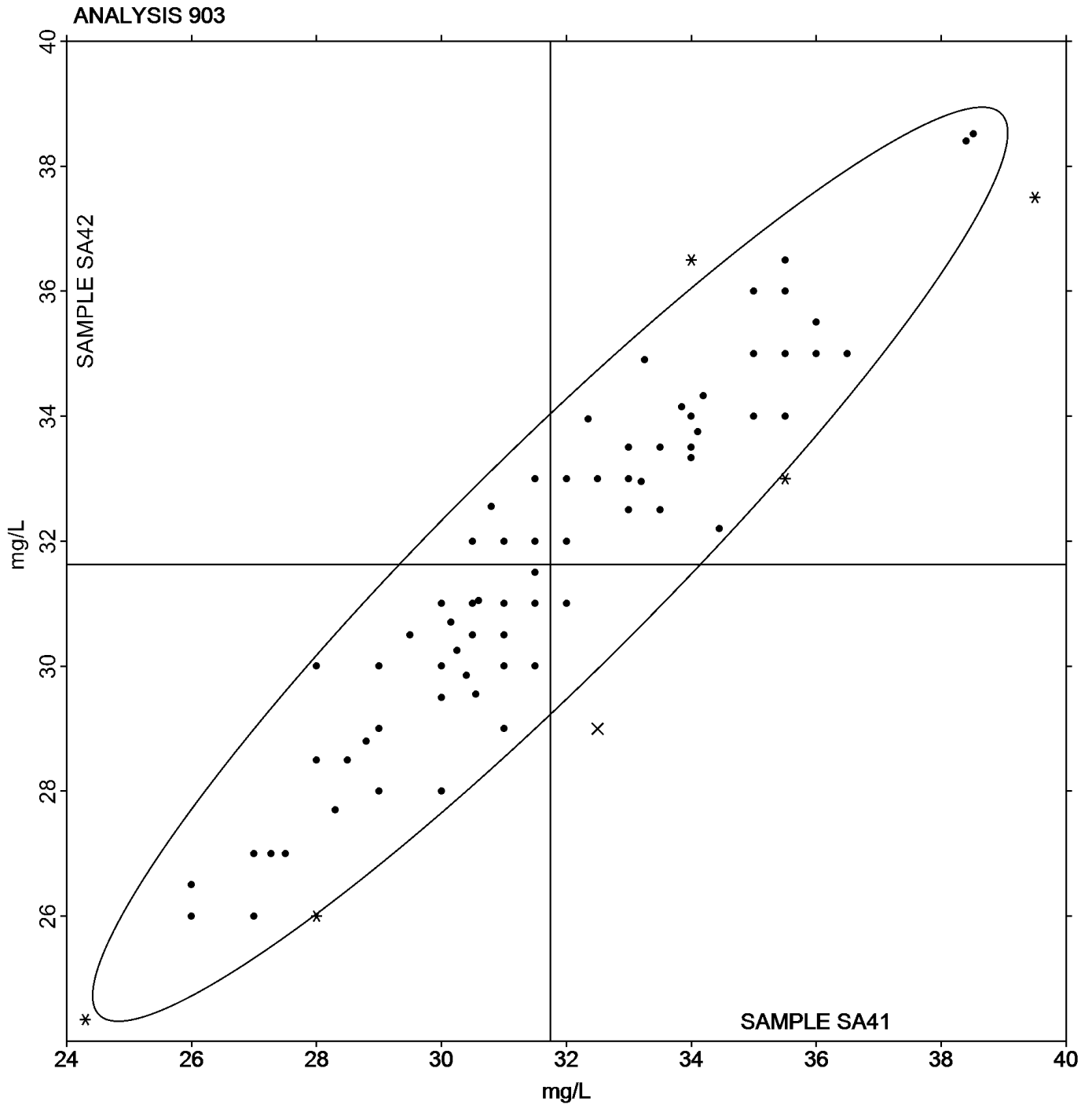
Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #903

- KJ7N3R (X) - Data for both samples are high. Possible Systematic Error.
- FKCHUV (X) - Data for both samples are high. Possible Systematic Error.
- TARCPT (X) - Inconsistent in testing between samples, data for sample SA41 are low.
- XVX2WD (X) - Inconsistent in testing between samples.
- ETU2RW (X) - Data for both samples are low. Possible Systematic Error.
- Z76V3M (X) - Inconsistent in testing between samples, data for sample SA42 are high.
- P29KHY (X) - Data for both samples are low. Possible Systematic Error.
- APBD9B (X) - Inconsistent in testing between samples, data for sample SA41 are low.
- R92ET3 (X) - Data for both samples are high. Possible Systematic Error.
- Y7CFGQ (X) - Inconsistent in testing between samples.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	31.000	1.414	-0.74	31.500	2.121	-0.13	2/2
Ripper Method	32.666	3.189	0.93	32.321	3.129	0.69	28/31
Aeration Oxidation (AO) Method	31.210	2.426	-0.53	31.336	2.623	-0.30	23/29
Segmented Flow Analyzer	33.000	2.384	1.26	33.394	2.111	1.76	8/8
Enzymatic Method	32.158	1.624	0.42	31.900	1.994	0.27	6/6
Colormetric Analyzer	31.999	3.528	0.26	31.521	2.879	-0.11	13/13
Flow Injection Analysis	28.322	2.216	-3.42	27.792	2.479	-3.84	8/8
FTIR	31.550	1.151	-0.19	32.480	1.542	0.85	5/6





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Analysis 904 Titratable Acidity

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		4.800	-0.163	-1.42	4.800	-0.162	-1.48
2G3NXC	*	5.110	0.147	1.28	5.030	0.068	0.62
2WVLBM		5.015	0.052	0.45	4.975	0.013	0.12
4BPMPD		4.930	-0.033	-0.29	4.895	-0.067	-0.61
4HTULN	X	5.435	0.472	4.12	5.380	0.418	3.81
63U8T2		5.100	0.137	1.19	5.100	0.138	1.26
6BLMH6	X	4.350	-0.613	-5.35	4.350	-0.612	-5.58
6CJZ3C		4.865	-0.098	-0.86	4.860	-0.102	-0.93
6NARP2		4.870	-0.093	-0.81	4.860	-0.102	-0.93
6YWNTN	X	4.500	-0.463	-4.04	4.500	-0.462	-4.21
72D8VA		5.026	0.063	0.55	5.060	0.098	0.90
7CWLYC	X	4.800	-0.163	-1.42	4.900	-0.062	-0.56
7DPAG9		5.000	0.037	0.32	5.000	0.038	0.35
7KADNB		4.900	-0.063	-0.55	4.900	-0.062	-0.56
7WZU74		5.025	0.062	0.54	5.025	0.063	0.58
87NEYZ		4.950	-0.013	-0.11	4.950	-0.012	-0.11
88GXVE		4.880	-0.083	-0.72	4.880	-0.082	-0.75
89BNY9		4.950	-0.013	-0.11	4.950	-0.012	-0.11
8BFAQE	X	4.330	-0.633	-5.52	4.335	-0.627	-5.72
8C8BQB		4.900	-0.063	-0.55	4.900	-0.062	-0.56
8LW2BH	X	4.555	-0.408	-3.56	4.580	-0.382	-3.48
8MQPTD		4.685	-0.278	-2.43	4.700	-0.262	-2.39
9TTQF7		4.890	-0.073	-0.64	4.895	-0.067	-0.61
APBD9B		5.000	0.037	0.32	5.050	0.088	0.80
AT9UHJ		4.990	0.027	0.24	4.990	0.028	0.26
AU3H2E		5.000	0.037	0.32	5.000	0.038	0.35
B48R4X		4.765	-0.198	-1.73	4.760	-0.202	-1.84
B4MNFb		4.870	-0.093	-0.81	4.890	-0.072	-0.65
BRT8RA		4.975	0.012	0.10	4.995	0.033	0.30
CBZLE2		5.005	0.042	0.37	4.985	0.023	0.21
D364DX		4.950	-0.013	-0.11	4.940	-0.022	-0.20
DHUNJ3		5.065	0.102	0.89	5.025	0.063	0.58
DR6B8R		5.045	0.082	0.72	5.025	0.063	0.58
ENHVEC		4.700	-0.263	-2.29	4.700	-0.262	-2.39
EPXBN7		4.960	-0.003	-0.03	4.965	0.003	0.03



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 904 Titratable Acidity

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ERXN66		5.000	0.037	0.32	5.030	0.068	0.62
ETU2RW	X	5.150	0.187	1.63	5.250	0.288	2.63
F3VGZU		5.000	0.037	0.32	5.000	0.038	0.35
FKCHUV		4.905	-0.058	-0.51	4.920	-0.042	-0.38
G3V2HA		4.900	-0.063	-0.55	4.900	-0.062	-0.56
GBMJUX		4.900	-0.063	-0.55	4.900	-0.062	-0.56
GP9YXW		5.095	0.132	1.15	5.095	0.133	1.22
GXXMTY		4.700	-0.263	-2.29	4.700	-0.262	-2.39
HQDDQ2		5.200	0.237	2.07	5.165	0.203	1.85
HXEREM		4.905	-0.058	-0.51	4.915	-0.047	-0.43
JEGRZW		5.060	0.097	0.85	5.065	0.103	0.94
JHVUZT		5.010	0.047	0.41	5.010	0.048	0.44
JHYGD2		4.840	-0.123	-1.07	4.830	-0.132	-1.20
JMU9P4		5.100	0.137	1.19	5.100	0.138	1.26
JUNF44		5.036	0.073	0.64	5.034	0.072	0.66
K4AYYM		4.900	-0.063	-0.55	4.900	-0.062	-0.56
K72Z3Q		5.085	0.122	1.06	5.070	0.108	0.99
KJ7N3R		4.855	-0.108	-0.94	4.880	-0.082	-0.75
LL8E2Y	X	5.145	0.182	1.59	4.975	0.013	0.12
LM6RKL		4.950	-0.013	-0.11	5.000	0.038	0.35
LUK6AP		4.875	-0.088	-0.77	4.870	-0.092	-0.84
LYCCRX		5.000	0.037	0.32	5.000	0.038	0.35
M4KKLU		5.015	0.052	0.45	5.055	0.093	0.85
M7E7G7		5.040	0.077	0.67	5.030	0.068	0.62
N77NUR	X	5.110	0.147	1.28	5.220	0.258	2.36
N9XM9Q		5.050	0.087	0.76	5.050	0.088	0.80
NARBQL		4.935	-0.028	-0.24	4.925	-0.037	-0.34
NFGQFT	X	0.475	-4.488	-39.15	0.480	-4.482	-40.88
NR7MGQ	X	4.665	-0.298	-2.60	4.740	-0.222	-2.02
P29KHY	*	4.640	-0.323	-2.82	4.640	-0.322	-2.94
PPF4TX		4.850	-0.113	-0.99	4.900	-0.062	-0.56
PR4HFM	X	5.000	0.037	0.32	5.100	0.138	1.26
PYNF8G		4.900	-0.063	-0.55	4.900	-0.062	-0.56
Q3KJC9	X	5.000	0.037	0.32	4.750	-0.212	-1.93
Q7KU99	X	4.910	-0.053	-0.46	5.040	0.078	0.71

**ASEV-CTS Wine Industry Interlaboratory Testing Program****Report #071
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WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
Q97G2V		5.100	0.137	1.19	5.100	0.138	1.26
QC8KQW		5.000	0.037	0.32	5.000	0.038	0.35
QK6M4M		4.850	-0.113	-0.99	4.900	-0.062	-0.56
QX8DKL		4.920	-0.043	-0.38	4.915	-0.047	-0.43
R92ET3		5.075	0.112	0.98	5.025	0.063	0.58
RC3RKE		4.920	-0.043	-0.38	4.915	-0.047	-0.43
RJX9T	X	5.000	0.037	0.32	4.900	-0.062	-0.56
RTBEXW	X	5.650	0.687	5.99	5.050	0.088	0.80
RZNVVK		5.090	0.127	1.11	5.070	0.108	0.99
TARCPT	X	5.485	0.522	4.55	4.950	-0.012	-0.11
TQH63L		4.940	-0.023	-0.20	4.935	-0.027	-0.24
TW6T2X		5.100	0.137	1.19	5.050	0.088	0.80
TXYGKT		4.850	-0.113	-0.99	4.850	-0.112	-1.02
U6G7JT	X	5.250	0.287	2.50	5.300	0.338	3.08
UJDM6K	X	5.260	0.297	2.59	5.340	0.378	3.45
UKB7FF		4.720	-0.243	-2.12	4.765	-0.197	-1.80
W4BTPW		4.950	-0.013	-0.11	4.900	-0.062	-0.56
W7JQGR		5.125	0.162	1.41	5.090	0.128	1.17
WHEY2F	X	4.570	-0.393	-3.43	4.860	-0.102	-0.93
WTUJ8B		4.900	-0.063	-0.55	4.900	-0.062	-0.56
XM7LAU		5.140	0.177	1.54	5.170	0.208	1.90
XNZATP	X	4.925	-0.038	-0.33	5.110	0.148	1.35
XU2NAK		4.935	-0.028	-0.24	4.910	-0.052	-0.47
XVX2WD		5.050	0.087	0.76	5.100	0.138	1.26
Y2FWBL		5.110	0.147	1.28	5.145	0.183	1.67
Y7CFGQ	*	5.150	0.187	1.63	5.080	0.118	1.08
Y7DFDK		5.050	0.087	0.76	5.035	0.073	0.67
YH7W7R		5.000	0.037	0.32	5.000	0.038	0.35
YQE22B		5.000	0.037	0.32	5.000	0.038	0.35
YW8BMP	X	3.005	-1.958	-17.08	2.985	-1.977	-18.03
Z76V3M		5.000	0.037	0.32	5.000	0.038	0.35
ZXGA7H		5.100	0.137	1.19	5.100	0.138	1.26



Analysis 904
Titratable Acidity

Grand Means	Summary Statistics
4.9630 g/L as tartaric acid	4.9618 g/L as tartaric acid
Stnd Dev Btwn Labs	
0.1146 g/L as tartaric acid	0.1096 g/L as tartaric acid
Statistics based on 80 of 102 reporting participants	

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #904

- TARCPT (X) - Inconsistent in testing between samples, data for sample SA41 are high. Inconsistent within the determinations of sample SA41.
- 7CWLYC (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.
- 6BLMH6 (X) - Data for both samples are low. Possible Systematic Error.
- NR7MGQ (X) - Inconsistent in testing between samples.
- PR4HFM (X) - Inconsistent in testing between samples.
- WHEY2F (X) - Inconsistent in testing between samples, data for sample SA41 are low.
- ETU2RW (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.
- RJX9T (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA42.
- UJDM6K (X) - Inconsistent in testing between samples, data for sample SA42 are high.
- NFGQFT (X) - Data for both samples are low. Data may be off by a factor of 10.
- N77NUR (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.
- 8LW2BH (X) - Data for both samples are low. Possible Systematic Error.
- YW8BMP (X) - Data for both samples are low.
- RTBEXW (X) - Inconsistent in testing between samples, data for sample SA41 are high.
- XNZATP (X) - Inconsistent in testing between samples.
- U6G7JT (X) - Inconsistent in testing between samples, data for sample SA42 are high.
- 8BFAQE (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA41.
- LL8E2Y (X) - Inconsistent in testing between samples.
- 6YWNTN (X) - Data for both samples are low. Possible Systematic Error.
- 4HTULN (X) - Data for both samples are high. Possible Systematic Error.
- Q7KU99 (X) - Inconsistent in testing between samples.
- Q3KJC9 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.



