



## Wine Industry Interlaboratory Program

### Summary Report #072 - Fall 2022

Note: For Wine Cycle 072, some participants received improperly labelled samples, which led to data being swapped between sample sets. Labs identified as having swapped samples were corrected by CTS before the Analyses below were run. Great caution was used to select labs where multiple properties appeared to correspond to a mislabeled sample set. For the identified laboratories, all properties were assumed to be impacted and all results from those participants were transposed

An appendix section has been added to this report that presents the original data as reported by the participants.

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[Introduction to the Wine Program](#)

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

[Appendix of original responses](#)

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

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## **About the Wine Industry Interlaboratory Program**

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

### **About CTS**

Founded in 1971, Collaborative Testing Services, Inc. (CTS) is a privately - owned company that specializes in interlaboratory tests for a variety of sectors: including 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.

For further information concerning this report contact:

**Collaborative Testing Services, Inc.  
21331 Gentry Drive  
Sterling, Virginia 20166 USA**

**+1-571-434-1925  
wine@cts-interlab.com**

**Office Hours: 8:00 a.m. - 4:30 p.m. ET**

## Key for Web Summary Report (Page 1 of 2)

<b>WebCode</b>	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.
<b>Lab Mean</b>	The average of the test results obtained by the participant.
<b>Grand Mean</b>	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.
<b>Difference from Grand Mean</b>	The difference of the LAB MEAN from the GRAND MEAN.
<b>Between-Lab Standard Deviation</b>	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).
<b>Comparative Performance Value</b>	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.
<b>Data Flag</b>	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	<b>CAUTION</b> - 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	<b>STOP</b> - 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	<b>PROCEED</b> - 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.

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### 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.

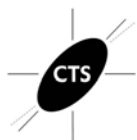
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Labs flagged with an \* are not typically included in the footnotes of a data table. These labs may locate their position in the control ellipse and use the definitions above to help identify the type of testing error. An \* should serve as a caution 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 SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		11.26	0.01	0.11	11.29	0.02	0.42
32QU7N		11.28	0.02	0.40	11.28	0.02	0.32
3TZ8FT	X	11.25	-0.01	-0.18	11.15	-0.11	-2.17
3UXHBV		11.20	-0.05	-1.05	11.20	-0.06	-1.22
4D6EGP		11.27	0.02	0.31	11.27	0.01	0.13
4JDYLA		11.28	0.03	0.50	11.29	0.03	0.51
674KXH		11.26	0.01	0.11	11.28	0.02	0.32
6NYDJF		11.20	-0.05	-1.05	11.20	-0.06	-1.22
6PVZAL	X	11.10	-0.15	-2.98	11.26	0.00	-0.06
6Q8H3V		11.31	0.05	0.98	11.31	0.04	0.80
6RZJXL		11.30	0.05	0.89	11.32	0.06	1.09
6WTD4Z		11.28	0.03	0.50	11.29	0.03	0.51
6XAE6G		11.32	0.07	1.27	11.32	0.06	1.09
789U4K		11.24	-0.01	-0.28	11.25	-0.01	-0.26
7VHTT6		11.29	0.03	0.60	11.32	0.06	1.09
89JWPJ		11.25	0.00	-0.08	11.27	0.01	0.13
8AR98K		11.25	0.00	-0.08	11.26	0.00	-0.06
8BKWPF		11.27	0.02	0.31	11.27	0.00	0.03
8DDLE3		11.20	-0.05	-1.05	11.26	0.00	-0.06
8MGYBW		11.18	-0.07	-1.44	11.21	-0.06	-1.12
8PKBWJ		11.26	0.00	0.01	11.26	-0.01	-0.16
8UZ9FK		11.21	-0.04	-0.86	11.22	-0.04	-0.83
9BXHLH		11.28	0.03	0.50	11.30	0.03	0.61
9HJFEC	X	11.20	-0.05	-1.05	11.06	-0.21	-4.00
A2UM8J	X	10.97	-0.29	-5.59	10.99	-0.27	-5.24
A4FVLR		11.26	0.01	0.11	11.28	0.01	0.22
AAHJ4E		11.28	0.02	0.40	11.30	0.03	0.61
ABGJ9K		11.17	-0.08	-1.63	11.22	-0.05	-0.93
AD27RC		11.26	0.01	0.11	11.26	0.00	-0.06
ALCYTE		11.34	0.08	1.56	11.34	0.07	1.37
AWFFY6		11.29	0.04	0.69	11.30	0.04	0.70
AXQD7U		11.14	-0.12	-2.31	11.14	-0.13	-2.46
B2XV8A		11.40	0.15	2.82	11.40	0.14	2.62
BH8Q2A	*	11.36	0.10	1.95	11.43	0.17	3.20
BWT2TL		11.27	0.02	0.31	11.28	0.02	0.32



Analysis 901  
Ethanol (% of volume)

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
BWVQWJ	X	11.10	-0.15	-2.98	11.00	-0.26	-5.05
C23JM9		11.15	-0.10	-2.02	11.15	-0.11	-2.17
C2MPXC	M	No data reported for this sample			11.39	0.13	2.43
CGW47G		11.27	0.02	0.31	11.27	0.01	0.13
CU4FTN		11.28	0.02	0.40	11.29	0.03	0.51
D9ZUQW		11.25	0.00	-0.08	11.26	-0.01	-0.16
DWJCPD		11.27	0.02	0.31	11.28	0.02	0.32
EGTX4D		11.25	-0.01	-0.18	11.28	0.01	0.22
EMW3UC	X	11.40	0.15	2.82	11.50	0.24	4.54
FZHY9E		11.25	0.00	-0.08	11.28	0.01	0.22
G62N49		11.31	0.05	0.98	11.31	0.05	0.90
G7YYYB		11.26	0.01	0.11	11.28	0.02	0.32
GC7NYP		11.29	0.03	0.60	11.30	0.03	0.61
GECQPA	X	8.82	-2.44	-47.16	8.16	-3.10	-59.53
GQ4CV6		11.29	0.04	0.69	11.30	0.04	0.70
GYL9VQ		11.22	-0.04	-0.76	11.25	-0.01	-0.26
H3UMH2		11.36	0.11	2.05	11.35	0.09	1.66
H8BE4H		11.28	0.02	0.40	11.30	0.03	0.61
HENAZB		11.26	0.00	0.01	11.26	0.00	-0.06
HQ242B		11.35	0.10	1.85	11.36	0.10	1.85
HQ4RKA		11.14	-0.11	-2.21	11.20	-0.06	-1.22
HVYWM8		11.30	0.05	0.89	11.30	0.04	0.70
JAXRC8		11.10	-0.15	-2.98	11.10	-0.16	-3.13
JDTBZ4		11.20	-0.05	-1.05	11.20	-0.06	-1.22
JFUMR		11.26	0.01	0.11	11.27	0.01	0.13
JQV8BC		11.28	0.02	0.40	11.29	0.02	0.42
JRTH7F		11.22	-0.03	-0.66	11.23	-0.04	-0.74
JT7FTP	X	3.20	-8.06	-155.82	3.20	-8.07	-154.77
JUYFNF		11.29	0.03	0.60	11.25	-0.02	-0.35
KLMGU6		11.26	0.00	0.01	11.25	-0.02	-0.35
LA32D3		11.33	0.08	1.47	11.34	0.08	1.47
LVZR89		11.26	0.01	0.11	11.28	0.02	0.32
MDJBTY		11.29	0.03	0.60	11.29	0.02	0.42
MGKJW9		11.23	-0.02	-0.47	11.24	-0.03	-0.54
MTDZLA		11.22	-0.04	-0.76	11.23	-0.04	-0.74



# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #072

Fall 2022

## Analysis 901 Ethanol (% of volume)

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
N8B2R4		11.19	-0.06	-1.24	11.18	-0.08	-1.60
NGUD72	X	11.25	0.00	-0.08	11.40	0.14	2.62
NGXZH9	X	11.09	-0.16	-3.18	11.16	-0.10	-1.98
NJ3XZA		11.27	0.02	0.31	11.27	0.01	0.13
PMFQH9		11.28	0.03	0.50	11.30	0.04	0.70
Q6VK4A		11.29	0.03	0.60	11.29	0.02	0.42
T8EFHD		11.23	-0.03	-0.57	11.22	-0.04	-0.83
TC8KBG		11.33	0.07	1.37	11.34	0.08	1.47
TLYZZL		11.26	0.01	0.11	11.26	0.00	-0.06
U89ZUX		11.27	0.02	0.31	11.29	0.02	0.42
UFZH4Z		11.16	-0.09	-1.82	11.17	-0.09	-1.79
ULU46F		11.24	-0.01	-0.28	11.25	-0.01	-0.26
UXMWLY		11.17	-0.09	-1.73	11.20	-0.06	-1.22
W2XQE2		11.26	0.00	0.01	11.26	0.00	-0.06
WELG6C		11.26	0.00	0.01	11.28	0.01	0.22
WT2GYG	X	11.50	0.25	4.75	11.50	0.24	4.54
WTPKUC		11.19	-0.06	-1.24	11.19	-0.08	-1.50
WUVMKW		11.25	0.00	-0.08	11.26	-0.01	-0.16
WUW82P		11.29	0.04	0.69	11.29	0.03	0.51
X4GXY2		11.16	-0.09	-1.82	11.21	-0.05	-1.02
X6AN9L		11.25	0.00	-0.08	11.26	0.00	-0.06
XHVZKW		11.28	0.03	0.50	11.29	0.03	0.51
XWG9QA		11.30	0.05	0.91	11.34	0.07	1.42
YETFEB		11.27	0.02	0.31	11.28	0.02	0.32
YGM4X7	X	11.39	0.13	2.53	11.29	0.03	0.51
YTFKM8		11.22	-0.03	-0.66	11.22	-0.05	-0.93
YVFAVM		11.28	0.03	0.50	11.29	0.03	0.51
Z94Y4R		11.26	0.00	0.01	11.27	0.01	0.13
Z9ZCQK		11.25	0.00	-0.08	11.25	-0.01	-0.26
ZB6XJQ		11.23	-0.02	-0.47	11.23	-0.03	-0.64
ZQ2JWQ		11.28	0.03	0.50	11.28	0.01	0.22