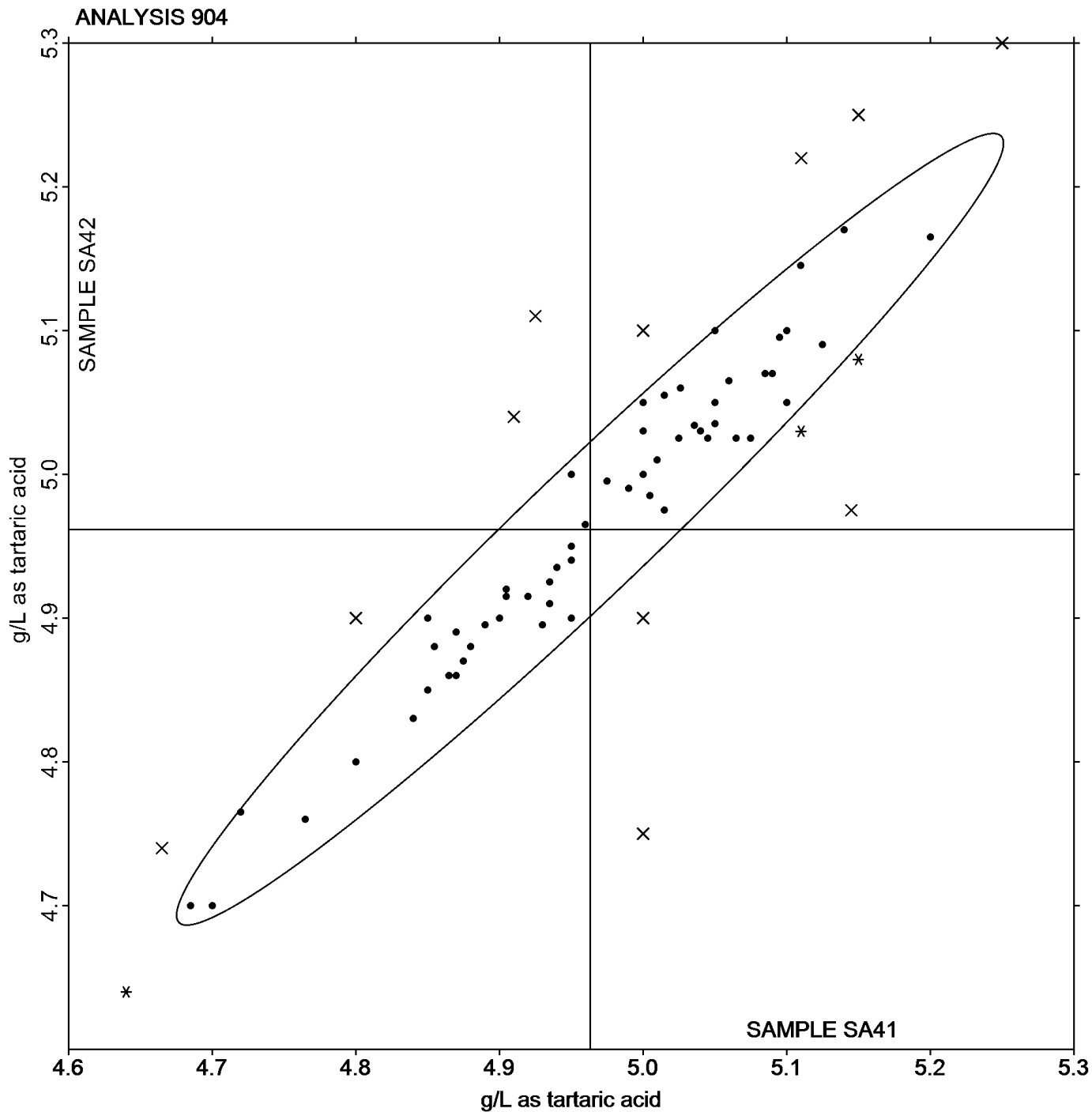
Analysis 904
Titratable Acidity

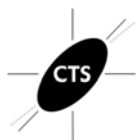
Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Autotitration	4.975	0.097	0.012	4.974	0.092	0.012	56/65
Manual Titration	4.993	0.091	0.030	4.992	0.087	0.030	15/26
FTIR	4.805	0.153	-0.158	4.809	0.150	-0.152	8/9
Segmented Flow Analyzer	5.090	0.000	0.127	5.070	0.000	0.108	1/2



Analysis 904
Titratable Acidity





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WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		0.5000	0.0768	1.90	0.5000	0.0789	1.95
2G3NXC		0.3880	-0.0352	-0.87	0.3730	-0.0481	-1.18
2WVLBM		0.4950	0.0718	1.77	0.4900	0.0689	1.70
4BPMPD	*	0.4250	0.0018	0.04	0.4450	0.0239	0.59
4HTULN		0.4100	-0.0132	-0.33	0.4100	-0.0111	-0.27
63U8T2		0.4600	0.0368	0.91	0.4400	0.0189	0.47
6BLMH6		0.4550	0.0318	0.79	0.4550	0.0339	0.84
6CJZ3C		0.3700	-0.0532	-1.31	0.3650	-0.0561	-1.38
6NARP2		0.3385	-0.0847	-2.09	0.3430	-0.0781	-1.92
6YWNTN		0.5000	0.0768	1.90	0.4900	0.0689	1.70
72D8VA		0.3900	-0.0332	-0.82	0.4000	-0.0211	-0.52
7CWLYC		0.4350	0.0118	0.29	0.4200	-0.0011	-0.03
7DPAG9	*	0.5250	0.1018	2.51	0.5300	0.1089	2.68
7KADNB	X	0.4400	0.0168	0.41	0.4800	0.0589	1.45
7WZU74		0.4500	0.0268	0.66	0.4500	0.0289	0.71
87NEYZ		0.3600	-0.0632	-1.56	0.3500	-0.0711	-1.75
89BNY9		0.4000	-0.0232	-0.57	0.4000	-0.0211	-0.52
8BFAQE		0.3900	-0.0332	-0.82	0.3900	-0.0311	-0.77
8LW2BH		0.4200	-0.0032	-0.08	0.4150	-0.0061	-0.15
8MQPTD		0.3850	-0.0382	-0.94	0.3850	-0.0361	-0.89
9TTQF7		0.4260	0.0028	0.07	0.4255	0.0044	0.11
APBD9B		0.3900	-0.0332	-0.82	0.3800	-0.0411	-1.01
AT9UHJ		0.3650	-0.0582	-1.44	0.3800	-0.0411	-1.01
AU3H2E		0.5000	0.0768	1.90	0.4900	0.0689	1.70
B48R4X		0.4600	0.0368	0.91	0.4550	0.0339	0.84
B4MNFb		0.4200	-0.0032	-0.08	0.4100	-0.0111	-0.27
BRT8RA		0.4850	0.0618	1.53	0.4850	0.0639	1.58
CBZLE2		0.4150	-0.0082	-0.20	0.4150	-0.0061	-0.15
D364DX		0.3700	-0.0532	-1.31	0.3650	-0.0561	-1.38
DHUNJ3		0.4050	-0.0182	-0.45	0.3850	-0.0361	-0.89
DR6B8R		0.3950	-0.0282	-0.70	0.3900	-0.0311	-0.77
ENHVEC		0.4050	-0.0182	-0.45	0.4100	-0.0111	-0.27
EPXBN7		0.4100	-0.0132	-0.33	0.4100	-0.0111	-0.27
ERXN66		0.4150	-0.0082	-0.20	0.4050	-0.0161	-0.40
ETU2RW	X	0.0900	-0.3332	-8.23	0.1250	-0.2961	-7.29



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WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FKCHUV		0.4700	0.0468	1.16	0.4700	0.0489	1.21
G3V2HA		0.3550	-0.0682	-1.68	0.3650	-0.0561	-1.38
GBMJUX		0.4900	0.0668	1.65	0.4900	0.0689	1.70
GP9YXW		0.4700	0.0468	1.16	0.4650	0.0439	1.08
GX2A8R		0.4450	0.0218	0.54	0.4350	0.0139	0.34
GXXMTY		0.4150	-0.0082	-0.20	0.4150	-0.0061	-0.15
HQDDQ2		0.4800	0.0568	1.40	0.4800	0.0589	1.45
HXEREM		0.4750	0.0518	1.28	0.4800	0.0589	1.45
JEGRWZ		0.4320	0.0088	0.22	0.4445	0.0234	0.58
JHVUZZ		0.4170	-0.0062	-0.15	0.4035	-0.0176	-0.43
JHYGD2		0.4400	0.0168	0.41	0.4400	0.0189	0.47
JMU9P4		0.4050	-0.0182	-0.45	0.4000	-0.0211	-0.52
JUNF44		0.4200	-0.0032	-0.08	0.4200	-0.0011	-0.03
K4AYYM		0.4150	-0.0082	-0.20	0.4150	-0.0061	-0.15
K7Z23Q		0.4200	-0.0032	-0.08	0.4200	-0.0011	-0.03
LL8E2Y		0.4450	0.0218	0.54	0.4450	0.0239	0.59
LM6RKL		0.4550	0.0318	0.79	0.4550	0.0339	0.84
LUK6AP		0.3850	-0.0382	-0.94	0.3900	-0.0311	-0.77
LYCCRX		0.4350	0.0118	0.29	0.4300	0.0089	0.22
M4KKLU		0.4850	0.0618	1.53	0.4800	0.0589	1.45
M7E7G7		0.4100	-0.0132	-0.33	0.4100	-0.0111	-0.27
MH63GJ	X	0.4450	0.0218	0.54	0.4050	-0.0161	-0.40
N77NUR		0.4050	-0.0182	-0.45	0.4050	-0.0161	-0.40
N9XM9Q		0.4200	-0.0032	-0.08	0.4300	0.0089	0.22
NARBQL		0.4550	0.0318	0.79	0.4400	0.0189	0.47
NFGQFT	X	0.2700	-0.1532	-3.78	0.3550	-0.0661	-1.63
NR7MGQ	X	0.4800	0.0568	1.40	0.4500	0.0289	0.71
P29KHY		0.4200	-0.0032	-0.08	0.4200	-0.0011	-0.03
PPF4TX		0.4050	-0.0182	-0.45	0.4050	-0.0161	-0.40
PR4HFM		0.4000	-0.0232	-0.57	0.3950	-0.0261	-0.64
PYNF8G		0.4300	0.0068	0.17	0.4200	-0.0011	-0.03
Q3KJC9		0.4100	-0.0132	-0.33	0.4100	-0.0111	-0.27
Q7KU99		0.3715	-0.0517	-1.28	0.3620	-0.0591	-1.45
Q97G2V		0.4050	-0.0182	-0.45	0.3950	-0.0261	-0.64
QC8KQW		0.4050	-0.0182	-0.45	0.4100	-0.0111	-0.27



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WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
QK6M4M		0.4200	-0.0032	-0.08	0.4050	-0.0161	-0.40
QX8DKL	X	0.5700	0.1468	3.62	0.5800	0.1589	3.92
RC3RKE		0.4700	0.0468	1.16	0.4700	0.0489	1.21
RJX9T		0.3750	-0.0482	-1.19	0.3750	-0.0461	-1.13
RTBEXW		0.3850	-0.0382	-0.94	0.3650	-0.0561	-1.38
RZNVVK		0.4400	0.0168	0.41	0.4300	0.0089	0.22
TARCPT	X	0.4850	0.0618	1.53	0.6800	0.2589	6.38
TQH63L		0.3970	-0.0262	-0.65	0.4000	-0.0211	-0.52
TW6T2X	*	0.3950	-0.0282	-0.70	0.3700	-0.0511	-1.26
TXYGKT		0.3900	-0.0332	-0.82	0.3950	-0.0261	-0.64
U6G7JT		0.3550	-0.0682	-1.68	0.3600	-0.0611	-1.50
UJDM6K		0.3900	-0.0332	-0.82	0.4000	-0.0211	-0.52
UKB7FF	X	0.4700	0.0468	1.16	0.4050	-0.0161	-0.40
W4BTPW	X	0.4550	0.0318	0.79	0.4850	0.0639	1.58
W7JQGR		0.3600	-0.0632	-1.56	0.3650	-0.0561	-1.38
WHEY2F		0.3800	-0.0432	-1.07	0.3600	-0.0611	-1.50
WTUJ8B		0.4650	0.0418	1.03	0.4700	0.0489	1.21
XM7LAU		0.3965	-0.0267	-0.66	0.4010	-0.0201	-0.49
XNZATP	*	0.5400	0.1168	2.88	0.5300	0.1089	2.68
XU2NAK		0.4550	0.0318	0.79	0.4600	0.0389	0.96
XVX2WD		0.4300	0.0068	0.17	0.4300	0.0089	0.22
Y2FWBL		0.4500	0.0268	0.66	0.4450	0.0239	0.59
Y7CFGQ	X	0.4500	0.0268	0.66	0.5800	0.1589	3.92
Y7DFDK		0.4200	-0.0032	-0.08	0.4200	-0.0011	-0.03
YH7W7R		0.4100	-0.0132	-0.33	0.4200	-0.0011	-0.03
YQE22B		0.4300	0.0068	0.17	0.4300	0.0089	0.22
YW8BMP		0.4300	0.0068	0.17	0.4350	0.0139	0.34
Z76V3M	X	0.5100	0.0868	2.14	0.5400	0.1189	2.93
ZXGA7H		0.4100	-0.0132	-0.33	0.4150	-0.0061	-0.15



**Analysis 905
Volatile Acidity**

Grand Means	Summary Statistics	
0.42320 g/L as acetic acid	0.42105 g/L as acetic acid	0.42105 g/L as acetic acid
Std Dev Btwn Labs	0.04051 g/L as acetic acid	0.04059 g/L as acetic acid
Statistics based on 88 of 99 reporting participants		

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #905

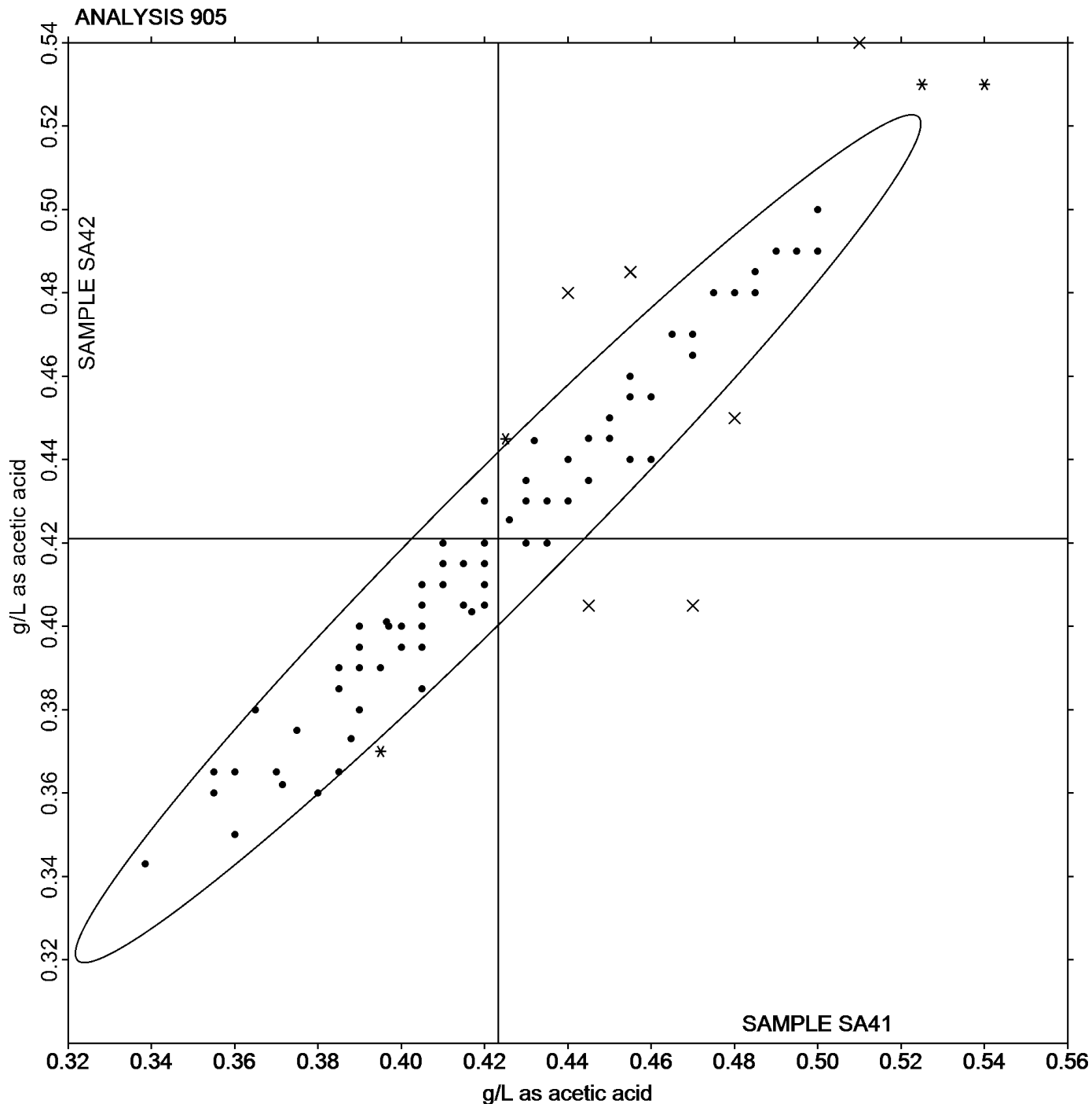
- UKB7FF (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.
- 7KADNB (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.
- QX8DKL (X) - Data for both samples are high. Possible Systematic Error.
- TARCPT (X) - Data for sample SA42 are high. Inconsistent within the determinations of both samples.
- MH63GJ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA42.
- NR7MGQ (X) - Inconsistent in testing between samples.
- ETU2RW (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.
- NFGQFT (X) - Data for sample SA41 are low. Inconsistent within the determinations of sample SA41.
- Z76V3M (X) - Data for sample SA42 are high.
- W4BTPW (X) - Inconsistent in testing between samples.
- Y7CFGQ (X) - Inconsistent in testing between samples, data for sample SA42 are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Cash Still method	0.498	0.032	0.0748	0.492	0.029	0.0709	5/9
Enzymatic method	0.414	0.035	-0.0090	0.412	0.036	-0.0086	68/72
GC							0/1
Colorimetric Analysis	0.418	0.046	-0.0057	0.418	0.039	-0.0036	2/2
Seg. Flow / Colorimetric Analyzer	0.452	0.010	0.0285	0.442	0.013	0.0206	3/3
FTIR	0.440	0.042	0.0163	0.439	0.042	0.0174	10/12