Grand Means		Summary Statistics	
	11.254 percent		11.263 percent
Std Dev Btwn Labs			0.052 percent
	0.052 percent		0.052 percent
<b>Statistics based on 88 of 101 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #901**

- JT7FTP (X) - Extreme data.
- YGM4X7 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA43.
- WT2GYG (X) - Data for both samples are high. Possible Systematic Error.
- C2MPXC (M) - Participant did not submit data for sample SA43.
- 9HJFEC (X) - Data for sample SA44 are low. Inconsistent within the determinations of both samples.
- 6PVZAL (X) - Data for sample SA43 are low.
- GECQPA (X) - Data for both samples are low.
- A2UM8J (X) - Data for both samples are low. Possible Systematic Error.
- EMW3UC (X) - Data for both samples are high. Inconsistent within the determinations of sample SA43.
- NGUD72 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.
- NGXZH9 (X) - Data for sample SA43 are low.
- 3TZ8FT (X) - Inconsistent in testing between samples.
- BWVQWJ (X) - Data for both samples are low.

**Results by Methodology (as reported by laboratory)**

Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	11.190	0.000	-0.06	11.180	0.000	-0.08	1/1
Ebulliometer Method	11.217	0.161	-0.04	11.217	0.161	-0.05	3/6
Gas Chromatography Method	11.261	0.058	0.01	11.276	0.087	0.01	2/5
Near Infrared Method	11.262	0.042	0.01	11.274	0.042	0.01	65/69
Dist. / Density Method	11.254	0.053	0.00	11.259	0.048	0.00	11/13
FTIR	11.185	0.048	-0.07	11.203	0.037	-0.06	4/4
Other _____	11.270	0.014	0.02	11.288	0.011	0.02	2/3

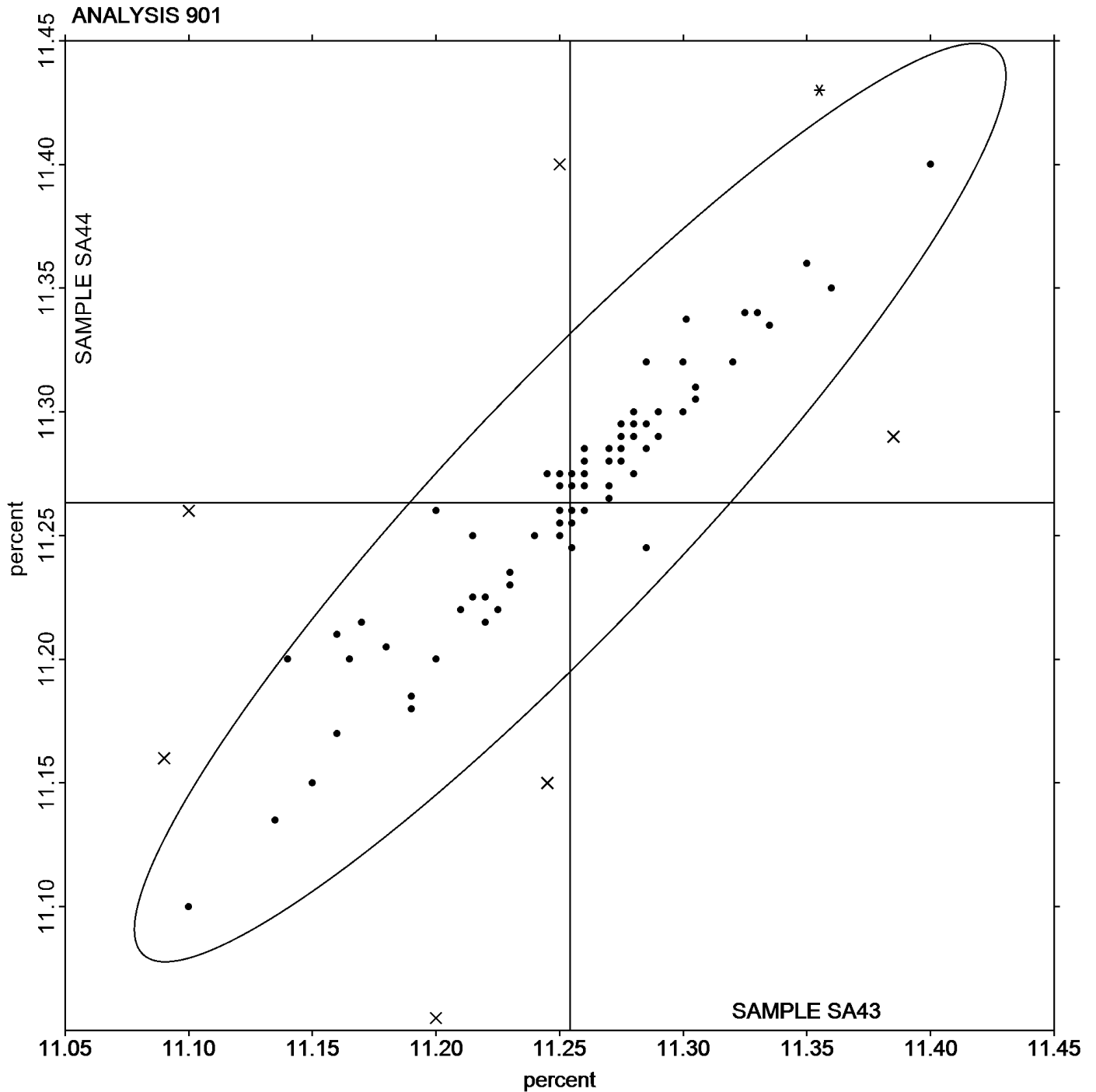




Analysis 901

Fall 2022

Ethanol (% of volume)





Analysis 902  
Total Sulfur Dioxide

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		139.0	9.7	1.20	128.0	9.2	1.30
32QU7N		128.0	-1.3	-0.17	116.0	-2.8	-0.40
3TZ8FT		126.5	-2.8	-0.35	115.0	-3.8	-0.54
3UXHBV		116.0	-13.3	-1.66	106.0	-12.8	-1.81
4D6EGP		125.7	-3.7	-0.46	115.7	-3.1	-0.44
4JDYLA		132.5	3.2	0.39	120.5	1.7	0.24
674KXH		133.0	3.7	0.45	122.0	3.2	0.45
6NYDJF	X	133.0	3.7	0.45	135.5	16.7	2.35
6PVZAL		138.0	8.7	1.08	125.0	6.2	0.87
6Q8H3V		117.5	-11.8	-1.48	107.5	-11.3	-1.59
6RZJXL		131.5	2.2	0.27	122.0	3.2	0.45
6WTD4Z		138.1	8.7	1.08	121.4	2.5	0.36
6XAE6G		128.5	-0.8	-0.11	116.0	-2.8	-0.40
789U4K		128.5	-0.8	-0.11	118.0	-0.8	-0.11
7VHTT6		122.0	-7.3	-0.92	110.0	-8.8	-1.24
89JWPJ	X	125.0	-4.3	-0.54	124.5	5.7	0.80
8AR98K	X	134.5	5.2	0.64	114.1	-4.7	-0.66
8BKWPF		131.0	1.7	0.21	121.0	2.2	0.31
8DDLE3		133.0	3.7	0.45	122.0	3.2	0.45
8MGYBW		124.5	-4.8	-0.60	117.0	-1.8	-0.25
8PKBWJ		135.0	5.7	0.70	124.5	5.7	0.80
8UZ9FK		117.0	-12.3	-1.54	111.0	-7.8	-1.10
9BXHLH		123.0	-6.3	-0.79	118.0	-0.8	-0.11
9HJFEC		116.0	-13.3	-1.66	103.0	-15.8	-2.23
A2UM8J		131.0	1.7	0.21	121.0	2.2	0.31
A4FVLR		125.5	-3.8	-0.48	114.0	-4.8	-0.68
AAHJ4E		124.0	-5.3	-0.67	113.5	-5.3	-0.75
ABGJ9K		144.5	15.2	1.89	130.5	11.7	1.65
AD27RC		133.0	3.7	0.45	125.0	6.2	0.87
ALCYTE		135.0	5.7	0.70	124.5	5.7	0.80
AWFFY6	X	100.0	-29.3	-3.65	92.0	-26.8	-3.78
AXQD7U		126.5	-2.8	-0.35	118.0	-0.8	-0.11
BH8Q2A		126.4	-3.0	-0.37	114.1	-4.8	-0.67
BWT2TL		135.5	6.2	0.77	124.5	5.7	0.80
BWVQWJ		130.5	1.2	0.14	119.5	0.7	0.10



Analysis 902

Total Sulfur Dioxide

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
C23JM9		126.7	-2.6	-0.33	114.0	-4.8	-0.68
C2MPXC	M	No data reported for this sample			117.0	-1.8	-0.25
CGW47G		128.0	-1.3	-0.17	121.5	2.7	0.38
CU4FTN		137.5	8.2	1.01	125.0	6.2	0.87
D9ZUQW		124.5	-4.8	-0.60	119.0	0.2	0.03
DWJCPD		128.0	-1.3	-0.17	115.0	-3.8	-0.54
EGTX4D		123.0	-6.3	-0.79	116.0	-2.8	-0.40
EMW3UC	X	130.0	0.7	0.08	130.0	11.2	1.58
FZHY9E		134.0	4.7	0.58	121.0	2.2	0.31
G62N49		121.0	-8.3	-1.04	109.0	-9.8	-1.38
G7YYYYB		125.0	-4.3	-0.54	120.0	1.2	0.17
GC7NYP	*	138.0	8.7	1.08	118.5	-0.3	-0.04
GECQPA	X	102.3	-27.1	-3.37	102.0	-16.8	-2.37
GQ4CV6		134.0	4.7	0.58	118.0	-0.8	-0.11
GYL9VQ	X	134.0	4.7	0.58	134.5	15.7	2.21
H3UMH2		142.0	12.7	1.57	128.0	9.2	1.30
H8BE4H		137.5	8.2	1.01	126.0	7.2	1.01
HENAZB		139.7	10.4	1.29	125.7	6.9	0.97
HQ242B	X	103.5	-25.8	-3.22	101.0	-17.8	-2.51
HQ4RKA		120.0	-9.3	-1.16	116.0	-2.8	-0.40
HVYWM8		122.0	-7.4	-0.92	110.2	-8.6	-1.21
JAXRC8		128.0	-1.3	-0.17	121.6	2.8	0.39
JDTBZ4		143.0	13.7	1.70	130.5	11.7	1.65
JJFUMR	X	130.5	1.2	0.14	143.5	24.7	3.48
JQV8BC		122.0	-7.3	-0.92	109.5	-9.3	-1.31
JRTH7F		118.5	-10.8	-1.35	109.5	-9.3	-1.31
JT7FTP		129.0	-0.3	-0.04	121.0	2.2	0.31
JUYFNF	X	117.0	-12.3	-1.54	128.0	9.2	1.30
KLMGU6	X	100.5	-28.8	-3.59	98.0	-20.8	-2.93
LA32D3		124.5	-4.8	-0.60	116.0	-2.8	-0.40
LVZR89		132.0	2.7	0.33	126.0	7.2	1.01
MDJBTY		123.5	-5.8	-0.73	117.5	-1.3	-0.18
MGKJW9		124.5	-4.8	-0.60	114.5	-4.3	-0.61
MTDZLA		117.0	-12.3	-1.54	107.5	-11.3	-1.59
N8B2R4		133.5	4.2	0.52	118.5	-0.3	-0.04



Analysis 902  
Total Sulfur Dioxide

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NGUD72		133.5	4.2	0.52	120.0	1.2	0.17
NGXZH9		130.0	0.7	0.08	117.0	-1.8	-0.25
NJ3XZA		139.0	9.7	1.20	122.0	3.2	0.45
PMFQH9		130.0	0.7	0.08	121.0	2.2	0.31
Q6VK4A		131.0	1.7	0.21	121.0	2.2	0.31
T8EFHD		143.0	13.7	1.70	131.0	12.2	1.72
TC8KBG		136.5	7.2	0.89	126.0	7.2	1.01
TLYZZL	X	95.0	-34.3	-4.28	86.5	-32.3	-4.56
U89ZUX	*	116.0	-13.3	-1.66	102.5	-16.3	-2.30
UFZH4Z		129.5	0.2	0.02	122.0	3.2	0.45
ULU46F		126.5	-2.8	-0.35	115.0	-3.8	-0.54
UXMWLY		145.0	15.7	1.95	131.0	12.2	1.72
VVXDB7		122.7	-6.6	-0.83	115.7	-3.1	-0.44
W2XQE2	*	107.0	-22.3	-2.78	99.5	-19.3	-2.72
WELG6C		118.0	-11.3	-1.41	109.0	-9.8	-1.38
WT2GYG		120.0	-9.3	-1.16	112.5	-6.3	-0.89
WTPKUC	*	151.0	21.7	2.70	140.0	21.2	2.99
WUVMKW		135.5	6.2	0.77	124.0	5.2	0.73
WUW82P		128.9	-0.4	-0.06	119.4	0.6	0.08
X4GXY2		134.5	5.2	0.64	126.0	7.2	1.01
X6AN9L		129.0	-0.3	-0.04	118.5	-0.3	-0.04
XHVZKW	*	122.0	-7.3	-0.92	119.5	0.7	0.10
XWG9QA		128.1	-1.2	-0.15	115.5	-3.3	-0.47
YETFEB		126.5	-2.8	-0.35	116.0	-2.8	-0.40
YFRVWW		138.2	8.9	1.10	126.4	7.5	1.06
YGM4X7	X	155.0	25.7	3.19	146.0	27.2	3.84
YTFKM8		137.0	7.7	0.95	124.0	5.2	0.73
YVFAVM		117.5	-11.8	-1.48	108.5	-10.3	-1.45
Z94Y4R		134.6	5.2	0.65	124.5	5.7	0.80
ZB6XJQ		128.0	-1.3	-0.17	119.0	0.2	0.03
ZQ2JWQ		142.5	13.2	1.64	130.5	11.7	1.65



**Analysis 902  
Total Sulfur Dioxide**

Grand Means		Summary Statistics	
	129.35 mg/L		118.80 mg/L
Std Dev Btwn Labs			7.09 mg/L
	8.03 mg/L		
<b>Statistics based on 87 of 101 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #902**

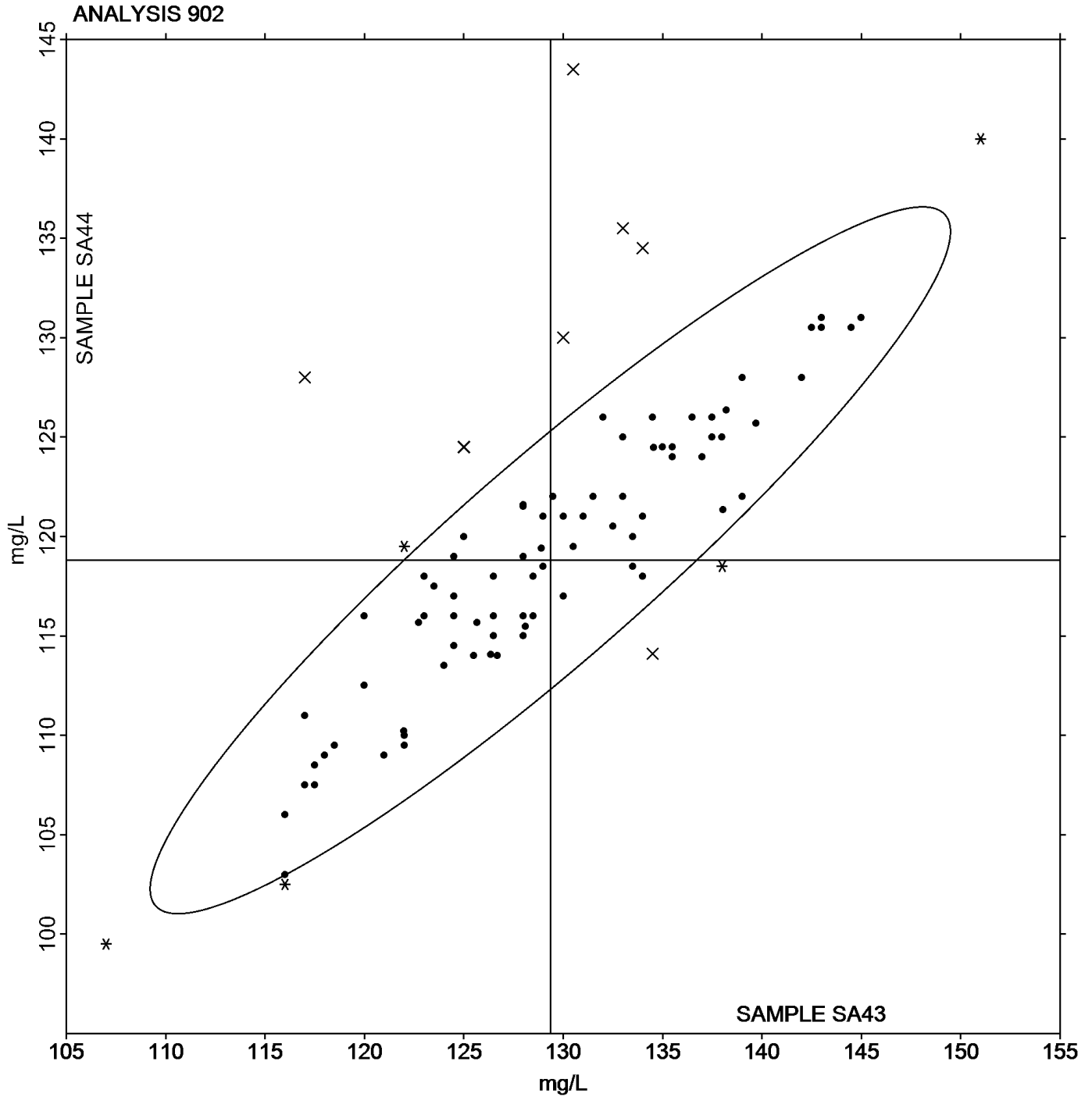
- GYL9VQ (X) - Inconsistent in testing between samples.
- YGM4X7 (X) - Data for both samples are high. Possible Systematic Error.
- AWFFY6 (X) - Data for both samples are low. Possible Systematic Error.
- TLYZZL (X) - Data for both samples are low. Inconsistent within the determinations of both samples.
- JFUMR (X) - Inconsistent in testing between samples. High data for Sample SA44.
- C2MPXC (M) - Participant did not submit data for sample SA43.
- KLMGU6 (X) - Data for both samples are low. Possible Systematic Error.
- 6NYDJF (X) - Inconsistent in testing between samples.
- 8AR98K (X) - Inconsistent in testing between samples.
- 89JWPJ (X) - Inconsistent in testing between samples.
- JUYFNF (X) - Inconsistent in testing between samples.
- HQ242B (X) - Data for sample SA43 are low. Inconsistent within the determinations of both samples.
- GECQPA (X) - Data for sample SA43 are low.
- EMW3UC (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA44.