Analysis 905
Volatile Acidity





ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
Summer 2022

Analysis 906 Specific Gravity

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		0.9999	0.0002	0.28	0.9998	0.0001	0.19
2G3NXC	X	0.9993	-0.0003	-0.47	0.9997	0.0000	0.06
2WVLBM		1.0013	0.0016	2.18	1.0013	0.0016	2.23
4BPMPD		1.0006	0.0010	1.30	1.0006	0.0009	1.28
63U8T2	X	0.9933	-0.0064	-8.68	1.0000	0.0003	0.47
6BLMH6		0.9996	-0.0001	-0.13	0.9996	-0.0001	-0.14
6CJZ3C		0.9996	0.0000	-0.06	0.9996	-0.0001	-0.08
6NARP2		0.9998	0.0002	0.24	0.9998	0.0002	0.23
6YWNTN		1.0000	0.0004	0.48	1.0000	0.0003	0.47
72D8VA	X	0.9991	-0.0005	-0.74	0.9998	0.0001	0.19
7CWLYC		0.9998	0.0002	0.26	0.9998	0.0002	0.26
7DPAG9		1.0000	0.0004	0.51	1.0000	0.0004	0.49
7KADNB	X	1.0006	0.0010	1.31	1.0004	0.0007	1.00
7WZU74		0.9990	-0.0006	-0.88	0.9990	-0.0007	-0.89
87NEYZ		0.9998	0.0002	0.24	0.9998	0.0002	0.25
88GXVE		1.0004	0.0008	1.02	1.0004	0.0007	1.01
89BNY9		1.0008	0.0011	1.56	1.0008	0.0011	1.54
8BFAQE	X	0.9970	-0.0027	-3.66	0.9969	-0.0028	-3.74
8C8BQB		0.9996	0.0000	-0.06	0.9995	-0.0002	-0.21
8LW2BH		0.9998	0.0002	0.26	0.9999	0.0002	0.33
8MQPTD		0.9980	-0.0016	-2.23	0.9980	-0.0017	-2.25
9TTQF7		1.0008	0.0012	1.57	1.0008	0.0011	1.55
APBD9B		0.9991	-0.0005	-0.74	0.9992	-0.0005	-0.62
AT9UHI		1.0000	0.0004	0.48	1.0000	0.0003	0.47
AU3H2E		1.0000	0.0004	0.48	1.0001	0.0004	0.53
B48R4X		0.9997	0.0000	0.07	0.9997	0.0000	0.05
B4MNF8	*	0.9973	-0.0023	-3.18	0.9973	-0.0024	-3.19
BRT8RA		0.9996	-0.0001	-0.13	0.9997	0.0000	-0.01
D364DX		0.9982	-0.0015	-2.01	0.9982	-0.0015	-1.97
DHUN3		1.0002	0.0005	0.68	1.0003	0.0006	0.80
DR6B8R		1.0000	0.0003	0.41	1.0000	0.0003	0.47
ENHVEC		0.9996	0.0000	-0.06	0.9996	-0.0001	-0.08
EPXBN7		0.9990	-0.0006	-0.88	0.9990	-0.0007	-0.89
ETU2RW		0.9998	0.0002	0.25	0.9998	0.0001	0.19
F3VGZU		0.9998	0.0002	0.26	0.9999	0.0002	0.26



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
Summer 2022

Analysis 906 Specific Gravity

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FKCHUV		0.9981	-0.0015	-2.10	0.9981	-0.0016	-2.11
G3V2HA		0.9980	-0.0016	-2.19	0.9980	-0.0016	-2.19
GBMJUX		0.9997	0.0001	0.07	0.9997	0.0000	0.06
GP9YXW		0.9999	0.0002	0.32	0.9999	0.0002	0.30
GX2A8R		0.9999	0.0002	0.28	0.9999	0.0002	0.29
GXXMTY		0.9999	0.0002	0.28	0.9998	0.0001	0.19
H76DHZ		0.9998	0.0002	0.24	0.9999	0.0002	0.27
HQDDQ2		0.9992	-0.0004	-0.60	0.9992	-0.0005	-0.62
HXEREM		0.9982	-0.0015	-2.03	0.9982	-0.0015	-1.97
JEGRZW		0.9999	0.0002	0.30	1.0000	0.0003	0.40
JHVUZT		0.9997	0.0001	0.07	0.9997	0.0000	-0.01
JUNF44		0.9998	0.0002	0.22	0.9998	0.0002	0.21
K4AYYM		0.9998	0.0002	0.26	0.9998	0.0002	0.24
K72Z3Q		0.9993	-0.0003	-0.47	0.9993	-0.0004	-0.48
LL8E2Y		0.9986	-0.0011	-1.49	0.9985	-0.0012	-1.57
LM6RKL		0.9998	0.0002	0.22	0.9999	0.0002	0.31
LUK6AP		1.0001	0.0005	0.62	1.0001	0.0004	0.60
LYCCRX		0.9999	0.0002	0.33	0.9999	0.0002	0.30
M4KKLU		0.9996	0.0000	-0.06	0.9997	0.0000	0.06
M7E7G7		1.0005	0.0009	1.19	1.0005	0.0009	1.20
MH63GJ	X	0.9971	-0.0026	-3.52	0.9970	-0.0026	-3.54
N77NUR		0.9999	0.0003	0.35	0.9999	0.0002	0.30
N9XM9Q		1.0000	0.0004	0.48	1.0000	0.0003	0.47
NFGQFT	X	0.9980	-0.0017	-2.24	0.9984	-0.0012	-1.64
P29KHY		1.0001	0.0005	0.64	1.0001	0.0004	0.60
PPF4TX		0.9999	0.0003	0.35	0.9999	0.0002	0.33
PR4HFM	*	0.9981	-0.0015	-2.10	0.9980	-0.0017	-2.25
PYNF8G		0.9999	0.0002	0.28	0.9998	0.0002	0.25
Q3KJC9	X	0.9968	-0.0029	-3.93	0.9968	-0.0029	-3.94
Q97G2V		0.9999	0.0003	0.35	0.9999	0.0003	0.38
QC8KQW		1.0008	0.0011	1.56	1.0008	0.0011	1.54
QX8DKL		0.9998	0.0002	0.27	0.9999	0.0002	0.32
R92ET3		1.0007	0.0010	1.42	1.0007	0.0010	1.41
RC3RKE		0.9982	-0.0015	-2.03	0.9982	-0.0015	-1.97
RJJX9T		1.0002	0.0005	0.74	1.0002	0.0005	0.73



**Analysis 906
Specific Gravity**

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RTBEXW		1.0002	0.0005	0.71	1.0002	0.0005	0.70
RZNVVK		0.9998	0.0002	0.22	0.9998	0.0002	0.23
TARCPT		0.9999	0.0003	0.35	1.0000	0.0003	0.47
TQH63L		1.0005	0.0009	1.16	1.0004	0.0007	0.94
TW6T2X		0.9991	-0.0006	-0.81	0.9991	-0.0006	-0.75
TXYGKT		0.9991	-0.0005	-0.74	0.9991	-0.0006	-0.75
U6G7JT		0.9998	0.0002	0.21	0.9997	0.0000	0.06
UJDM6K		0.9984	-0.0012	-1.69	0.9984	-0.0013	-1.70
UKB7FF		0.9999	0.0002	0.28	0.9998	0.0001	0.13
W4BTPW		0.9999	0.0002	0.28	1.0000	0.0003	0.47
W7JQGR		1.0002	0.0005	0.71	1.0002	0.0005	0.70
WHEY2F	X	0.9997	0.0000	0.01	0.9990	-0.0007	-0.96
WTUJ8B		0.9998	0.0002	0.25	0.9998	0.0002	0.24
XM7LAU		0.9998	0.0002	0.27	0.9998	0.0002	0.24
XNZATP		0.9999	0.0003	0.37	1.0001	0.0004	0.57
XU2NAK		1.0000	0.0004	0.48	0.9999	0.0002	0.33
XVX2WD		0.9998	0.0001	0.18	0.9998	0.0002	0.21
Y2FWBL		0.9985	-0.0011	-1.50	0.9986	-0.0011	-1.44
YQE22B		0.9998	0.0002	0.24	0.9998	0.0002	0.24
YW8BMP		1.0008	0.0011	1.56	1.0008	0.0011	1.54
Z76V3M		0.9998	0.0002	0.22	0.9998	0.0002	0.25

Grand Means		Summary Statistics	
0.99965	sp gr 20/20 C	0.99966	sp gr 20/20 C
Std Dev Btwn Labs			
0.00074	sp gr 20/20 C	0.00074	sp gr 20/20 C
Statistics based on 82 of 91 reporting participants			

Wines tested: SA41: Merlot; SA42: Merlot



Comments on Assigned Data Flags for Test #906

7KADNB (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA42.

2G3NXC (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.

72D8VA (X) - Inconsistent in testing between samples.

MH63GJ (X) - Data for both samples are low. Possible Systematic Error.

63U8T2 (X) - Data for sample SA41 are low. Inconsistent within the determinations of sample SA41.

WHEY2F (X) - Inconsistent in testing between samples.

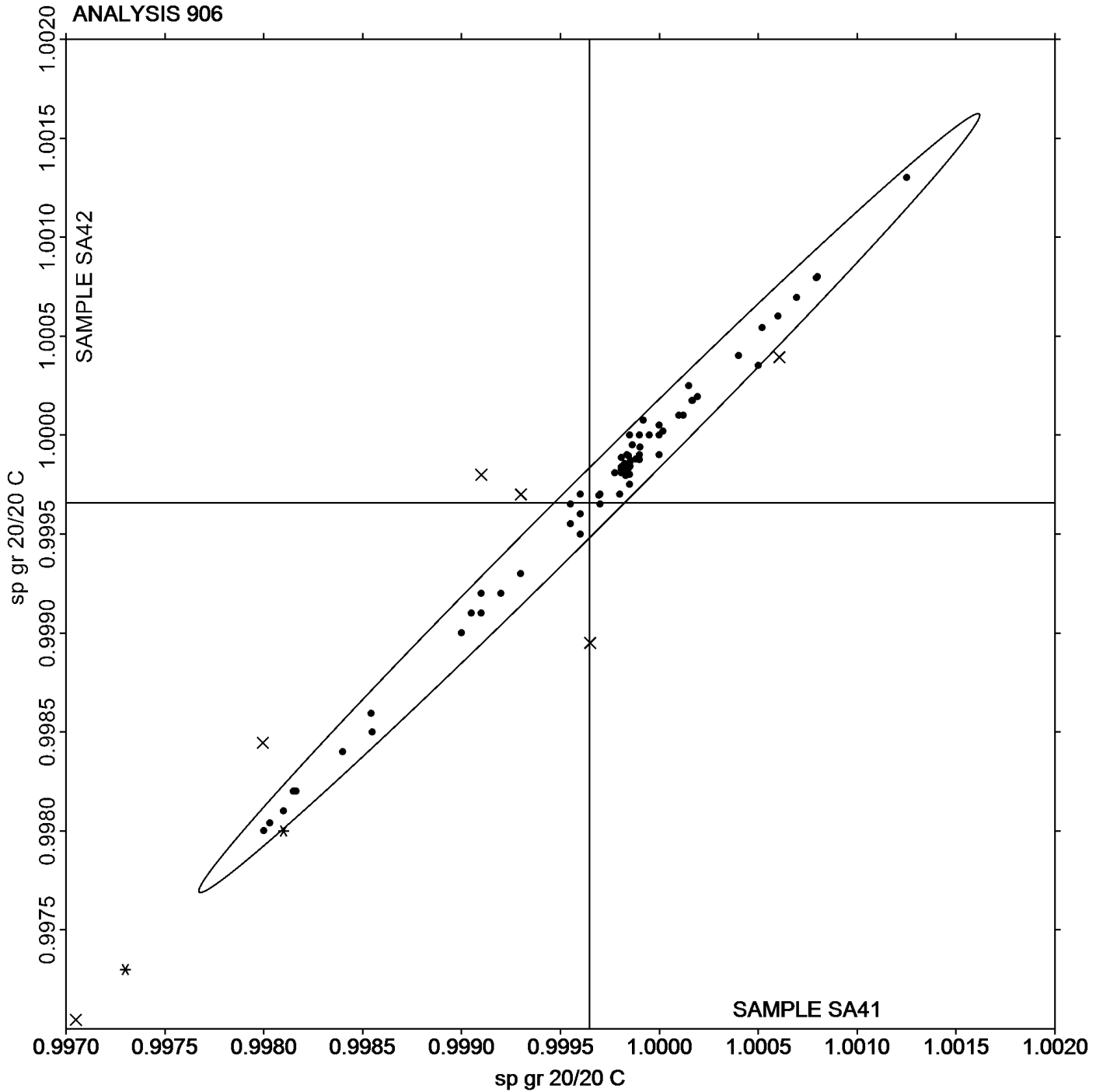
NFGQFT (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA42.

8BFAQE (X) - Data for both samples are low. Possible Systematic Error.

Q3KJC9 (X) - Data for both samples are low. Possible Systematic Error.



Analysis 906
Specific Gravity





ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
Summer 2022

Analysis 907

pH

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		3.750	-0.019	-0.67	3.750	-0.020	-0.71
2G3NXC		3.753	-0.016	-0.56	3.752	-0.018	-0.65
2WVLBM		3.746	-0.023	-0.81	3.757	-0.013	-0.46
4BPMPD		3.780	0.011	0.40	3.780	0.010	0.37
4HTULN		3.750	-0.019	-0.67	3.750	-0.020	-0.71
63U8T2		3.800	0.031	1.11	3.800	0.030	1.08
6BLMH6		3.705	-0.064	-2.26	3.705	-0.065	-2.32
6CJZ3C		3.775	0.006	0.22	3.780	0.010	0.37
6NARP2		3.750	-0.019	-0.67	3.750	-0.020	-0.71
6YWNTN	X	3.640	-0.129	-4.57	3.650	-0.120	-4.28
72D8VA	X	3.752	-0.017	-0.59	3.705	-0.065	-2.32
7CWLYC		3.765	-0.004	-0.13	3.770	0.000	0.01
7DPAG9		3.760	-0.009	-0.31	3.760	-0.010	-0.35
7KADNB		3.765	-0.004	-0.13	3.770	0.000	0.01
7WZU74		3.770	0.001	0.04	3.770	0.000	0.01
87NEYZ	*	3.755	-0.014	-0.49	3.775	0.005	0.19
88GXVE	*	3.840	0.071	2.53	3.840	0.070	2.51
89BNY9		3.730	-0.039	-1.38	3.730	-0.040	-1.42
8BFAQE		3.805	0.036	1.29	3.820	0.050	1.80
8C8BQB	*	3.780	0.011	0.40	3.760	-0.010	-0.35
8LW2BH		3.798	0.029	1.02	3.791	0.021	0.76
8MQPTD	X	4.000	0.231	8.21	4.070	0.300	10.73
9TTQF7	*	3.750	-0.019	-0.67	3.730	-0.040	-1.42
APBD9B		3.790	0.021	0.76	3.800	0.030	1.08
AT9UHI		3.770	0.001	0.04	3.760	-0.010	-0.35
AU3H2E		3.800	0.031	1.11	3.800	0.030	1.08
B48R4X		3.700	-0.069	-2.44	3.700	-0.070	-2.49
B4MNF8		3.770	0.001	0.04	3.770	0.000	0.01
BRT8RA		3.795	0.026	0.93	3.790	0.020	0.72
CBZLE2		3.735	-0.034	-1.20	3.740	-0.030	-1.06
D364DX		3.815	0.046	1.64	3.810	0.040	1.44
DHUN3		3.790	0.021	0.76	3.775	0.005	0.19
DR6B8R		3.760	-0.009	-0.31	3.760	-0.010	-0.35
ENHVEC		3.775	0.006	0.22	3.770	0.000	0.01
EPXBN7		3.770	0.001	0.04	3.770	0.000	0.01



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
Summer 2022

Analysis 907

pH

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ERXN66		3.745	-0.024	-0.84	3.750	-0.020	-0.71
ETU2RW		3.760	-0.009	-0.31	3.760	-0.010	-0.35
FKCHUV		3.780	0.011	0.40	3.775	0.005	0.19
G3V2HA	X	3.915	0.146	5.20	3.910	0.140	5.01
GBMJUX		3.745	-0.024	-0.84	3.745	-0.025	-0.89
GP9YXW		3.810	0.041	1.47	3.810	0.040	1.44
GX2A8R		3.765	-0.004	-0.13	3.780	0.010	0.37
GXXMTY		3.765	-0.004	-0.13	3.770	0.000	0.01
HQDDQ2		3.735	-0.034	-1.20	3.735	-0.035	-1.24
HXEREM		3.785	0.016	0.58	3.790	0.020	0.72
JEGRZW		3.795	0.026	0.93	3.800	0.030	1.08
JHVUZT		3.755	-0.014	-0.49	3.754	-0.016	-0.56
JHYGD2		3.760	-0.009	-0.31	3.770	0.000	0.01
JMU9P4		3.795	0.026	0.93	3.790	0.020	0.72
JUNF44		3.761	-0.008	-0.28	3.764	-0.006	-0.22
K4AYYM		3.755	-0.014	-0.49	3.750	-0.020	-0.71
K72Z3Q		3.795	0.026	0.93	3.800	0.030	1.08
KJ7N3R		3.780	0.011	0.40	3.795	0.025	0.90
LL8E2Y	X	3.465	-0.304	-10.79	3.720	-0.050	-1.78
LM6RKL		3.785	0.016	0.58	3.780	0.010	0.37
LUK6AP		3.780	0.011	0.40	3.775	0.005	0.19
LYCCRZ		3.740	-0.029	-1.02	3.740	-0.030	-1.06
M4KKLU		3.805	0.036	1.29	3.800	0.030	1.08
M7E7G7		3.740	-0.029	-1.02	3.740	-0.030	-1.06
MH63GJ	X	3.820	0.051	1.82	3.730	-0.040	-1.42
N77NUR		3.750	-0.019	-0.67	3.745	-0.025	-0.89
N9XM9Q		3.755	-0.014	-0.49	3.770	0.000	0.01
NARBQL		3.770	0.001	0.04	3.770	0.000	0.01
NFGQFT	X	4.050	0.281	9.99	4.030	0.260	9.30
NR7MGQ		3.750	-0.019	-0.67	3.740	-0.030	-1.06
P29KHY		3.740	-0.029	-1.02	3.740	-0.030	-1.06
PPF4TX		3.760	-0.009	-0.31	3.770	0.000	0.01
PR4HFM		3.770	0.001	0.04	3.770	0.000	0.01
PYNF8G		3.750	-0.019	-0.67	3.750	-0.020	-0.71
Q3KJC9		3.810	0.041	1.47	3.800	0.030	1.08