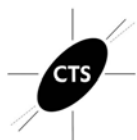
**Results by Methodology (as reported by laboratory)**

Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	131.000	0.000	1.7	121.000	0.000	2.2	1/1
Ripper Method	124.918	5.809	-4.4	114.730	5.873	-4.1	34/39
Aeration Oxidation (AO) Method	127.970	7.889	-1.4	118.539	5.552	-0.3	10/13
Segmented Flow Analyzer	130.650	4.575	1.3	120.050	3.183	1.2	7/7
Enzymatic Method	131.667	5.184	2.3	121.167	4.138	2.4	9/9
Colorimetric Analyzer	137.707	4.040	8.4	124.968	4.355	6.2	14/18
FTIR	135.725	13.906	6.4	126.475	10.938	7.7	4/5
Flow Injection Analysis	128.145	10.955	-1.2	117.807	9.994	-1.0	8/9



Analysis 902  
Total Sulfur Dioxide





Free Sulfur Dioxide

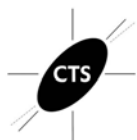
WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		26.50	-4.03	-1.29	23.00	-2.53	-0.83
32QU7N		33.50	2.97	0.96	29.50	3.97	1.30
3TZ8FT		32.00	1.47	0.47	27.00	1.47	0.48
3UXHBV		29.00	-1.53	-0.49	24.00	-1.53	-0.50
4D6EGP		34.00	3.47	1.12	28.00	2.47	0.81
4JDYLA		32.00	1.47	0.47	27.00	1.47	0.48
674KXH		29.00	-1.53	-0.49	25.00	-0.53	-0.17
6NYDJF		33.50	2.97	0.96	29.50	3.97	1.30
6PVZAL		33.00	2.47	0.79	28.00	2.47	0.81
6Q8H3V		30.50	-0.03	-0.01	24.50	-1.03	-0.34
6RZJXL		28.50	-2.03	-0.65	24.00	-1.53	-0.50
6WTD4Z		30.55	0.02	0.01	24.75	-0.78	-0.26
6XAE6G		37.00	6.47	2.08	32.00	6.47	2.12
789U4K	X	28.00	-2.53	-0.81	27.00	1.47	0.48
7VHTT6		34.00	3.47	1.12	28.50	2.97	0.97
89JWPJ		31.00	0.47	0.15	28.00	2.47	0.81
8AR98K		32.45	1.92	0.62	27.40	1.87	0.61
8BKWPF		33.00	2.47	0.79	28.00	2.47	0.81
8DDLE3		28.00	-2.53	-0.81	22.50	-3.03	-0.99
8MGYBW	X	24.30	-6.23	-2.00	23.00	-2.53	-0.83
8PKBWJ		33.50	2.97	0.96	30.50	4.97	1.63
8UZ9FK	*	32.50	1.97	0.63	24.50	-1.03	-0.34
9BXHLH		30.50	-0.03	-0.01	26.00	0.47	0.15
9HJFEC		31.00	0.47	0.15	25.50	-0.03	-0.01
A2UM8J		31.00	0.47	0.15	26.50	0.97	0.32
A4FVLR		30.50	-0.03	-0.01	24.00	-1.53	-0.50
AAHJ4E		31.00	0.47	0.15	27.50	1.97	0.65
ABGJ9K		36.00	5.47	1.76	29.50	3.97	1.30
AD27RC	*	37.00	6.47	2.08	30.00	4.47	1.47
ALCYTE		25.50	-5.03	-1.62	21.25	-4.28	-1.40
AWFFY6		26.00	-4.53	-1.45	21.00	-4.53	-1.49
AXQD7U		32.00	1.47	0.47	27.00	1.47	0.48
B2XV8A		27.20	-3.33	-1.07	20.40	-5.13	-1.68
BH8Q2A	*	22.95	-7.58	-2.44	17.80	-7.73	-2.54
BWT2TL		30.50	-0.03	-0.01	26.50	0.97	0.32



Free Sulfur Dioxide

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
BWVQWJ		27.20	-3.33	-1.07	24.15	-1.38	-0.45
C23JM9		34.60	4.07	1.31	29.50	3.97	1.30
C2MPXC	M	No data reported for this sample			25.50	-0.03	-0.01
CGW47G		32.50	1.97	0.63	27.00	1.47	0.48
CU4FTN		29.00	-1.53	-0.49	24.00	-1.53	-0.50
D9ZUQW		33.00	2.47	0.79	29.50	3.97	1.30
DWJCPD		34.00	3.47	1.12	28.00	2.47	0.81
EGTX4D		31.50	0.97	0.31	26.00	0.47	0.15
EMW3UC		28.45	-2.08	-0.67	23.35	-2.18	-0.72
FZHY9E		27.00	-3.53	-1.13	22.00	-3.53	-1.16
G62N49		28.00	-2.53	-0.81	22.00	-3.53	-1.16
G7YYYB		32.00	1.47	0.47	28.00	2.47	0.81
GC7NYP		34.00	3.47	1.12	27.50	1.97	0.65
GECQPA	X	17.60	-12.93	-4.15	17.20	-8.33	-2.73
GQ4CV6	X	32.00	1.47	0.47	23.00	-2.53	-0.83
GYL9VQ	X	25.00	-5.53	-1.78	25.00	-0.53	-0.17
H3UMH2		26.00	-4.53	-1.45	23.00	-2.53	-0.83
H8BE4H		28.00	-2.53	-0.81	23.00	-2.53	-0.83
HENAZB		28.65	-1.88	-0.60	22.65	-2.88	-0.94
HQ242B		27.70	-2.83	-0.91	24.55	-0.98	-0.32
HQ4RKA		31.00	0.47	0.15	27.00	1.47	0.48
HVYWM8		36.38	5.85	1.88	31.03	5.50	1.80
JAXRC8	X	35.80	5.27	1.69	35.80	10.27	3.37
JDTBZ4		38.00	7.47	2.40	32.00	6.47	2.12
JFUMR	*	38.50	7.97	2.56	33.00	7.47	2.45
JQV8BC		31.00	0.47	0.15	26.00	0.47	0.15
JRTH7F		29.00	-1.53	-0.49	22.50	-3.03	-0.99
JT7FTP		32.50	1.97	0.63	27.00	1.47	0.48
JUYFNF		25.50	-5.03	-1.62	21.00	-4.53	-1.49
KLMGU6		31.50	0.97	0.31	28.50	2.97	0.97
LA32D3		28.50	-2.03	-0.65	23.50	-2.03	-0.67
LVZR89		31.00	0.47	0.15	25.00	-0.53	-0.17
MDJBTY		29.00	-1.53	-0.49	25.00	-0.53	-0.17
MGKJW9		29.00	-1.53	-0.49	25.00	-0.53	-0.17
MTDZLA		29.00	-1.53	-0.49	25.50	-0.03	-0.01





Free Sulfur Dioxide

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
N8B2R4		26.40	-4.13	-1.33	22.00	-3.53	-1.16
NGUD72		31.00	0.47	0.15	25.50	-0.03	-0.01
NGXZH9		27.50	-3.03	-0.97	21.00	-4.53	-1.49
NJ3XZA		29.00	-1.53	-0.49	24.00	-1.53	-0.50
PMFQH9		30.00	-0.53	-0.17	24.00	-1.53	-0.50
Q6VK4A		33.50	2.97	0.96	28.50	2.97	0.97
T8EFHD		30.50	-0.03	-0.01	25.50	-0.03	-0.01
TC8KBG		29.45	-1.08	-0.35	24.95	-0.58	-0.19
TLYZZL	X	29.50	-1.03	-0.33	29.00	3.47	1.14
U89ZUX		24.00	-6.53	-2.10	18.50	-7.03	-2.31
UFZH4Z		33.00	2.47	0.79	28.00	2.47	0.81
ULU46F		31.00	0.47	0.15	27.00	1.47	0.48
UXMWLY		27.00	-3.53	-1.13	21.00	-4.53	-1.49
W2XQE2		30.00	-0.53	-0.17	24.00	-1.53	-0.50
WELG6C	*	22.00	-8.53	-2.74	18.00	-7.53	-2.47
WT2GYG		34.74	4.21	1.35	28.70	3.17	1.04
WTPKUC		33.00	2.47	0.79	27.50	1.97	0.65
WUVMKW		30.55	0.02	0.01	24.80	-0.73	-0.24
WUW82P		29.45	-1.08	-0.35	22.25	-3.28	-1.08
X4GXY2		29.00	-1.53	-0.49	24.50	-1.03	-0.34
X6AN9L		30.00	-0.53	-0.17	25.00	-0.53	-0.17
XHVZKW		29.50	-1.03	-0.33	27.00	1.47	0.48
XWG9QA		28.42	-2.11	-0.68	22.75	-2.78	-0.91
YETFEB		31.50	0.97	0.31	26.00	0.47	0.15
YFRVWW		33.53	3.00	0.96	28.86	3.32	1.09
YGM4X7	X	44.00	13.47	4.33	35.00	9.47	3.11
YTFKM8		29.50	-1.03	-0.33	23.50	-2.03	-0.67
YVFAVM		30.50	-0.03	-0.01	26.00	0.47	0.15
Z94Y4R		28.91	-1.62	-0.52	24.17	-1.36	-0.45
Z9ZCQK		32.00	1.47	0.47	26.00	0.47	0.15
ZB6XJQ		29.00	-1.53	-0.49	26.00	0.47	0.15
ZQ2JWQ		29.00	-1.53	-0.49	24.50	-1.03	-0.34



**Analysis 903  
Free Sulfur Dioxide**

Grand Means		Summary Statistics	
	30.528 mg/L		25.530 mg/L
Std Dev Btwn Labs			3.048 mg/L
	3.112 mg/L		
<b>Statistics based on 93 of 102 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #903**

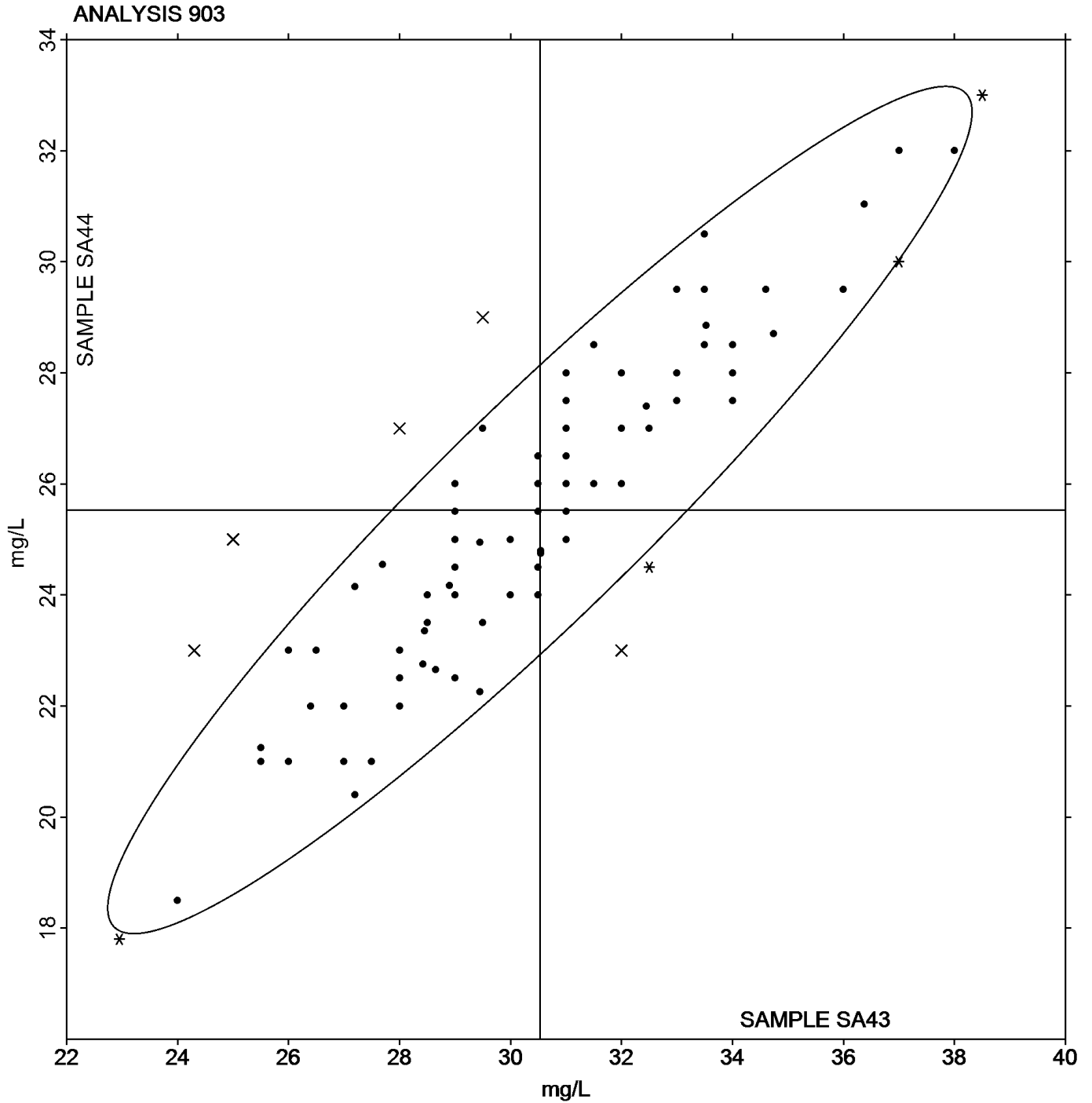
- GYL9VQ (X) - Inconsistent in testing between samples.
- YGM4X7 (X) - Data for both samples are high. Possible Systematic Error.
- 8MGYBW (X) - Inconsistent in testing between samples.
- TLYZZL (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.
- C2MPXC (M) - Participant did not submit data for sample SA43.
- 789U4K (X) - Inconsistent in testing between samples.
- GQ4CV6 (X) - Inconsistent in testing between samples.
- GECQPA (X) - Data for both samples are low. Possible Systematic Error.
- JAXRC8 (X) - Data for sample SA44 are high.

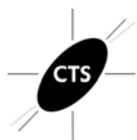
**Results by Methodology (as reported by laboratory)**

Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	32.000	1.414	1.47	27.500	0.707	1.97	2/2
Ripper Method	30.709	2.849	0.18	25.872	3.039	0.34	29/31
Aeration Oxidation (AO) Method	29.494	3.683	-1.03	24.269	3.284	-1.26	23/28
Segmented Flow Analyzer	32.650	3.140	2.12	27.321	2.695	1.79	7/8
Enzymatic Method	30.990	2.071	0.46	25.990	1.775	0.46	5/5
Colorimetric Analyzer	30.131	3.169	-0.40	25.372	3.140	-0.16	14/15
Flow Injection Analysis	29.703	1.673	-0.82	24.380	2.063	-1.15	9/9
FTIR	33.375	3.198	2.85	28.750	2.255	3.22	4/4



Analysis 903  
Free Sulfur Dioxide





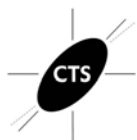
Analysis 904  
Titratable Acidity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		6.430	-0.167	-0.61	6.420	-0.168	-0.66
32QU7N		6.460	-0.137	-0.50	6.460	-0.128	-0.50
3TZ8FT		6.550	-0.047	-0.17	6.500	-0.088	-0.34
3UXHBV		6.450	-0.147	-0.53	6.300	-0.288	-1.13
4D6EGP		7.000	0.403	1.47	6.900	0.312	1.22
4JDYLA		6.900	0.303	1.10	6.795	0.207	0.81
674KXH		6.300	-0.297	-1.08	6.300	-0.288	-1.13
6NYDJF		6.145	-0.452	-1.64	6.110	-0.478	-1.87
6PVZAL		6.600	0.003	0.01	6.700	0.112	0.44
6Q8H3V		6.550	-0.047	-0.17	6.475	-0.113	-0.44
6RZJXL		6.300	-0.297	-1.08	6.250	-0.338	-1.32
6WTD4Z		6.405	-0.192	-0.70	6.335	-0.253	-0.99
6XAE6G		7.000	0.403	1.47	7.000	0.412	1.61
789U4K		6.585	-0.012	-0.04	6.620	0.032	0.12
7VHTT6		6.450	-0.147	-0.53	6.500	-0.088	-0.34
89JWPJ		6.435	-0.162	-0.59	6.455	-0.133	-0.52
8AR98K		6.395	-0.202	-0.73	6.380	-0.208	-0.81
8MGYBW		6.890	0.293	1.07	6.740	0.152	0.59
8PKBWJ	*	6.400	-0.197	-0.71	6.600	0.012	0.05
8UZ9FK		6.300	-0.297	-1.08	6.350	-0.238	-0.93
9BXHLH	*	7.100	0.503	1.83	7.200	0.612	2.40
9HJFEC	X	6.410	-0.187	-0.68	6.150	-0.438	-1.71
A2UM8J		6.500	-0.097	-0.35	6.455	-0.133	-0.52
A4FVLR		6.760	0.163	0.59	6.785	0.197	0.77
AAHJ4E		6.350	-0.247	-0.90	6.300	-0.288	-1.13
ABGJ9K		6.890	0.293	1.07	6.845	0.257	1.01
AD27RC		6.800	0.203	0.74	6.700	0.112	0.44
ALCYTE		6.305	-0.292	-1.06	6.355	-0.233	-0.91
AWFFY6		6.485	-0.112	-0.41	6.570	-0.018	-0.07
AXQD7U	X	6.500	-0.097	-0.35	6.200	-0.388	-1.52
B2XV8A		6.413	-0.184	-0.67	6.410	-0.178	-0.70
BH8Q2A	X	7.915	1.318	4.79	7.865	1.277	5.00
BWT2TL		6.420	-0.177	-0.64	6.405	-0.183	-0.72
BWVQWJ		6.770	0.173	0.63	6.590	0.002	0.01
C23JM9		6.980	0.383	1.39	6.980	0.392	1.53