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
Summer 2022

Analysis 907

pH

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
Q7KU99		3.760	-0.009	-0.31	3.760	-0.010	-0.35
Q97G2V	*	3.835	0.066	2.35	3.820	0.050	1.80
QC8KQW		3.760	-0.009	-0.31	3.765	-0.005	-0.17
QK6M4M		3.735	-0.034	-1.20	3.740	-0.030	-1.06
QX8DKL		3.725	-0.044	-1.55	3.720	-0.050	-1.78
R92ET3	X	3.685	-0.084	-2.97	3.710	-0.060	-2.14
RC3RKE		3.705	-0.064	-2.26	3.710	-0.060	-2.14
RJX9T		3.785	0.016	0.58	3.795	0.025	0.90
RTBEXW	X	3.790	0.021	0.76	3.840	0.070	2.51
TARCPT		3.800	0.031	1.11	3.800	0.030	1.08
TQH63L		3.753	-0.016	-0.56	3.753	-0.017	-0.60
TW6T2X		3.775	0.006	0.22	3.785	0.015	0.54
TXYGKT		3.770	0.001	0.04	3.770	0.000	0.01
U6G7JT		3.760	-0.009	-0.31	3.760	-0.010	-0.35
UJDM6K	X	3.650	-0.119	-4.22	3.650	-0.120	-4.28
UKB7FF	X	3.745	-0.024	-0.84	3.785	0.015	0.54
W4BTPW		3.780	0.011	0.40	3.785	0.015	0.54
W7JQGR		3.725	-0.044	-1.55	3.735	-0.035	-1.24
WHEY2F		3.780	0.011	0.40	3.780	0.010	0.37
WTUJ8B		3.785	0.016	0.58	3.790	0.020	0.72
XM7LAU		3.770	0.001	0.04	3.780	0.010	0.37
XNZATP	*	3.690	-0.079	-2.80	3.700	-0.070	-2.49
XU2NAK		3.795	0.026	0.93	3.795	0.025	0.90
XVX2WD		3.775	0.006	0.22	3.775	0.005	0.19
Y2FWBL		3.810	0.041	1.47	3.810	0.040	1.44
Y7CFGQ		3.820	0.051	1.82	3.820	0.050	1.80
Y7DFDK		3.785	0.016	0.58	3.790	0.020	0.72
YH7W7R		3.800	0.031	1.11	3.800	0.030	1.08
YQE22B		3.790	0.021	0.76	3.790	0.020	0.72
YW8BMP	*	3.780	0.011	0.40	3.800	0.030	1.08
Z76V3M		3.740	-0.029	-1.02	3.730	-0.040	-1.42
ZXGA7H		3.780	0.011	0.40	3.780	0.010	0.37



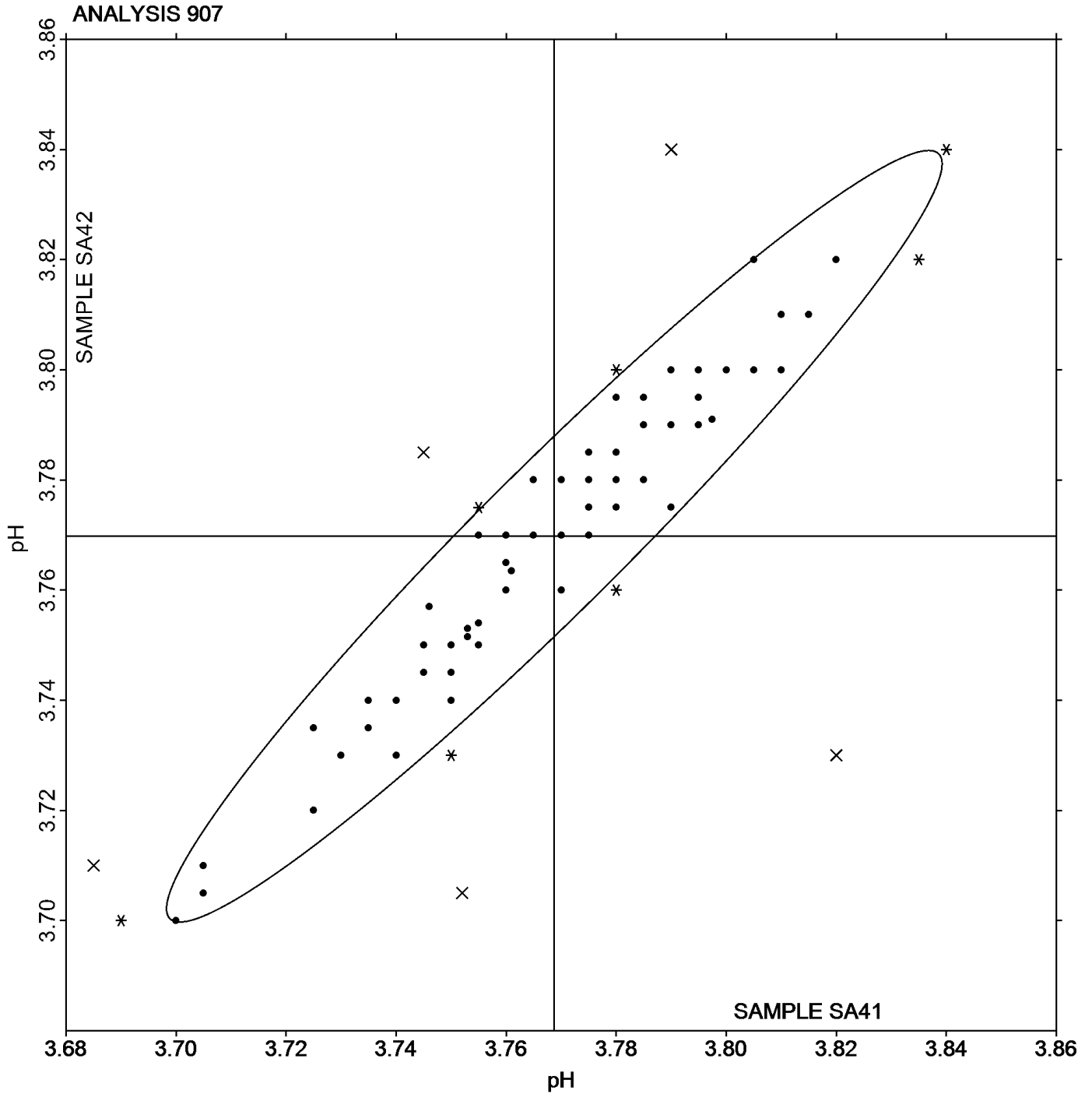
Analysis 907
pH

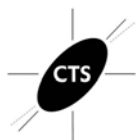
Grand Means	Summary Statistics
3.7687 pH	3.7698 pH
Stnd Dev Btwn Labs	
0.0282 pH	0.0280 pH
Statistics based on 91 of 102 reporting participants	

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #907

- UKB7FF (X) - Inconsistent in testing between samples.
- 72D8VA (X) - Inconsistent in testing between samples.
- MH63GJ (X) - Inconsistent in testing between samples.
- 8MQPTD (X) - Data for both samples are high. Inconsistent within the determinations of sample SA41.
- UJDM6K (X) - Data for both samples are low. Possible Systematic Error.
- NFGQFT (X) - Data for both samples are high. Possible Systematic Error.
- RTBEXW (X) - Inconsistent in testing between samples.
- LL8E2Y (X) - Data for sample SA41 are low. Inconsistent within the determinations of both samples.
- R92ET3 (X) - Inconsistent in testing between samples, data for sample SA41 are low.
- 6YWNTN (X) - Data for both samples are low. Possible Systematic Error.
- G3V2HA (X) - Data for both samples are high. Possible Systematic Error.





**Analysis 908
Residual Sugar**

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2G3NXC		11.79	-1.14	-0.91	11.50	-1.37	-1.09
6BLMH6		13.13	0.19	0.15	13.07	0.20	0.16
7WZU74		14.30	1.37	1.09	14.30	1.43	1.14
8LW2BH		12.82	-0.11	-0.09	13.02	0.15	0.12
AU3H2E		15.00	2.07	1.65	15.00	2.13	1.70
B48R4X		13.40	0.47	0.37	13.40	0.53	0.42
D364DX	X	1.14	-11.80	-9.42	1.13	-11.74	-9.37
DHUJN3		11.91	-1.03	-0.82	12.15	-0.72	-0.58
ETU2RW	X	0.98	-11.95	-9.54	0.97	-11.90	-9.50
GP9YXW		11.80	-1.13	-0.90	11.90	-0.97	-0.77
GX2A8R		13.05	0.12	0.09	13.05	0.18	0.14
HQDDQ2		12.57	-0.36	-0.29	12.73	-0.14	-0.11
JUNF44		11.55	-1.38	-1.10	11.80	-1.07	-0.85
M7E7G7		10.40	-2.53	-2.02	10.20	-2.67	-2.13
MH63GJ		12.70	-0.24	-0.19	12.37	-0.50	-0.40
N9XM9Q		11.80	-1.13	-0.90	11.40	-1.47	-1.17
NFGQFT	X	14.50	1.57	1.25	16.08	3.21	2.56
NR7MGQ		14.53	1.59	1.27	13.90	1.03	0.82
P29KHY		14.20	1.27	1.01	14.10	1.23	0.98
PYNF8G		14.70	1.77	1.41	14.80	1.93	1.54
RZNVZVK		14.40	1.47	1.17	14.14	1.27	1.01
WHEY2F		12.02	-0.91	-0.73	11.80	-1.07	-0.85
XNZATP		13.55	0.62	0.49	13.65	0.78	0.62
XVX2WD		12.00	-0.93	-0.75	12.00	-0.87	-0.69
Y7CFGQ	X	15.40	2.47	1.97	19.50	6.63	5.29

Grand Means		Summary Statistics	
	12.933 g/L		12.869 g/L
Std Dev Btw Labs			1.253 g/L
	1.252 g/L		
Statistics based on 21 of 25 reporting participants			

Wines tested: SA41: Merlot; SA42: Merlot



**Analysis 908
Residual Sugar**

Comments on Assigned Data Flags for Test #908

D364DX (X) - Data for both samples are low. Data may be off by a factor of 10.

ETU2RW (X) - Data for both samples are low.

NFGQFT (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA42.

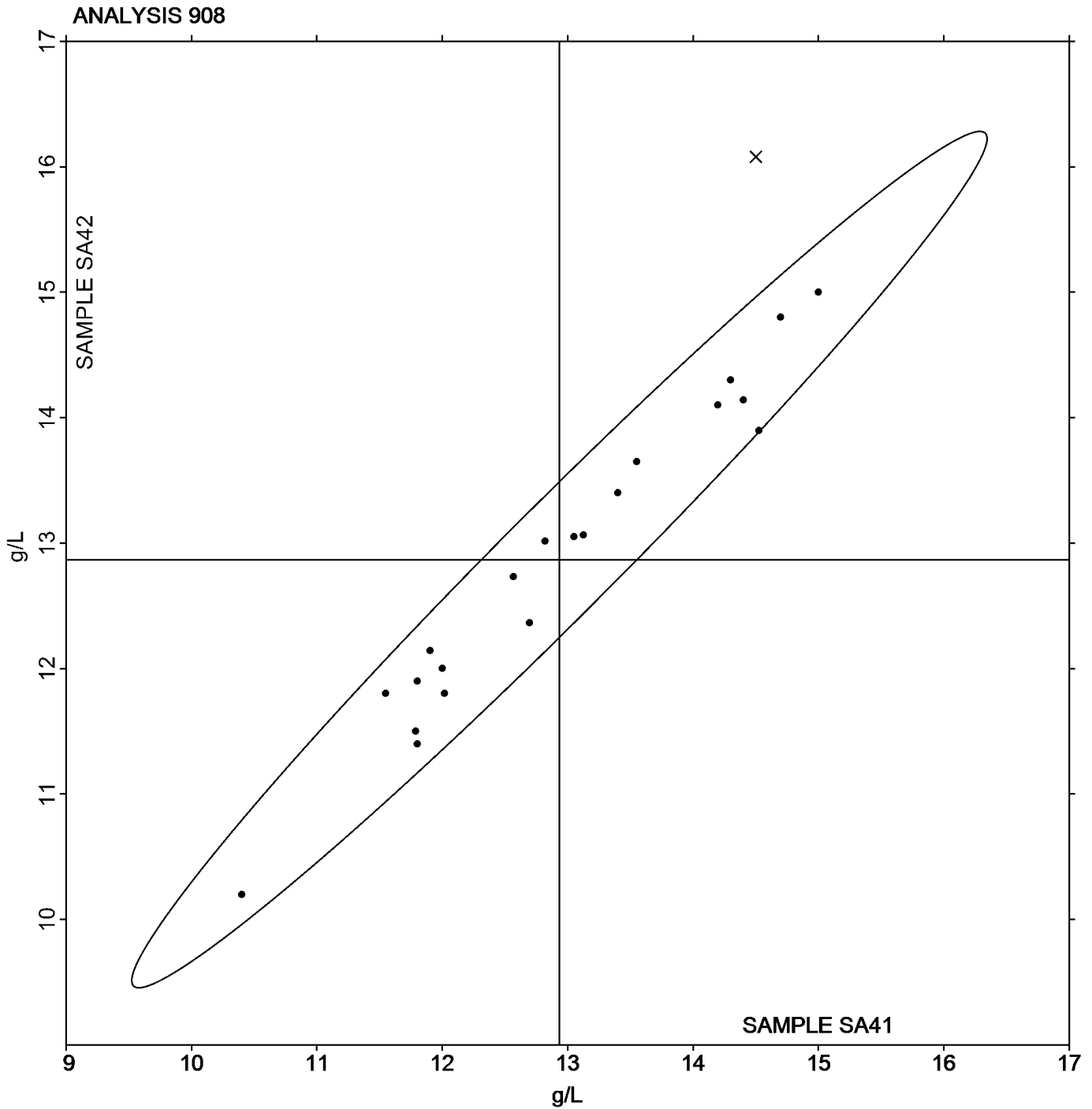
Y7CFGQ (X) - Data for sample SA42 are high.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	12.820	0.000	-0.11	13.015	0.000	0.15	1/2
Cu Reduction Method	14.014	0.904	1.08	13.842	0.971	0.97	5/7
Segmented Flow	14.400	0.000	1.47	14.140	0.000	1.27	1/1
FTIR	12.551	1.205	-0.38	12.520	1.258	-0.35	12/12
Other _____	11.848	0.081	-1.09	11.823	0.456	-1.05	2/3



Analysis 908
Residual Sugar





ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 909

L-Malic Acid

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		0.1950	-0.0170	-0.35	0.1700	-0.0416	-0.82
2G3NXC		0.1800	-0.0320	-0.66	0.1850	-0.0266	-0.52
2WVLBM		0.1900	-0.0220	-0.46	0.1900	-0.0216	-0.43
4BPMPD		0.2380	0.0260	0.54	0.2390	0.0274	0.54
4HTULN		0.2100	-0.0020	-0.04	0.2100	-0.0016	-0.03
63U8T2		0.2185	0.0065	0.13	0.2230	0.0114	0.23
6BLMH6		0.2500	0.0380	0.79	0.2600	0.0484	0.95
6CJZ3C		0.2150	0.0030	0.06	0.2450	0.0334	0.66
6NARP2		0.2045	-0.0075	-0.16	0.2000	-0.0116	-0.23
6YWNTN		0.2700	0.0580	1.20	0.2700	0.0584	1.15
72D8VA		0.2450	0.0330	0.68	0.2700	0.0584	1.15
7CWLYC		0.1725	-0.0395	-0.82	0.1775	-0.0341	-0.67
7DPAG9		0.2325	0.0205	0.42	0.2340	0.0224	0.44
7KADNB		0.2485	0.0365	0.75	0.2215	0.0099	0.20
7WZU74	X	0.3800	0.1680	3.48	0.3800	0.1684	3.32
87NEYZ		0.2050	-0.0070	-0.15	0.2050	-0.0066	-0.13
8BFAQE		0.2200	0.0080	0.16	0.2100	-0.0016	-0.03
8MQPTD	X	0.2300	0.0180	0.37	0.1650	-0.0466	-0.92
9TTQF7		0.2250	0.0130	0.27	0.2240	0.0124	0.25
APBD9B	*	0.1200	-0.0920	-1.90	0.1500	-0.0616	-1.21
AT9UHJ		0.1200	-0.0920	-1.90	0.1100	-0.1016	-2.00
AU3H2E		0.1450	-0.0670	-1.39	0.1200	-0.0916	-1.80
B48R4X		0.2300	0.0180	0.37	0.2450	0.0334	0.66
B4MNFb		0.1865	-0.0255	-0.53	0.1870	-0.0246	-0.48
BRT8RA		0.2030	-0.0090	-0.19	0.2030	-0.0086	-0.17
CBZLE2		0.2450	0.0330	0.68	0.2440	0.0324	0.64
D364DX		0.1450	-0.0670	-1.39	0.1350	-0.0766	-1.51
DHUJN3		0.2250	0.0130	0.27	0.2400	0.0284	0.56
DR6B8R		0.2500	0.0380	0.79	0.2500	0.0384	0.76
ENHVEC		0.2200	0.0080	0.16	0.2450	0.0334	0.66
EPXBN7		0.1945	-0.0175	-0.36	0.1870	-0.0246	-0.48
ERXN66		0.2650	0.0530	1.10	0.2600	0.0484	0.95
ETU2RW	*	0.1850	-0.0270	-0.56	0.1450	-0.0666	-1.31
FKCHUV		0.2350	0.0230	0.48	0.2335	0.0219	0.43
G3V2HA		0.2860	0.0740	1.53	0.2655	0.0539	1.06



ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 909

L-Malic Acid

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
GBMJUX		0.2390	0.0270	0.56	0.2420	0.0304	0.60
GP9YXW		0.1200	-0.0920	-1.90	0.1250	-0.0866	-1.71
GX2A8R		0.1550	-0.0570	-1.18	0.1500	-0.0616	-1.21
GXXMTY		0.2290	0.0170	0.35	0.2270	0.0154	0.30
HXEREM		0.2000	-0.0120	-0.25	0.2050	-0.0066	-0.13
JEGRZW		0.2235	0.0115	0.24	0.2075	-0.0041	-0.08
JHVUZT		0.1935	-0.0185	-0.38	0.1865	-0.0251	-0.49
JHYGD2		0.1800	-0.0320	-0.66	0.1700	-0.0416	-0.82
JMU9P4		0.2350	0.0230	0.48	0.2350	0.0234	0.46
JUNF44		0.3250	0.1130	2.34	0.3300	0.1184	2.33
K4AYYM		0.1455	-0.0665	-1.38	0.1390	-0.0726	-1.43
K72Z3Q		0.2090	-0.0030	-0.06	0.2145	0.0029	0.06
LL8E2Y		0.3050	0.0930	1.92	0.3150	0.1034	2.04
LM6RKL		0.2450	0.0330	0.68	0.2400	0.0284	0.56
LUK6AP		0.2255	0.0135	0.28	0.2400	0.0284	0.56
LYCCRX		0.2150	0.0030	0.06	0.1900	-0.0216	-0.43
M4KKLU		0.2590	0.0470	0.97	0.2565	0.0449	0.89
M7E7G7		0.2300	0.0180	0.37	0.2200	0.0084	0.17
N77NUR		0.2200	0.0080	0.16	0.2200	0.0084	0.17
N9XM9Q		0.2300	0.0180	0.37	0.2200	0.0084	0.17
NARBQL		0.2600	0.0480	0.99	0.2400	0.0284	0.56
NFGQFT	X	0.4050	0.1930	3.99	0.4000	0.1884	3.71
P29KHY	*	0.3000	0.0880	1.82	0.3300	0.1184	2.33
PPF4TX		0.2250	0.0130	0.27	0.2200	0.0084	0.17
PR4HFM		0.2850	0.0730	1.51	0.2950	0.0834	1.64
PYNF8G	X	0.2300	0.0180	0.37	0.3000	0.0884	1.74
Q3KJC9		0.2100	-0.0020	-0.04	0.2400	0.0284	0.56
Q7KU99		0.1750	-0.0370	-0.77	0.1950	-0.0166	-0.33
Q97G2V		0.2350	0.0230	0.48	0.2400	0.0284	0.56
QC8KQW		0.2400	0.0280	0.58	0.2250	0.0134	0.26
QK6M4M		0.2430	0.0310	0.64	0.2425	0.0309	0.61
QX8DKL		0.1350	-0.0770	-1.59	0.1300	-0.0816	-1.61
RC3RKE	*	0.0850	-0.1270	-2.63	0.1000	-0.1116	-2.20
RJX9T		0.2150	0.0030	0.06	0.2000	-0.0116	-0.23
RTBEXW	X	0.0500	-0.1620	-3.35	0.0250	-0.1866	-3.68



Analysis 909

L-Malic Acid

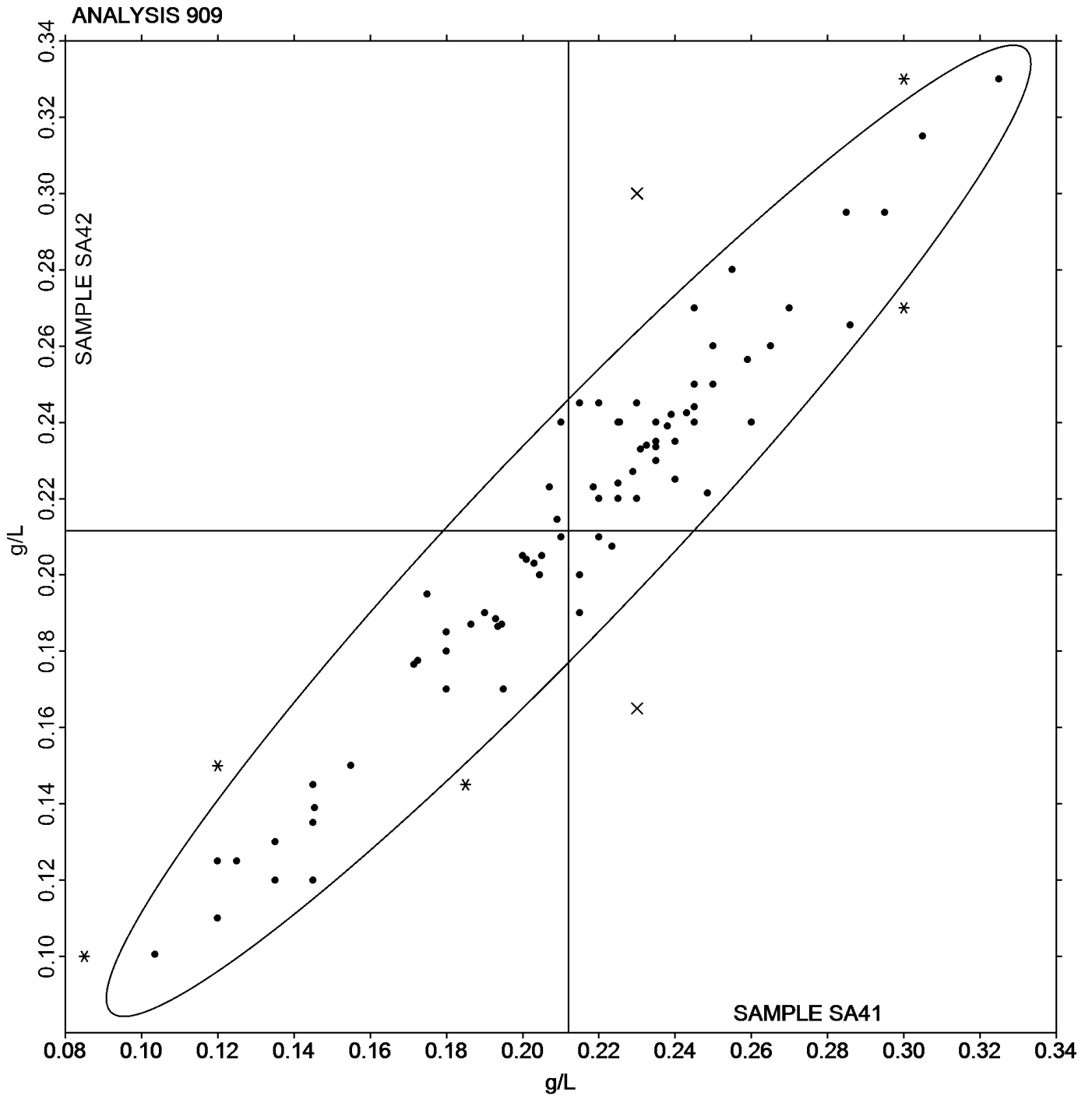
WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TARCPT		0.1715	-0.0405	-0.84	0.1765	-0.0351	-0.69
TQH63L		0.2070	-0.0050	-0.10	0.2230	0.0114	0.23
TXYGKT		0.2950	0.0830	1.72	0.2950	0.0834	1.64
U6G7JT		0.1930	-0.0190	-0.39	0.1885	-0.0231	-0.45
UJDM6K	*	0.3000	0.0880	1.82	0.2700	0.0584	1.15
UKB7FF		0.2400	0.0280	0.58	0.2350	0.0234	0.46
W4BTPW		0.1900	-0.0220	-0.46	0.1900	-0.0216	-0.43
WHEY2F		0.1250	-0.0870	-1.80	0.1250	-0.0866	-1.71
WTUJ8B		0.1035	-0.1085	-2.25	0.1005	-0.1111	-2.19
XM7LAU		0.2350	0.0230	0.48	0.2300	0.0184	0.36
XNZATP		0.1450	-0.0670	-1.39	0.1450	-0.0666	-1.31
XU2NAK		0.1800	-0.0320	-0.66	0.1700	-0.0416	-0.82
XVX2WD		0.1800	-0.0320	-0.66	0.1800	-0.0316	-0.62
Y2FWBL		0.2550	0.0430	0.89	0.2800	0.0684	1.35
Y7DFDK		0.1350	-0.0770	-1.59	0.1200	-0.0916	-1.80
YH7W7R		0.2010	-0.0110	-0.23	0.2040	-0.0076	-0.15
YQE22B		0.2310	0.0190	0.39	0.2330	0.0214	0.42
ZXGA7H		0.2450	0.0330	0.68	0.2500	0.0384	0.76

Grand Means		Summary Statistics	
	0.21203 g/L		0.21157 g/L
Std Dev Btwn Labs			
	0.04833 g/L		0.05074 g/L
Statistics based on 83 of 88 reporting participants			

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #909

- 7WZU74 (X) - Data for both samples are high. Possible Systematic Error.
- PYNF8G (X) - Inconsistent in testing between samples.
- 8MQPTD (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.
- NFGQFT (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample SA41.
- RTBEXW (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA41.



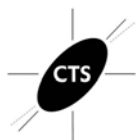


ASEV-CTS Wine Industry Interlaboratory Testing Program

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Analysis 910 Glucose + Fructose

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		11.45	-0.30	-0.48	11.85	0.12	0.21
2WVLBM	X	8.40	-3.35	-5.33	8.45	-3.28	-5.50
4BPMPD		12.40	0.65	1.03	12.35	0.62	1.05
4HTULN		13.00	1.25	1.98	13.05	1.32	2.23
63U8T2		12.90	1.15	1.82	12.85	1.12	1.89
6BLMH6		11.60	-0.15	-0.24	11.65	-0.08	-0.13
6CJZ3C	X	9.87	-1.89	-3.00	9.57	-2.16	-3.63
6NARP2		11.68	-0.08	-0.12	11.69	-0.04	-0.07
6YWNTN		11.95	0.20	0.31	11.73	0.00	0.01
72D8VA		11.95	0.20	0.31	11.95	0.22	0.38
7CWLYC		10.49	-1.27	-2.01	10.38	-1.35	-2.26
7DPAG9		12.50	0.75	1.19	12.30	0.57	0.96
7KADNB	X	12.00	0.25	0.39	11.25	-0.48	-0.80
87NEYZ		11.20	-0.55	-0.88	10.90	-0.83	-1.39
8BFAQE	X	9.55	-2.20	-3.50	9.30	-2.43	-4.08
8MQPTD	X	10.08	-1.68	-2.67	10.64	-1.09	-1.82
9TTQF7		12.34	0.58	0.93	12.18	0.45	0.76
APBD9B		11.35	-0.40	-0.64	11.65	-0.08	-0.13
AT9UHI		11.65	-0.10	-0.16	11.55	-0.18	-0.30
AU3H2E		12.00	0.25	0.39	11.80	0.07	0.12
B48R4X		11.80	0.05	0.08	11.75	0.02	0.04
B4MNF6		11.70	-0.05	-0.08	11.65	-0.08	-0.13
BRT8RA		11.85	0.10	0.15	11.95	0.22	0.38
CBZLE2		11.97	0.22	0.35	12.02	0.29	0.49
D364DX		11.35	-0.40	-0.64	11.25	-0.48	-0.80
DHUN3		11.91	0.15	0.24	12.15	0.42	0.70
DR6B8R		12.40	0.65	1.03	12.00	0.27	0.46
ENHVEC		12.00	0.25	0.39	12.10	0.37	0.63
EPXBN7		12.01	0.25	0.40	11.94	0.21	0.36
ERXN66		12.36	0.61	0.96	12.20	0.47	0.80
FKCHUV	X	9.40	-2.35	-3.74	9.55	-2.18	-3.66
G3V2HA		11.65	-0.10	-0.16	11.60	-0.13	-0.21
GBMJUX		12.25	0.50	0.79	12.30	0.57	0.96
GX2A8R		11.65	-0.10	-0.16	11.65	-0.08	-0.13
GXXMTY	X	11.94	0.19	0.30	12.68	0.95	1.60

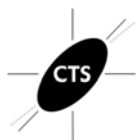


ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
Summer 2022

Analysis 910 Glucose + Fructose

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
HQDDQ2		12.83	1.08	1.71	12.67	0.94	1.59
HXEREM		12.10	0.35	0.55	12.20	0.47	0.80
JEGRZW		11.59	-0.17	-0.27	11.74	0.01	0.02
JHVUZZ		10.37	-1.38	-2.20	10.72	-1.01	-1.69
JHYGD2		11.90	0.15	0.23	11.90	0.17	0.29
JMU9P4		11.49	-0.26	-0.42	11.29	-0.44	-0.73
JUNF44		11.21	-0.54	-0.86	11.17	-0.56	-0.93
K4AYYM		12.52	0.77	1.22	12.46	0.73	1.23
K72Z3Q		11.45	-0.30	-0.48	11.51	-0.22	-0.37
LL8E2Y		10.34	-1.42	-2.25	10.34	-1.39	-2.33
LM6RKL		11.24	-0.51	-0.81	11.42	-0.31	-0.51
LUK6AP		11.75	0.00	0.00	12.05	0.32	0.54
LYCCRX	*	12.06	0.31	0.49	11.49	-0.24	-0.40
M4KKLU	X	13.30	1.55	2.46	13.75	2.02	3.40
M7E7G7		11.04	-0.71	-1.13	10.80	-0.93	-1.56
MH63GJ		12.19	0.44	0.69	12.21	0.48	0.81
N77NUR		11.11	-0.64	-1.02	11.16	-0.57	-0.95
N9XM9Q		11.80	0.05	0.08	11.40	-0.33	-0.55
NARBQL		11.74	-0.01	-0.02	11.99	0.26	0.44
NFGQFT	*	13.10	1.35	2.14	13.35	1.62	2.73
P29KHY		12.60	0.85	1.35	12.50	0.77	1.30
PPF4TX		11.75	0.00	0.00	11.65	-0.08	-0.13
PR4HFM		11.52	-0.23	-0.37	11.63	-0.10	-0.16
PYNF8G		11.60	-0.15	-0.24	11.60	-0.13	-0.21
Q3KJC9		11.26	-0.50	-0.79	11.14	-0.59	-0.98
Q7KU99		13.00	1.25	1.98	12.75	1.02	1.72
Q97G2V		11.60	-0.15	-0.24	11.70	-0.03	-0.04
QC8KQW		11.60	-0.15	-0.24	11.45	-0.28	-0.46
QK6M4M		12.05	0.30	0.47	12.15	0.42	0.71
QX8DKL		10.94	-0.82	-1.30	11.25	-0.48	-0.81
RC3RKE		12.15	0.40	0.63	12.35	0.62	1.05
RJJX9T		11.50	-0.25	-0.40	11.40	-0.33	-0.55
RTBEXW		10.95	-0.80	-1.28	11.05	-0.68	-1.14
RZNVZK		11.17	-0.59	-0.93	11.14	-0.59	-0.99
TARCPT		10.83	-0.93	-1.47	10.82	-0.90	-1.52



**Analysis 910
Glucose + Fructose**

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TQH63L		11.63	-0.12	-0.20	11.63	-0.10	-0.17
TW6T2X		10.70	-1.05	-1.67	10.80	-0.93	-1.56
TXYGKT		12.49	0.74	1.17	12.43	0.70	1.17
U6G7JT		11.00	-0.75	-1.20	10.85	-0.88	-1.47
UJDM6K		12.70	0.95	1.51	12.40	0.67	1.13
UKB7FF		12.60	0.85	1.35	12.15	0.42	0.71
W4BTPW		11.53	-0.22	-0.35	11.45	-0.28	-0.47
W7JQGR	*	10.70	-1.05	-1.67	11.20	-0.53	-0.88
WHEY2F		12.02	0.27	0.42	11.86	0.13	0.23
WTUJ8B		11.65	-0.10	-0.16	11.80	0.07	0.12
XM7LAU		11.19	-0.56	-0.89	11.05	-0.68	-1.14
XNZATP		10.63	-1.12	-1.78	10.84	-0.89	-1.50
XU2NAK		10.85	-0.90	-1.43	10.80	-0.93	-1.56
XVX2WD		12.08	0.33	0.52	11.99	0.26	0.44
Y2FWBL		12.13	0.38	0.60	12.18	0.45	0.76
Y7DFDK		11.67	-0.08	-0.13	11.55	-0.18	-0.30
YH7W7R		11.40	-0.35	-0.56	11.50	-0.23	-0.38
YQE22B		12.45	0.70	1.11	12.50	0.77	1.30
Z76V3M		12.50	0.75	1.19	12.20	0.47	0.80
ZXGA7H	*	12.15	0.40	0.63	11.50	-0.23	-0.38