Analysis 904  
Titratable Acidity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
C2MPXC	M	No data reported for this sample			6.350	-0.238	-0.93
CGW47G		6.400	-0.197	-0.71	6.450	-0.138	-0.54
CU4FTN		6.150	-0.447	-1.62	6.300	-0.288	-1.13
D9ZUQW		6.925	0.328	1.19	6.889	0.301	1.18
DWJCPD		6.500	-0.097	-0.35	6.450	-0.138	-0.54
EGTX4D		6.750	0.153	0.56	6.835	0.247	0.97
EMW3UC	*	7.314	0.717	2.61	7.296	0.708	2.77
FZHY9E		7.000	0.403	1.47	6.950	0.362	1.42
G62N49		6.850	0.253	0.92	6.800	0.212	0.83
G7YYYB	X	4.450	-2.147	-7.80	4.330	-2.258	-8.84
GC7NYP		6.750	0.153	0.56	6.800	0.212	0.83
GECQPA		6.465	-0.132	-0.48	6.615	0.027	0.11
GQ4CV6		6.885	0.288	1.05	6.815	0.227	0.89
GYL9VQ	*	6.450	-0.147	-0.53	6.650	0.062	0.24
H3UMH2	*	7.350	0.753	2.74	7.280	0.692	2.71
H8BE4H		6.410	-0.187	-0.68	6.395	-0.193	-0.76
HENAZB		6.555	-0.042	-0.15	6.550	-0.038	-0.15
HQ242B		7.050	0.453	1.65	6.900	0.312	1.22
HQ4RKA		6.070	-0.527	-1.91	6.120	-0.468	-1.83
HVYWM8		6.075	-0.522	-1.90	6.075	-0.513	-2.01
JAXRC8		6.400	-0.197	-0.71	6.450	-0.138	-0.54
JDTBZ4		6.600	0.003	0.01	6.500	-0.088	-0.34
JJFUMR		6.370	-0.227	-0.82	6.410	-0.178	-0.70
JQV8BC		6.750	0.153	0.56	6.600	0.012	0.05
JRTH7F		6.500	-0.097	-0.35	6.500	-0.088	-0.34
JT7FTP		6.300	-0.297	-1.08	6.225	-0.363	-1.42
JUYFNF	X	8.250	1.653	6.01	6.850	0.262	1.03
KLMGU6		6.395	-0.202	-0.73	6.375	-0.213	-0.83
LA32D3		6.700	0.103	0.38	6.600	0.012	0.05
LVZR89	X	7.215	0.618	2.25	6.900	0.312	1.22
MGKJW9		6.415	-0.182	-0.66	6.395	-0.193	-0.76
MTDZLA		6.480	-0.117	-0.42	6.505	-0.083	-0.33
N8B2R4	X	6.600	0.003	0.01	6.900	0.312	1.22
NGUD72		6.435	-0.162	-0.59	6.490	-0.098	-0.38
NGXZH9		6.600	0.003	0.01	6.620	0.032	0.12



Analysis 904  
Titratable Acidity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NJ3XZA		6.530	-0.067	-0.24	6.540	-0.048	-0.19
PMFQH9		6.600	0.003	0.01	6.500	-0.088	-0.34
Q6VK4A		6.450	-0.147	-0.53	6.450	-0.138	-0.54
T8EFHD		6.905	0.308	1.12	6.950	0.362	1.42
TC8KBG		6.350	-0.247	-0.90	6.500	-0.088	-0.34
TLYZZL		6.900	0.303	1.10	6.750	0.162	0.63
U89ZUX		6.850	0.253	0.92	6.750	0.162	0.63
UFZH4Z		6.500	-0.097	-0.35	6.500	-0.088	-0.34
ULU46F		6.500	-0.097	-0.35	6.500	-0.088	-0.34
UXMWLY		6.300	-0.297	-1.08	6.400	-0.188	-0.74
VVXDB7		6.932	0.335	1.22	6.893	0.305	1.19
W2XQE2		6.450	-0.147	-0.53	6.450	-0.138	-0.54
WELG6C		6.700	0.103	0.38	6.650	0.062	0.24
WT2GYG		6.350	-0.247	-0.90	6.390	-0.198	-0.78
WTPKUC		6.675	0.078	0.28	6.645	0.057	0.22
WUVMKW		6.835	0.238	0.87	6.755	0.167	0.65
WUW82P		6.590	-0.007	-0.02	6.520	-0.068	-0.27
X4GXY2		6.610	0.013	0.05	6.610	0.022	0.09
X6AN9L		6.310	-0.287	-1.04	6.315	-0.273	-1.07
XHVZKW		6.665	0.068	0.25	6.765	0.177	0.69
XWG9QA		6.225	-0.372	-1.35	6.200	-0.388	-1.52
YETFEB		6.895	0.298	1.08	6.915	0.327	1.28
YFRVWW		6.895	0.298	1.08	6.885	0.297	1.16
YGM4X7		6.750	0.153	0.56	6.845	0.257	1.01
YTFKM8	*	7.300	0.703	2.56	7.250	0.662	2.59
YVFAVM		6.800	0.203	0.74	6.705	0.117	0.46
Z94Y4R		6.670	0.073	0.27	6.550	-0.038	-0.15
Z9ZCQK	*	6.150	-0.447	-1.62	6.350	-0.238	-0.93
ZB6XJQ		6.550	-0.047	-0.17	6.500	-0.088	-0.34
ZQ2JWQ		6.450	-0.147	-0.53	6.450	-0.138	-0.54



Analysis 904  
Titratable Acidity

Grand Means		Summary Statistics	
	6.5967 g/L as tartaric acid		6.5881 g/L as tartaric acid
Stnd Dev Btwn Labs			
	0.2751 g/L as tartaric acid		0.2555 g/L as tartaric acid
<b>Statistics based on 92 of 100 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #904**

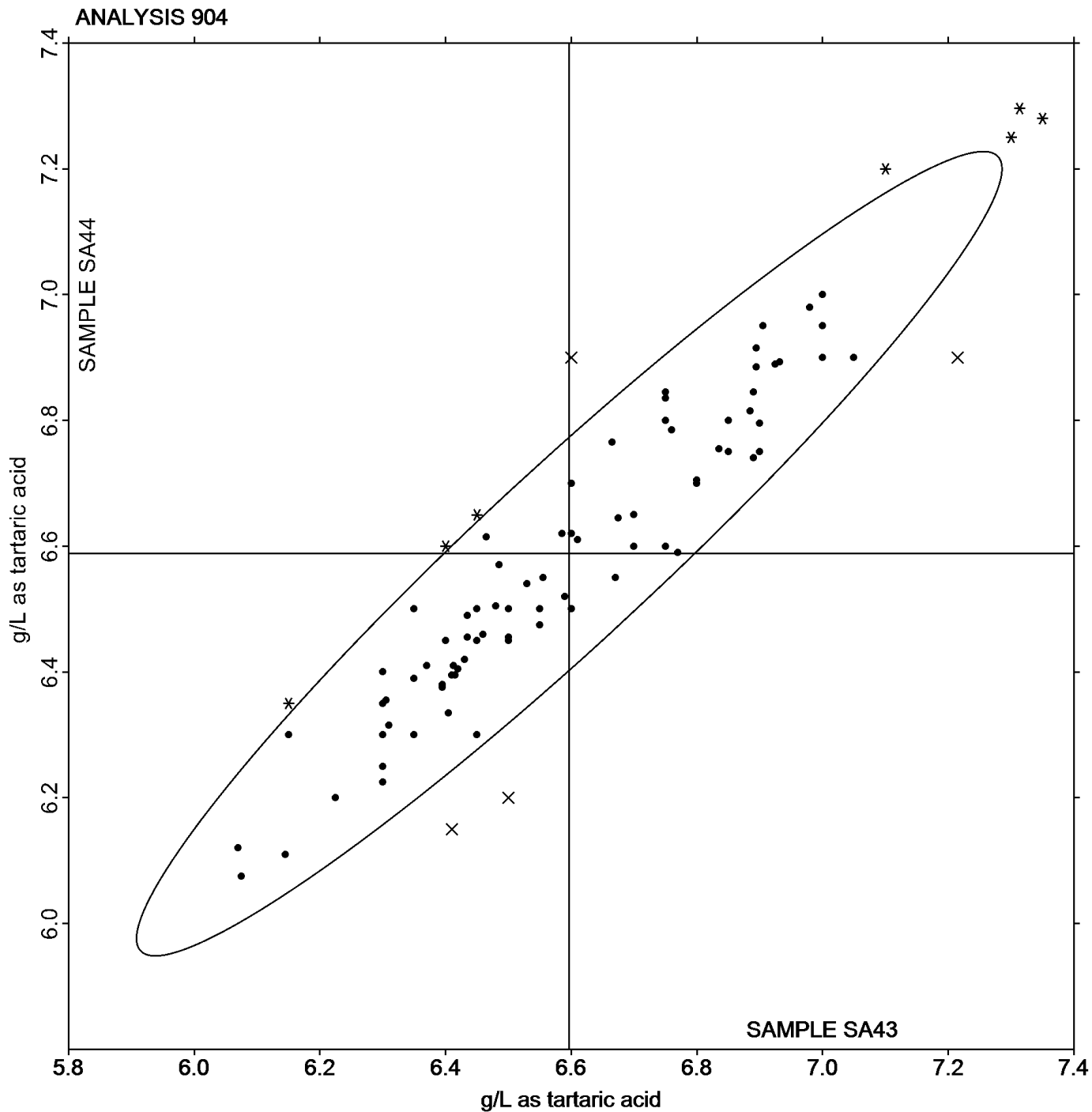
- AXQD7U (X) - Inconsistent in testing between samples.
- C2MPXC (M) - Participant did not submit data for sample SA43.
- JUYFNF (X) - Data for sample SA43 are high.
- BH8Q2A (X) - Data for both samples are high. Possible Systematic Error.
- 9HJFEC (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA43.
- LVZR89 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA44.
- G7YYYY (X) - Data for both samples are low.
- N8B2R4 (X) - Inconsistent in testing between samples.