Grand Means		Summary Statistics	
	11.753 g/L		11.726 g/L
Stnd Dev Btwn Labs	0.629 g/L		0.595 g/L
Statistics based on 82 of 90 reporting participants			

Wines tested: SA41: Merlot; SA42: Merlot



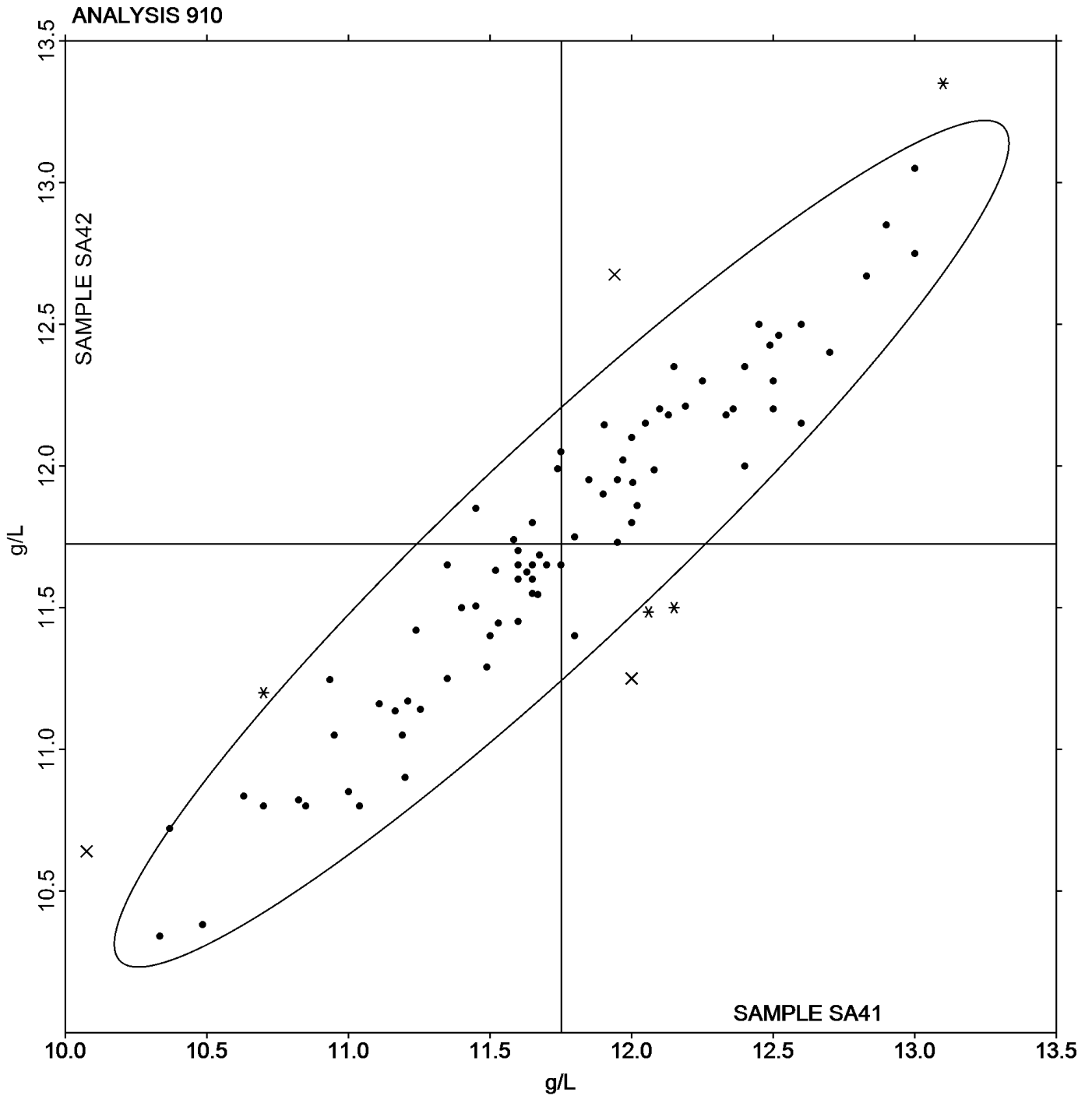
**Analysis 910
Glucose + Fructose**

Comments on Assigned Data Flags for Test #910

- 7KADNB (X) - Inconsistent in testing between samples.
- FKCHUV (X) - Data for both samples are low. Possible Systematic Error.
- 8MQPTD (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA42.
- 6CJZ3C (X) - Data for both samples are low. Possible Systematic Error.
- M4KKLU (X) - Data for sample SA42 are high. Inconsistent within the determinations of sample SA42.
- GXXMTY (X) - Inconsistent in testing between samples.
- 2WVLBM (X) - Data for both samples are low. Possible Systematic Error.
- 8BFAQE (X) - Data for both samples are low. Possible Systematic Error.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	11.950	0.000	0.20	11.730	0.000	0.00	1/1
HPLC	11.165	0.000	-0.59	11.135	0.000	-0.59	1/1
Enzymatic/Spectrophotometric	11.681	0.612	-0.07	11.661	0.573	-0.06	71/79
FTIR	12.360	0.502	0.61	12.315	0.545	0.59	8/8
Other _____	12.360	0.000	0.61	12.200	0.000	0.47	1/1





**Analysis 911
Copper Content**

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
6BLMH6		0.1150	-0.0212	-0.63	0.1250	-0.0085	-0.25
7DPAG9		0.1300	-0.0062	-0.18	0.1100	-0.0235	-0.68
9TTQF7	*	0.2450	0.1088	3.24	0.2350	0.1015	2.94
AU3H2E		0.1400	0.0038	0.11	0.1400	0.0065	0.19
DR6B8R		0.1535	0.0173	0.52	0.1495	0.0160	0.46
FKCHUV		0.1630	0.0268	0.80	0.1590	0.0255	0.74
G3V2HA		0.1200	-0.0162	-0.48	0.1200	-0.0135	-0.39
GX2A8R		0.1400	0.0038	0.11	0.1350	0.0015	0.04
HQDDQ2		0.0860	-0.0502	-1.49	0.0730	-0.0605	-1.75
HXEREM		0.1350	-0.0012	-0.04	0.1320	-0.0015	-0.04
JEGRZW		0.1450	0.0088	0.26	0.1300	-0.0035	-0.10
JUNF44	X	0.1100	-0.0262	-0.78	0.1500	0.0165	0.48
LYCCRX		0.1650	0.0288	0.86	0.1700	0.0365	1.06
M7E7G7		0.1190	-0.0172	-0.51	0.1240	-0.0095	-0.28
P29KHY		0.1500	0.0138	0.41	0.1500	0.0165	0.48
PYNF8G		0.0700	-0.0662	-1.97	0.0600	-0.0735	-2.13
QX8DKL		0.1200	-0.0162	-0.48	0.1200	-0.0135	-0.39
RZNVVK		0.1245	-0.0117	-0.35	0.1265	-0.0070	-0.20
UKB7FF		0.1450	0.0088	0.26	0.1430	0.0095	0.28
WTUJ8B		0.1300	-0.0062	-0.18	0.1300	-0.0035	-0.10
XNZATP		0.1450	0.0088	0.26	0.1550	0.0215	0.62
XVX2WD		0.1050	-0.0312	-0.93	0.1000	-0.0335	-0.97
YQE22B		0.1500	0.0138	0.41	0.1500	0.0165	0.48

Grand Means		Summary Statistics	
	0.13618 mg/L		0.13350 mg/L
Std Dev Btwn Labs			0.03452 mg/L
	0.03359 mg/L		
Statistics based on 22 of 23 reporting participants			

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #911

JUNF44 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA41.



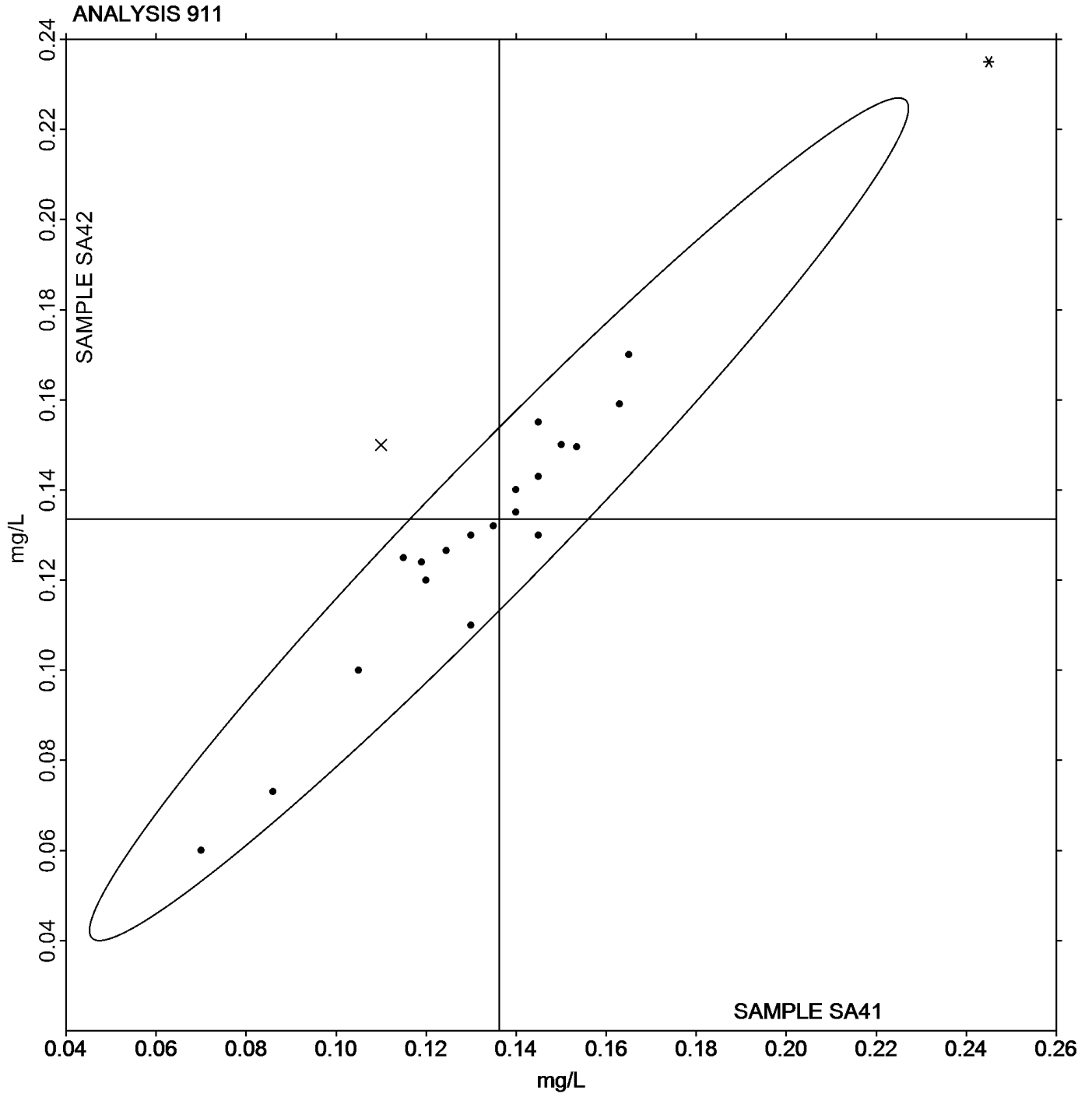
**Analysis 911
Copper Content**

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Atomic Absorption Spectroscopy	0.137	0.041	0.0009	0.131	0.041	-0.0023	11/12
ICP	0.139	0.014	0.0023	0.139	0.011	0.0051	8/8
FTIR	0.145	0.000	0.0088	0.155	0.000	0.0215	1/1
Other _____	0.165	0.000	0.0288	0.170	0.000	0.0365	1/1
Colorimetric Analysis	0.070	0.000	-0.0662	0.060	0.000	-0.0735	1/1



Analysis 911
Copper Content





**Analysis 912
Potassium (K) Content**

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
6BLMH6		1,530.0	19.8	0.12	1,525.0	26.0	0.16
7CWLYC		1,556.0	45.8	0.27	1,529.0	30.0	0.18
8BFAQE		1,264.5	-245.7	-1.45	1,287.0	-212.0	-1.27
AU3H2E		1,449.0	-61.2	-0.36	1,447.0	-52.0	-0.31
DR6B8R		1,560.0	49.8	0.29	1,535.0	36.0	0.21
F3VGZU		1,517.5	7.3	0.04	1,503.0	4.0	0.02
GX2A8R		1,506.0	-4.2	-0.02	1,509.5	10.5	0.06
LUK6AP		1,756.5	246.3	1.45	1,736.5	237.5	1.42
LYCCRX		1,499.5	-10.7	-0.06	1,511.0	12.0	0.07
M7E7G7		1,295.0	-215.2	-1.27	1,241.6	-257.4	-1.54
P29KHY		1,351.0	-159.2	-0.94	1,366.0	-133.0	-0.79
PYNF8G		1,538.0	27.8	0.16	1,468.0	-31.0	-0.19
Q7KU99	*	1,864.5	354.3	2.09	1,905.0	406.0	2.42
QX8DKL		1,485.0	-25.2	-0.15	1,409.0	-90.0	-0.54
RZNVZVK		1,374.5	-135.7	-0.80	1,390.0	-109.0	-0.65
TQH63L		1,441.7	-68.6	-0.41	1,480.4	-18.7	-0.11
TW6T2X		1,950.0	439.8	2.60	1,900.0	401.0	2.40
UKB7FF		1,431.0	-79.2	-0.47	1,410.5	-88.5	-0.53
WTUJ8B		1,367.0	-143.2	-0.85	1,386.0	-113.0	-0.68
XVX2WD		1,503.0	-7.2	-0.04	1,480.0	-19.0	-0.11
YQE22B		1,475.0	-35.2	-0.21	1,460.0	-39.0	-0.23

Grand Means		Summary Statistics	
	1,510.22 mg/L		1,499.02 mg/L
Std Dev Btwn Labs			
	169.28 mg/L		167.41 mg/L
Statistics based on 21 of 21 reporting participants			

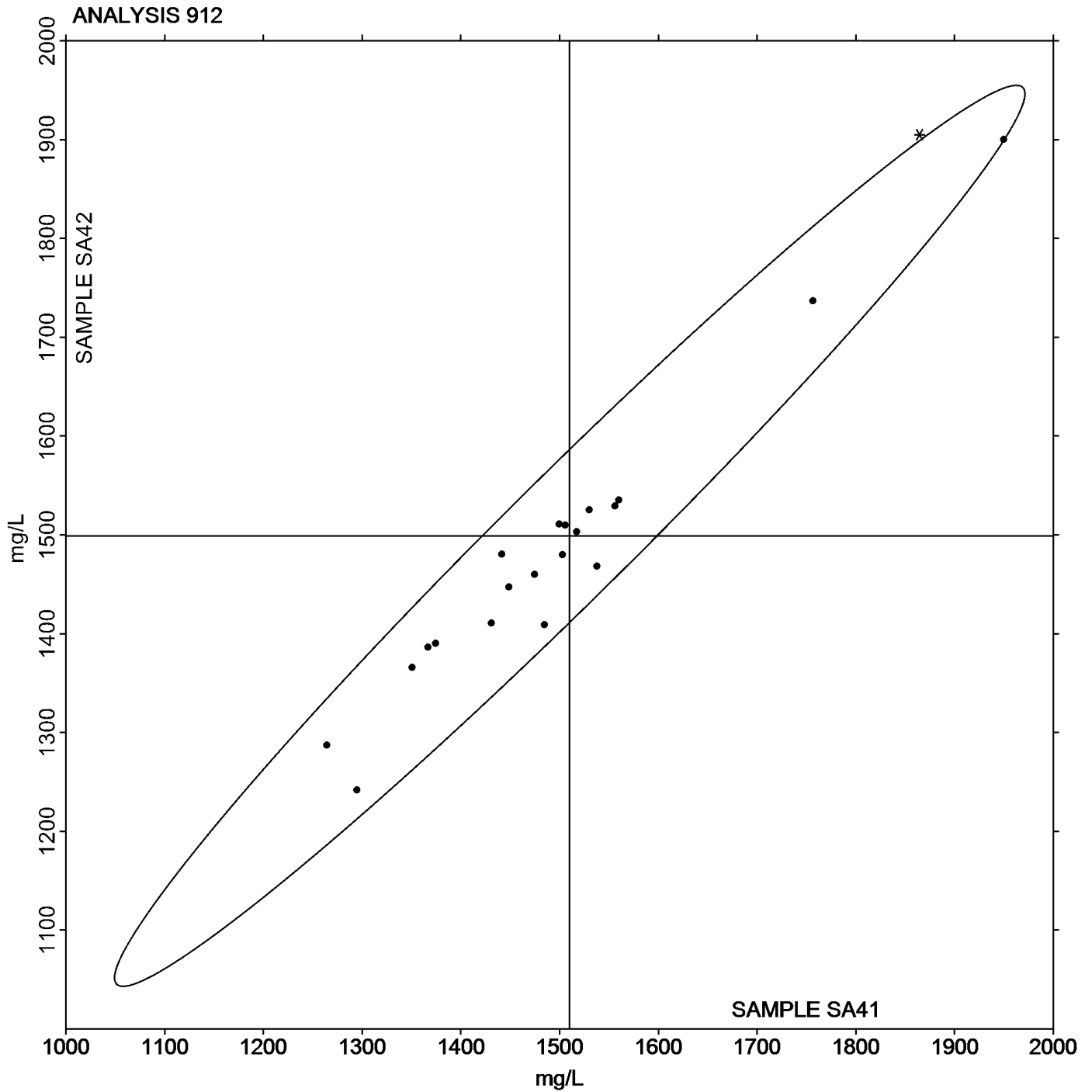
Wines tested: SA41: Merlot; SA42: Merlot



**Analysis 912
Potassium (K) Content**

Results by Methodology (as reported by laboratory)

Test Methodology	Sample SA41 <i>Merlot</i>			Sample SA42 <i>Merlot</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Atomic Absorption Spectroscopy	1,467.579	91.647	-42.6	1,434.941	103.646	-64.1	6/6
ICP	1,449.315	80.182	-60.9	1,447.748	68.416	-51.3	8/8
Other _____	1,771.333	239.265	261.1	1,772.000	226.046	273.0	3/3
Colorimetric Analysis	1,500.163	205.021	-10.1	1,492.963	184.854	-6.1	4/4





ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
Summer 2022

Analysis 915 A420nm (1cm path)

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		2.900	-0.055	-0.38	2.886	-0.112	-0.71
2G3NXC		2.643	-0.313	-2.12	2.707	-0.291	-1.84
2WVLBM		2.891	-0.064	-0.44	2.887	-0.112	-0.70
6BLMH6		2.910	-0.045	-0.31	2.955	-0.043	-0.27
6YWNTN		3.180	0.225	1.52	3.120	0.122	0.77
7CWLYC		2.963	0.008	0.05	3.031	0.032	0.20
7KADNB		2.825	-0.130	-0.89	3.000	0.002	0.01
7WZU74	X	3.583	0.628	4.26	3.523	0.525	3.31
87NEYZ		2.985	0.030	0.20	3.045	0.047	0.29
9TTQF7		3.228	0.273	1.85	3.218	0.220	1.38
APBD9B	X	0.060	-2.895	-19.65	0.061	-2.937	-18.52
AU3H2E		3.016	0.061	0.41	3.027	0.028	0.18
B48R4X		3.220	0.265	1.80	3.215	0.217	1.37
BRT8RA		2.835	-0.120	-0.82	2.920	-0.078	-0.49
DR6B8R		2.940	-0.015	-0.10	2.940	-0.058	-0.37
ETU2RW		2.960	0.005	0.03	2.894	-0.104	-0.66
G3V2HA	*	2.533	-0.422	-2.87	2.552	-0.446	-2.81
GXXMTY		3.027	0.072	0.49	3.038	0.040	0.25
HQDDQ2		2.989	0.033	0.22	3.095	0.097	0.61
HXEREM		2.956	0.000	0.00	3.010	0.011	0.07
JEGRZW		3.092	0.136	0.92	3.056	0.058	0.36
JHYGD2		2.840	-0.115	-0.78	2.890	-0.108	-0.68
JUNF44	X	2.276	-0.679	-4.61	2.265	-0.734	-4.63
LM6RKL		3.085	0.130	0.88	3.205	0.207	1.30
LUK6AP		2.898	-0.058	-0.39	2.918	-0.081	-0.51
LYCCRX		3.150	0.195	1.32	3.280	0.282	1.78
M7E7G7		3.163	0.208	1.41	3.196	0.198	1.25
MH63GJ		3.020	0.065	0.44	3.210	0.212	1.33
N77NUR		2.805	-0.151	-1.02	2.882	-0.116	-0.73
N9XM9Q		3.050	0.095	0.64	3.050	0.052	0.33
NFGQFT	X	0.574	-2.382	-16.16	0.578	-2.420	-15.26
P29KHY		2.827	-0.128	-0.87	2.870	-0.128	-0.81
PPF4TX		2.988	0.032	0.22	2.991	-0.007	-0.05
PYNF8G		3.113	0.158	1.07	3.100	0.102	0.64
Q7KU99	X	0.302	-2.653	-18.01	0.295	-2.704	-17.05



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

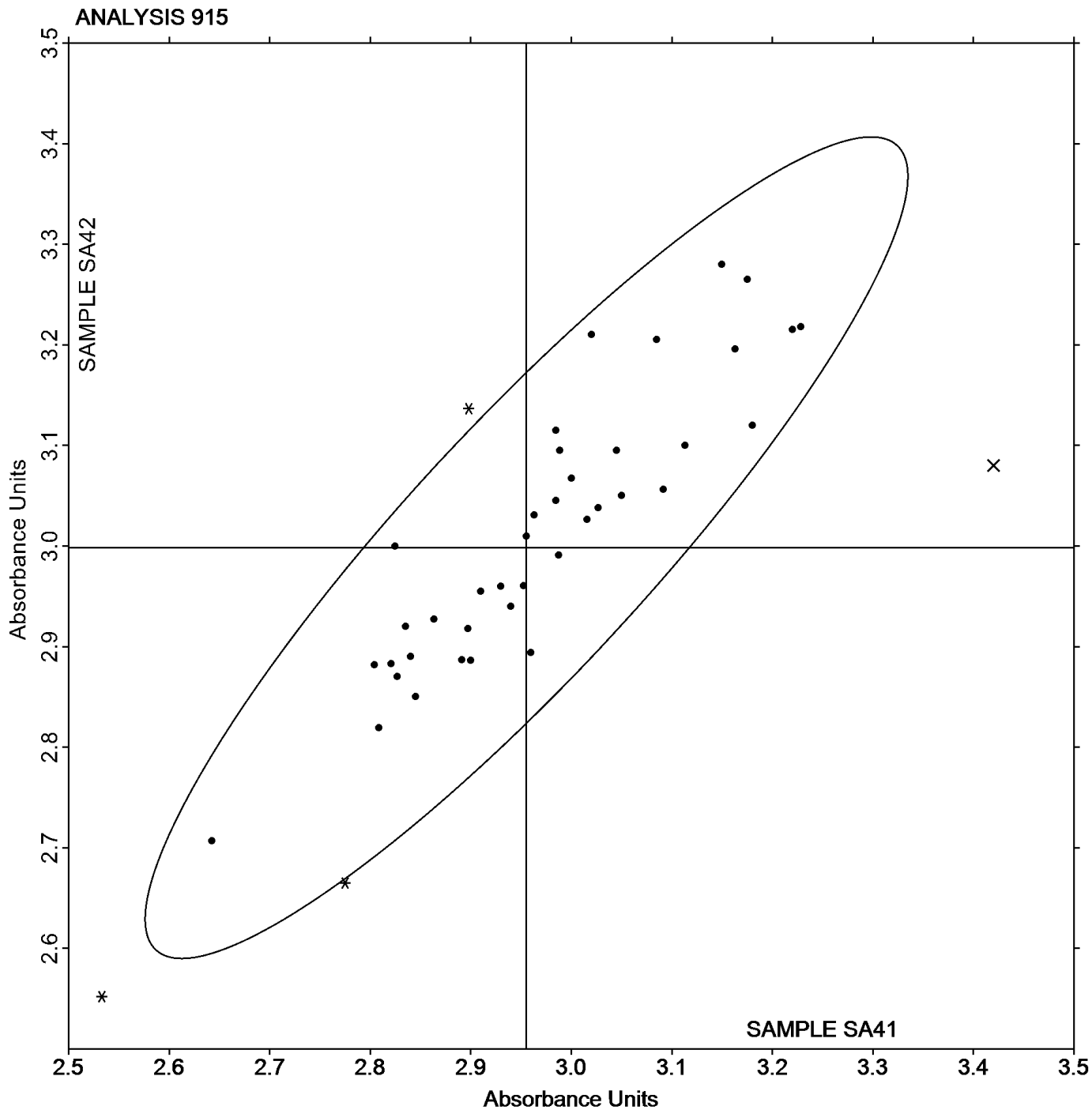
WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
Q97G2V	*	2.898	-0.057	-0.39	3.137	0.138	0.87
QX8DKL		2.845	-0.110	-0.75	2.850	-0.148	-0.93
R92ET3		2.809	-0.147	-1.00	2.819	-0.179	-1.13
RC3RKE		3.045	0.090	0.61	3.095	0.097	0.61
RTBEXW	*	2.775	-0.180	-1.22	2.665	-0.333	-2.10
TQH63L		2.821	-0.134	-0.91	2.883	-0.115	-0.73
UKB7FF		2.985	0.030	0.20	3.115	0.117	0.74
W7JQGR	X	2.075	-0.880	-5.97	2.070	-0.928	-5.85
WHEY2F		2.864	-0.092	-0.62	2.927	-0.071	-0.45
XVX2WD		3.175	0.220	1.49	3.265	0.267	1.68
Y7CFGQ		2.930	-0.025	-0.17	2.960	-0.038	-0.24
YQE22B		2.953	-0.003	-0.02	2.961	-0.038	-0.24
YW8BMP		3.000	0.045	0.30	3.068	0.069	0.44
Z76V3M	X	3.420	0.465	3.15	3.080	0.082	0.52

Grand Means		Summary Statistics	
2.9554	Absorbance Units	2.9983	Absorbance Units
0.1474	Absorbance Units	0.1586	Absorbance Units
Statistics based on 42 of 49 reporting participants			

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #915

- 7WZU74 (X) - Data for both samples are high. Possible Systematic Error.
- NFGQFT (X) - Data for both samples are low.
- W7JQGR (X) - Data for both samples are low. Possible Systematic Error.
- Z76V3M (X) - Inconsistent in testing between samples, data for sample SA41 are high.
- JUNF44 (X) - Data for both samples are low. Possible Systematic Error.
- APBD9B (X) - Extreme data.
- Q7KU99 (X) - Data for both samples are low. Data may be off by a factor of 10.





ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #071
Summer 2022

Analysis 916 A520nm (1cm path)

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
29BDZH		3.398	0.020	0.08	3.390	-0.008	-0.03
2G3NXC		3.153	-0.225	-0.88	3.188	-0.210	-0.81
6BLMH6		3.350	-0.028	-0.11	3.410	0.012	0.04
6YWNTN		3.660	0.282	1.10	3.570	0.172	0.66
7CWLYC		2.911	-0.468	-1.82	2.971	-0.427	-1.64
7WZU74	X	4.438	1.060	4.14	4.336	0.938	3.60
87NEYZ		3.455	0.077	0.30	3.475	0.077	0.29
9TTQF7		3.754	0.376	1.47	3.729	0.331	1.27
APBD9B	X	0.069	-3.309	-12.91	0.070	-3.328	-12.77
AU3H2E		3.489	0.111	0.43	3.497	0.099	0.38
B48R4X	X	4.780	1.402	5.47	4.765	1.367	5.24
BRT8RA		3.325	-0.053	-0.21	3.425	0.027	0.10
DR6B8R		3.420	0.042	0.16	3.420	0.022	0.08
ETU2RW		3.440	0.062	0.24	3.342	-0.056	-0.22
G3V2HA		2.767	-0.611	-2.38	2.767	-0.631	-2.42
GXXMTY		3.507	0.128	0.50	3.513	0.114	0.44
HQDDQ2		3.470	0.092	0.36	3.610	0.212	0.81
HXEREM		3.487	0.109	0.42	3.509	0.110	0.42
JEGRZW		3.608	0.230	0.90	3.549	0.151	0.58
JHYGD2		3.340	-0.038	-0.15	3.410	0.012	0.04
JUNF44		2.872	-0.506	-1.97	2.879	-0.519	-1.99
LM6RKL		3.615	0.237	0.92	3.735	0.337	1.29
LUK6AP		3.500	0.122	0.48	3.663	0.264	1.01
LYCCRZ		3.580	0.202	0.79	3.705	0.307	1.18
M7E7G7		3.496	0.118	0.46	3.510	0.112	0.43
MH63GJ		3.690	0.312	1.22	3.540	0.142	0.54
N77NUR		3.198	-0.180	-0.70	3.291	-0.107	-0.41
N9XM9Q		3.500	0.122	0.48	3.500	0.102	0.39
NFGQFT	X	0.793	-2.585	-10.09	0.785	-2.613	-10.03
P29KHY		3.184	-0.194	-0.76	3.224	-0.174	-0.67
PPF4TX		3.458	0.080	0.31	3.466	0.068	0.26
PYNF8G		3.543	0.164	0.64	3.530	0.131	0.50
Q7KU99	X	0.349	-3.030	-11.82	0.341	-3.058	-11.74
Q97G2V	X	3.393	0.015	0.06	3.127	-0.271	-1.04
QX8DKL		3.300	-0.078	-0.31	3.310	-0.088	-0.34



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

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
R92ET3		2.996	-0.382	-1.49	2.998	-0.401	-1.54
RC3RKE		3.675	0.297	1.16	3.705	0.307	1.18
RTBEXW	*	3.400	0.022	0.09	3.215	-0.183	-0.70
TQH63L		3.251	-0.128	-0.50	3.336	-0.062	-0.24
UKB7FF		3.475	0.097	0.38	3.595	0.197	0.75
W7JQGR	*	2.610	-0.768	-3.00	2.610	-0.788	-3.03
WHEY2F		3.303	-0.076	-0.30	3.367	-0.031	-0.12
XVX2WD		3.710	0.332	1.29	3.785	0.387	1.48
Y7CFGQ		3.420	0.042	0.16	3.410	0.012	0.04
YQE22B		3.467	0.088	0.34	3.452	0.054	0.21
YW8BMP		3.354	-0.025	-0.10	3.339	-0.060	-0.23
Z76V3M	X	0.870	-2.508	-9.79	3.570	0.172	0.66

Grand Means		Summary Statistics	
	3.3782 Absorbance Units		3.3984 Absorbance Units
Stnd Dev Btwn Labs	0.2563 Absorbance Units		0.2606 Absorbance Units
Statistics based on 40 of 47 reporting participants			

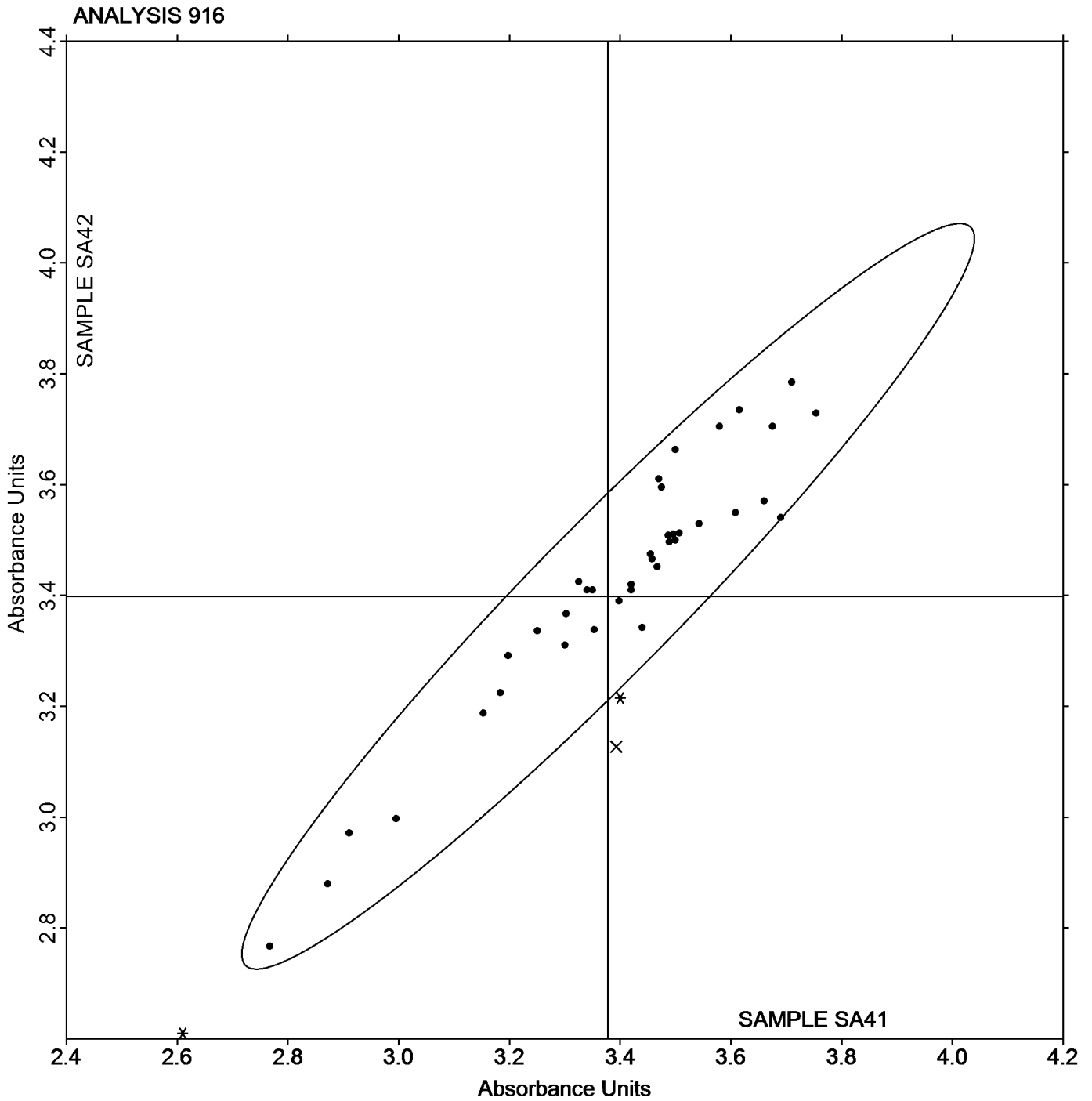
Wines tested: SA41: Merlot; SA42: Merlot

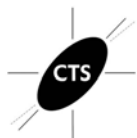
Comments on Assigned Data Flags for Test #916

- 7WZU74 (X) - Data for both samples are high. Possible Systematic Error.
- B48R4X (X) - Data for both samples are high. Possible Systematic Error.
- NFGQFT (X) - Data for both samples are low.
- Z76V3M (X) - Inconsistent in testing between samples, data for sample SA41 are low.
- Q97G2V (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA42.
- APBD9B (X) - Extreme data.
- Q7KU99 (X) - Data for both samples are low. Data may be off by a factor of 10.