**Results by Methodology (as reported by laboratory)**

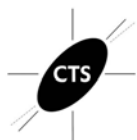
Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Autotitration	6.617	0.257	0.020	6.608	0.232	0.020	58/63
Manual Titration	6.570	0.310	-0.027	6.563	0.311	-0.025	23/26
FTIR	6.472	0.283	-0.125	6.477	0.246	-0.111	9/9
Segmented Flow Analyzer	6.893	0.004	0.296	6.813	0.103	0.224	2/2



Analysis 904  
Titratable Acidity







Analysis 905  
Volatile Acidity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		0.0965	-0.0093	-0.30	0.0965	-0.0108	-0.36
32QU7N	X	0.1850	0.0792	2.58	0.3800	0.2727	9.03
3TZ8FT		0.1600	0.0542	1.76	0.1750	0.0677	2.24
3UXHBV	*	0.1100	0.0042	0.14	0.1400	0.0327	1.08
4D6EGP		0.1400	0.0342	1.11	0.1500	0.0427	1.41
4JDYLA		0.1300	0.0242	0.79	0.1400	0.0327	1.08
674KXH		0.0700	-0.0358	-1.16	0.0700	-0.0373	-1.24
6NYDJF		0.1550	0.0492	1.60	0.1500	0.0427	1.41
6PVZAL		0.0800	-0.0258	-0.84	0.0900	-0.0173	-0.57
6Q8H3V		0.1050	-0.0008	-0.03	0.1100	0.0027	0.09
6RZJXL		0.1000	-0.0058	-0.19	0.1000	-0.0073	-0.24
6WTD4Z		0.0900	-0.0158	-0.51	0.0900	-0.0173	-0.57
6XAE6G		0.0900	-0.0158	-0.51	0.1050	-0.0023	-0.08
789U4K		0.1000	-0.0058	-0.19	0.1000	-0.0073	-0.24
7VHTT6		0.0550	-0.0508	-1.65	0.0700	-0.0373	-1.24
89JWPJ		0.0800	-0.0258	-0.84	0.0800	-0.0273	-0.90
8AR98K		0.0810	-0.0248	-0.81	0.0790	-0.0283	-0.94
8BKWPF		0.1000	-0.0058	-0.19	0.1000	-0.0073	-0.24
8MGYBW		0.1200	0.0142	0.46	0.1300	0.0227	0.75
8PKBWJ		0.1050	-0.0008	-0.03	0.1050	-0.0023	-0.08
8UZ9FK		0.0800	-0.0258	-0.84	0.0700	-0.0373	-1.24
9BXHLH		0.1200	0.0142	0.46	0.1150	0.0077	0.26
9HJFEC		0.0790	-0.0268	-0.87	0.1015	-0.0058	-0.19
A2UM8J	X	0.2200	0.1142	3.72	0.2450	0.1377	4.56
A4FVLR		0.0800	-0.0258	-0.84	0.0800	-0.0273	-0.90
AAHJ4E		0.1450	0.0392	1.28	0.1550	0.0477	1.58
ABGJ9K		0.1000	-0.0058	-0.19	0.1000	-0.0073	-0.24
AD27RC		0.1280	0.0222	0.72	0.1150	0.0077	0.26
ALCYTE		0.0850	-0.0208	-0.68	0.0900	-0.0173	-0.57
AWFFY6		0.1250	0.0192	0.63	0.1100	0.0027	0.09
AXQD7U		0.0500	-0.0558	-1.81	0.0450	-0.0623	-2.06
BH8Q2A		0.0900	-0.0158	-0.51	0.0900	-0.0173	-0.57
BWT2TL		0.0695	-0.0363	-1.18	0.0855	-0.0218	-0.72
BWVQWJ		0.0850	-0.0208	-0.68	0.0850	-0.0223	-0.74
C23JM9		0.0950	-0.0108	-0.35	0.0950	-0.0123	-0.41



Analysis 905  
Volatile Acidity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
C2MPXC	M	No data reported for this sample			0.0650	-0.0423	-1.40
CGW47G		0.0950	-0.0108	-0.35	0.1100	0.0027	0.09
CU4FTN		0.1100	0.0042	0.14	0.1100	0.0027	0.09
D9ZUQW		0.0700	-0.0358	-1.16	0.0700	-0.0373	-1.24
DWJCPD		0.0800	-0.0258	-0.84	0.0700	-0.0373	-1.24
EGTX4D		0.0600	-0.0458	-1.49	0.0550	-0.0523	-1.73
EMW3UC	*	0.0990	-0.0068	-0.22	0.0710	-0.0363	-1.20
FZHY9E		0.1400	0.0342	1.11	0.1350	0.0277	0.92
G62N49		0.1000	-0.0058	-0.19	0.0900	-0.0173	-0.57
G7YYYB	X	0.3400	0.2342	7.62	0.3700	0.2627	8.70
GC7NYP		0.1300	0.0242	0.79	0.1150	0.0077	0.26
GECQPA	X	0.2850	0.1792	5.83	0.3050	0.1977	6.55
GQ4CV6		0.0600	-0.0458	-1.49	0.0700	-0.0373	-1.24
GYL9VQ		0.0900	-0.0158	-0.51	0.1000	-0.0073	-0.24
H3UMH2	X	0.3000	0.1942	6.32	0.3000	0.1927	6.38
H8BE4H		0.1800	0.0742	2.42	0.1800	0.0727	2.41
HENAZB		0.0960	-0.0098	-0.32	0.0950	-0.0123	-0.41
HQ242B		0.1000	-0.0058	-0.19	0.1050	-0.0023	-0.08
HQ4RKA	*	0.0700	-0.0358	-1.16	0.1000	-0.0073	-0.24
HVYWM8		0.1260	0.0202	0.66	0.1260	0.0187	0.62
JDTBZ4		0.1700	0.0642	2.09	0.1700	0.0627	2.08
JJFUMR		0.1150	0.0092	0.30	0.1100	0.0027	0.09
JQV8BC		0.1500	0.0442	1.44	0.1350	0.0277	0.92
JRTH7F		0.0800	-0.0258	-0.84	0.0800	-0.0273	-0.90
JT7FTP	*	0.0600	-0.0458	-1.49	0.0900	-0.0173	-0.57
JUYFNF		0.0800	-0.0258	-0.84	0.0750	-0.0323	-1.07
KLMGU6		0.1150	0.0092	0.30	0.1150	0.0077	0.26
LA32D3		0.1200	0.0142	0.46	0.1250	0.0177	0.59
LVZR89		0.1300	0.0242	0.79	0.1350	0.0277	0.92
MDJBTY		0.1400	0.0342	1.11	0.1400	0.0327	1.08
MGKJW9		0.1350	0.0292	0.95	0.1350	0.0277	0.92
MTDZLA		0.1200	0.0142	0.46	0.1200	0.0127	0.42
N8B2R4		0.0900	-0.0158	-0.51	0.0850	-0.0223	-0.74
NGUD72		0.0980	-0.0078	-0.25	0.0890	-0.0183	-0.61
NGXZH9	X	0.2900	0.1842	6.00	0.1900	0.0827	2.74