Analysis 916
A520nm (1cm path)





ASEV-CTS Wine Industry Interlaboratory Testing Program
Research Property 950
Research Property: Conductivity @ 20C

Report #071
Summer 2022

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
2G3NXC		2,841.5	367.9	0.52	2,890.0	388.1	0.53
6BLMH6		2,445.0	-28.6	-0.04	2,465.0	-36.9	-0.05
6CJZ3C		2,679.5	205.9	0.29	2,677.5	175.6	0.24
7KADNB		2,679.0	205.4	0.29	2,695.0	193.1	0.26
BRT8RA		2,580.0	106.4	0.15	2,585.0	83.1	0.11
JEGRZW		2,847.5	373.9	0.53	2,849.0	347.1	0.48
JHVUZT		2,812.0	338.4	0.48	2,805.0	303.1	0.42
LM6RKL		1,913.8	-559.8	-0.79	1,911.5	-590.4	-0.81
M4KKLU		2,600.0	126.4	0.18	2,600.0	98.1	0.13
P29KHY		2,940.0	466.4	0.66	3,060.0	558.1	0.76
PYNF8G		1,945.0	-528.6	-0.75	1,955.0	-546.9	-0.75
Q3KJC9	*	55.8	-2,417.8	-3.43	47.9	-2,454.0	-3.36
Q7KU99		2,953.5	479.9	0.68	2,958.0	456.1	0.62
QX8DKL		2,700.0	226.4	0.32	2,800.0	298.1	0.41
TQH63L		2,961.0	487.4	0.69	2,970.5	468.6	0.64
TW6T2X		1,841.0	-632.6	-0.90	1,734.0	-767.9	-1.05
Y7CFGQ	*	2,700.0	226.4	0.32	3,000.0	498.1	0.68
YQE22B		3,030.0	556.4	0.79	3,030.0	528.1	0.72

Research Property Consensus Value

Consensus Average

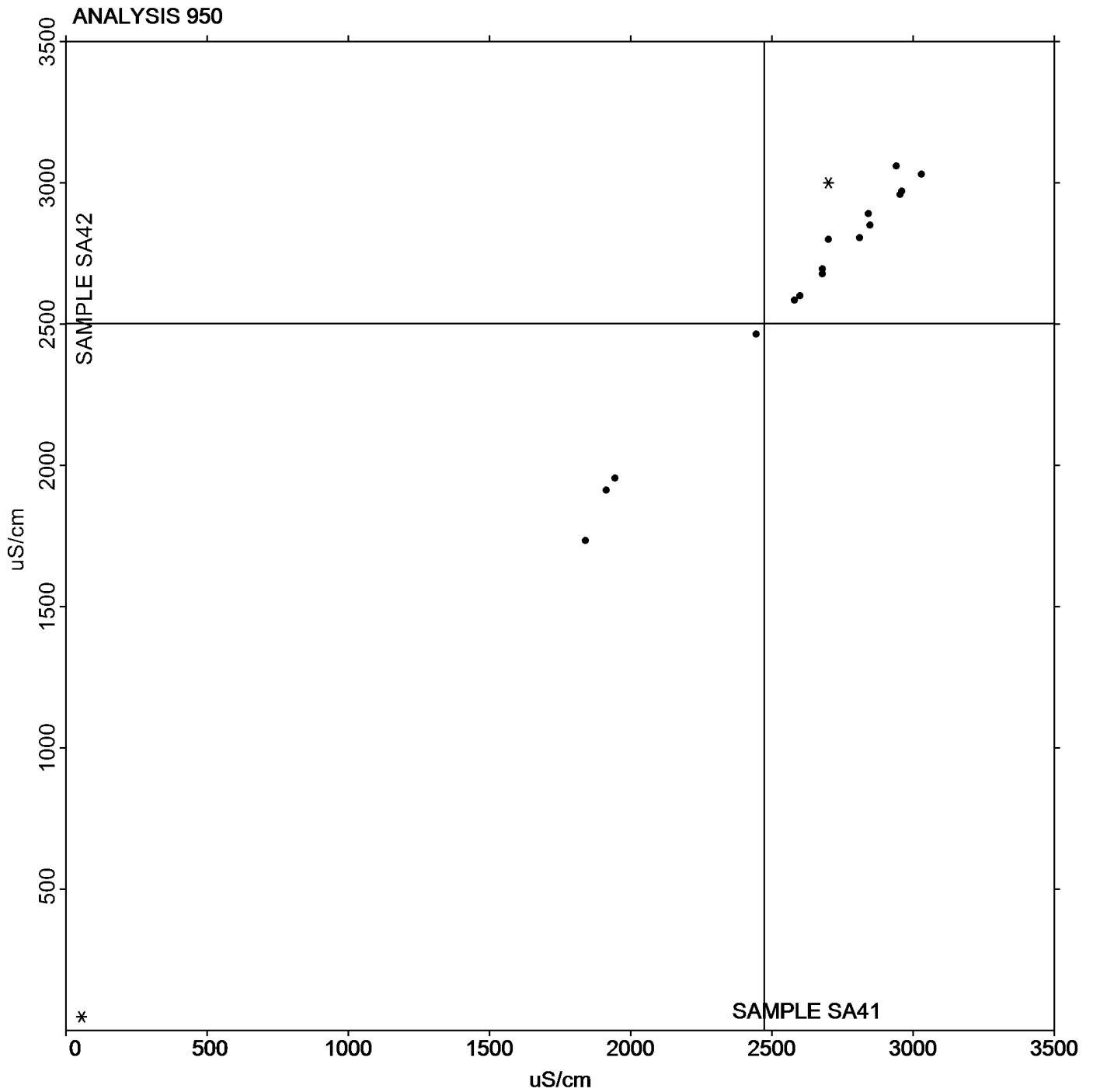
2,473.59 uS/cm

2,501.85 uS/cm

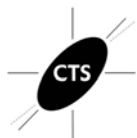
Note: Tests 950, 951 and 952, are research tests. As a result participants should use caution when evaluating data for these tests.

This consensus average is based on 18 reporting participants.

Wines tested: SA41: Merlot; SA42: Merlot



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: L-Lactic Acid

Report #071
Summer 2022

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
6BLMH6		0.6100	-0.1145	-0.67	0.6350	-0.0980	-0.60
9TTQF7		0.7925	0.0680	0.40	0.7845	0.0515	0.32
AU3H2E		0.6500	-0.0745	-0.44	0.7000	-0.0330	-0.20
BRT8RA		0.6815	-0.0430	-0.25	0.6825	-0.0505	-0.31
DR6B8R		0.7200	-0.0045	-0.03	0.7050	-0.0280	-0.17
GX2A8R		0.7500	0.0255	0.15	0.7550	0.0220	0.13
JEGRZW	*	1.2360	0.5115	3.01	1.2200	0.4870	2.98
LM6RKL		0.6000	-0.1245	-0.73	0.6300	-0.1030	-0.63
M4KKLU		0.7785	0.0540	0.32	0.7775	0.0445	0.27
M7E7G7		0.6700	-0.0545	-0.32	0.7000	-0.0330	-0.20
P29KHY	M	0.0500	-0.6745	-3.97	No data reported for this sample		
PPF4TX		0.6900	-0.0345	-0.20	0.6950	-0.0380	-0.23
PYNF8G		0.4900	-0.2345	-1.38	0.4700	-0.2630	-1.61
UKB7FF		0.6650	-0.0595	-0.35	0.6900	-0.0430	-0.26
YQE22B		0.8095	0.0850	0.50	0.8170	0.0840	0.51

Research Property Consensus Value

Consensus Average

0.72450 g/L

0.73296 g/L

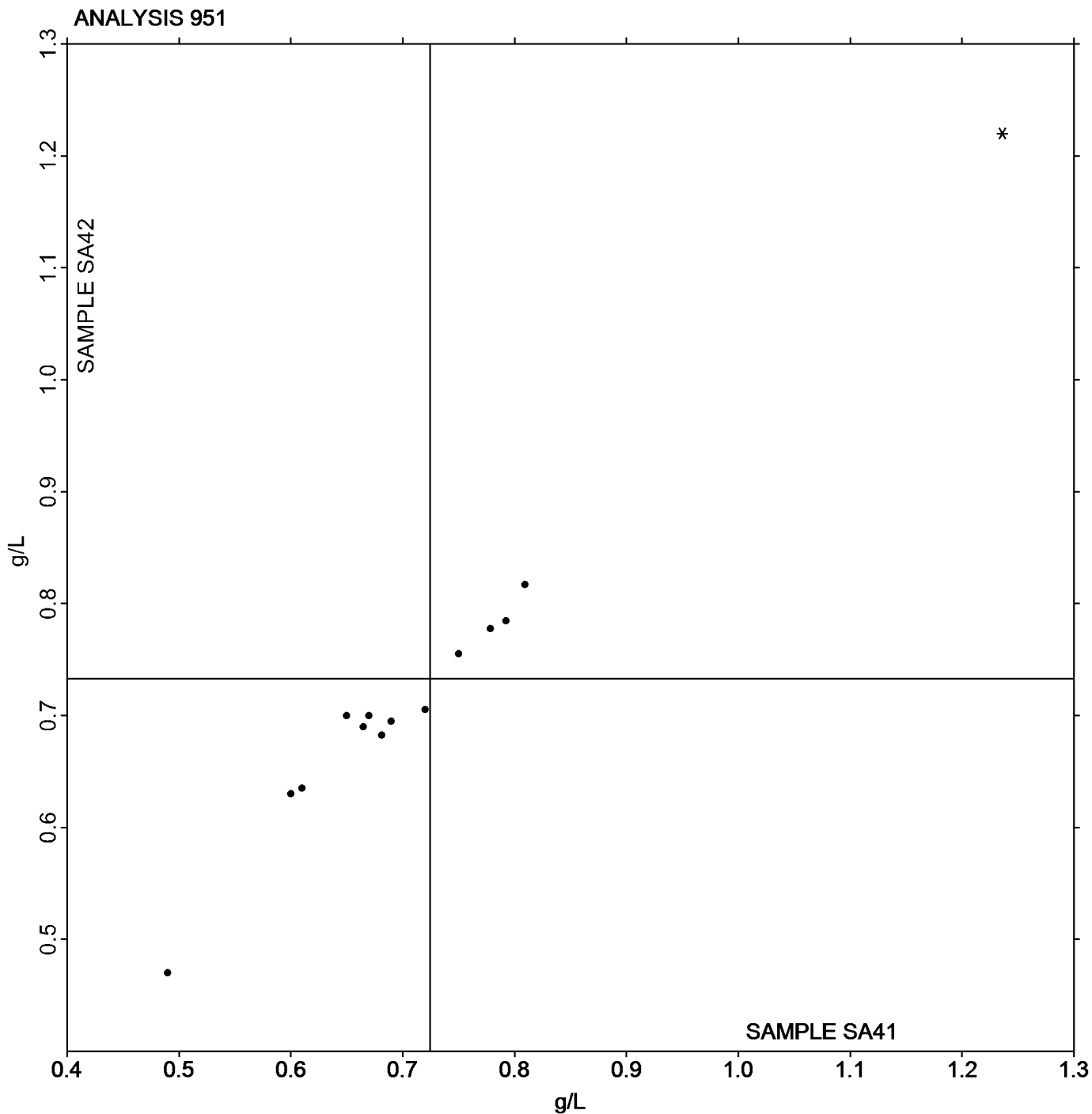
Note: Tests 950, 951 and 952, are research tests. As a result participants should use caution when evaluating data for these tests.

This consensus average is based on 14 reporting participants.

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #951

P29KHY (M) - Participant did not submit data for sample SA42. Data low for Sample SA41.



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: Methanol Content

WebCode	Data Flag	Sample SA41			Sample SA42		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
9TTQF7		208.0	16.4	0.78	202.2	17.4	0.51
DR6B8R		221.5	29.8	1.42	222.0	37.2	1.10
F3VGZU		195.5	3.8	0.18	195.0	10.2	0.30
GX2A8R		166.5	-25.2	-1.20	181.0	-3.8	-0.11
LM6RKL		196.0	4.3	0.21	192.5	7.7	0.23
M7E7G7	X	0.0	-191.6	-9.15	0.0	-184.8	-5.46
PYNF8G		145.0	-46.7	-2.23	89.0	-95.8	-2.83
Q3KJC9		194.5	2.8	0.14	190.4	5.6	0.17
QX8DKL		194.0	2.3	0.11	177.5	-7.3	-0.22
RZNVZVK		176.0	-15.7	-0.75	167.5	-17.3	-0.51
TW6T2X		215.0	23.3	1.11	217.5	32.7	0.97
UKB7FF		191.5	-0.2	-0.01	187.5	2.7	0.08
YQE22B		196.5	4.8	0.23	195.5	10.7	0.32

Research Property Consensus Value

Consensus Average

191.67 mg/L

184.80 mg/L

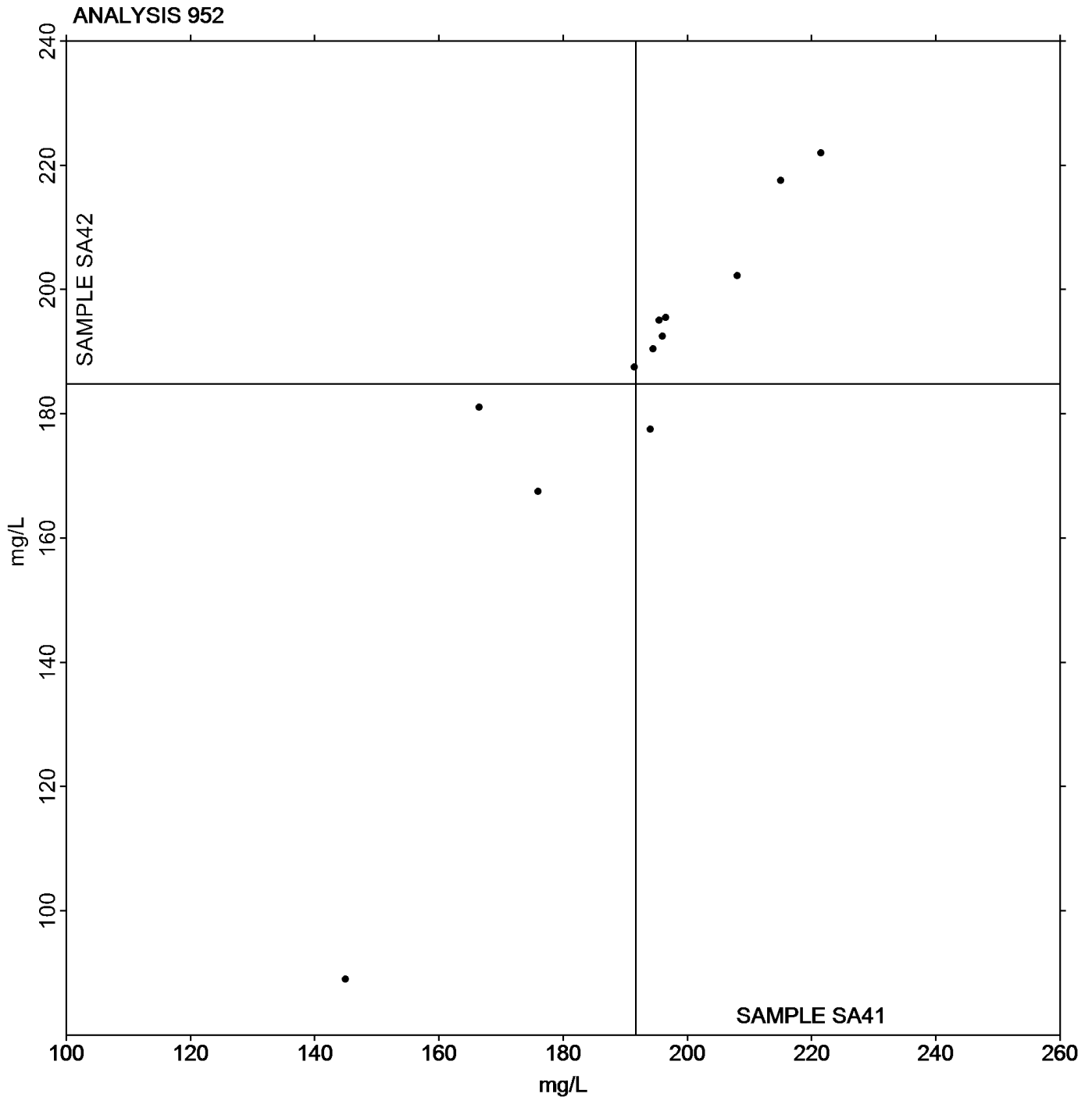
Note: Tests 950, 951 and 952, are research tests. As a result participants should use caution when evaluating data for these tests.

This consensus average is based on 12 reporting participants.

Wines tested: SA41: Merlot; SA42: Merlot

Comments on Assigned Data Flags for Test #952

M7E7G7 (X) - Extreme data.



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

-End of Report-