Analysis 905  
Volatile Acidity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NJ3XZA		0.1200	0.0142	0.46	0.1200	0.0127	0.42
PMFQH9		0.0900	-0.0158	-0.51	0.1000	-0.0073	-0.24
Q6VK4A		0.1100	0.0042	0.14	0.1050	-0.0023	-0.08
T8EFHD		0.1545	0.0487	1.59	0.1560	0.0487	1.61
TC8KBG		0.1000	-0.0058	-0.19	0.1000	-0.0073	-0.24
TLYZZL	X	0.2200	0.1142	3.72	0.2050	0.0977	3.24
U89ZUX		0.1500	0.0442	1.44	0.1500	0.0427	1.41
UFZH4Z		0.1300	0.0242	0.79	0.1200	0.0127	0.42
ULU46F		0.0950	-0.0108	-0.35	0.1000	-0.0073	-0.24
UXMWLY	*	0.1900	0.0842	2.74	0.1850	0.0777	2.57
W2XQE2		0.1050	-0.0008	-0.03	0.1050	-0.0023	-0.08
WELG6C		0.1660	0.0602	1.96	0.1605	0.0532	1.76
WT2GYG		0.1015	-0.0043	-0.14	0.1037	-0.0036	-0.12
WTPKUC		0.0400	-0.0658	-2.14	0.0400	-0.0673	-2.23
WUVMKW		0.1275	0.0217	0.71	0.1351	0.0278	0.92
WUW82P		0.1065	0.0007	0.02	0.1190	0.0117	0.39
X4GXY2		0.0800	-0.0258	-0.84	0.0800	-0.0273	-0.90
X6AN9L		0.1150	0.0092	0.30	0.1150	0.0077	0.26
XHVZKW		0.1050	-0.0008	-0.03	0.0850	-0.0223	-0.74
XWG9QA		0.1005	-0.0053	-0.17	0.1020	-0.0053	-0.18
YETFEB		0.0900	-0.0158	-0.51	0.0900	-0.0173	-0.57
YFRVWW		0.0890	-0.0168	-0.55	0.0900	-0.0173	-0.57
YGM4X7		0.1500	0.0442	1.44	0.1500	0.0427	1.41
YTFKM8		0.1600	0.0542	1.76	0.1650	0.0577	1.91
YVFAVM		0.0850	-0.0208	-0.68	0.0800	-0.0273	-0.90
Z94Y4R	X	0.2000	0.0942	3.07	0.3000	0.1927	6.38
Z9ZCQK	X	0.0450	-0.0608	-1.98	0.0800	-0.0273	-0.90
ZB6XJQ	*	0.0600	-0.0458	-1.49	0.0850	-0.0223	-0.74
ZQ2JWQ		0.0850	-0.0208	-0.68	0.0850	-0.0223	-0.74



**Analysis 905  
Volatile Acidity**

Grand Means	Summary Statistics	
0.10577 g/L as acetic acid	0.10730 g/L as acetic acid	0.10730 g/L as acetic acid
Stnd Dev Btwn Labs	0.03073 g/L as acetic acid	0.03019 g/L as acetic acid
<b>Statistics based on 89 of 99 reporting participants</b>		

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #905**

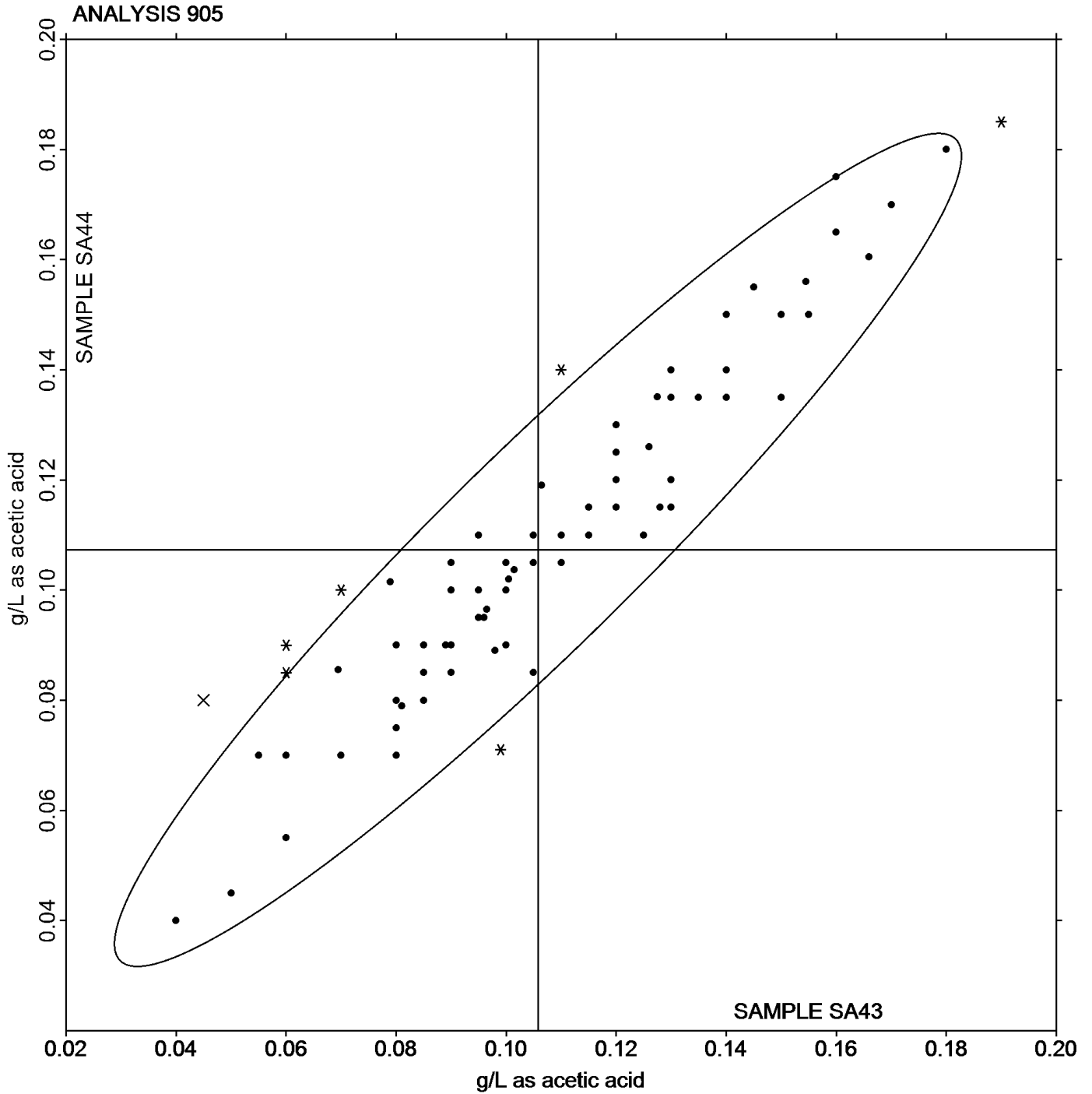
- TLYZZL (X) - Data for both samples are high. Possible Systematic Error.
- C2MPXC (M) - Participant did not submit data for sample SA43.
- Z9ZCQK (X) - Inconsistent in testing between samples.
- H3UMH2 (X) - Data for both samples are high.
- Z94Y4R (X) - Data for both samples are high. Inconsistent within the determinations of sample SA44.
- G7YYYYB (X) - Data for both samples are high.
- 32QU7N (X) - Data for sample SA44 are high. Inconsistent within the determinations of sample SA43.
- GECQPA (X) - Data for both samples are high.
- A2UM8J (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample SA43.
- NGXZH9 (X) - Data for sample SA43 are high.

**Results by Methodology (as reported by laboratory)**

Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method							0/1
Cash Still method	0.140	0.030	0.0339	0.144	0.025	0.0369	7/10
Enzymatic method	0.105	0.028	-0.0011	0.105	0.027	-0.0019	70/75
GC	0.050	0.000	-0.0558	0.045	0.000	-0.0623	1/1
Colorimetric Analysis	0.088	0.004	-0.0183	0.090	0.000	-0.0173	2/2
Seg. Flow / Colorimetric Analyzer	0.124	0.006	0.0182	0.123	0.011	0.0152	2/2
FTIR	0.091	0.041	-0.0152	0.099	0.040	-0.0085	7/8



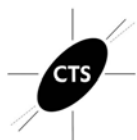
Analysis 905  
Volatile Acidity





Analysis 906  
Specific Gravity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		0.9960	-0.0013	-2.16	0.9960	-0.0010	-1.65
32QU7N		0.9970	-0.0003	-0.55	0.9969	0.0000	-0.06
3TZ8FT		0.9977	0.0003	0.56	0.9973	0.0003	0.56
3UXHBV	M	No data reported for this sample			0.9990	0.0020	3.45
4D6EGP		0.9976	0.0003	0.48	0.9972	0.0002	0.39
4JDYLA		0.9974	0.0001	0.15	0.9970	0.0000	0.05
674KXH		0.9974	0.0001	0.23	0.9971	0.0001	0.20
6PVZAL		0.9975	0.0002	0.35	0.9971	0.0002	0.27
6Q8H3V		0.9974	0.0001	0.16	0.9970	0.0001	0.13
6RZJXL		0.9970	-0.0003	-0.51	0.9970	0.0000	0.05
6WTD4Z		0.9972	-0.0002	-0.26	0.9972	0.0002	0.30
6XAE6G		0.9979	0.0006	0.98	0.9976	0.0006	1.07
789U4K		0.9974	0.0001	0.16	0.9970	0.0001	0.13
7VHTT6		0.9974	0.0001	0.11	0.9970	0.0000	0.05
89JWPJ		0.9975	0.0002	0.32	0.9971	0.0001	0.22
8AR98K		0.9977	0.0003	0.56	0.9973	0.0003	0.47
8BKWPF		0.9975	0.0001	0.23	0.9972	0.0002	0.33
8DDLE3		0.9974	0.0001	0.19	0.9971	0.0001	0.13
8MGYBW		0.9974	0.0001	0.22	0.9971	0.0001	0.17
8PKBWJ		0.9977	0.0003	0.57	0.9971	0.0001	0.16
8UZ9FK		0.9970	-0.0003	-0.51	0.9970	0.0000	0.05
9BXHLH		0.9979	0.0005	0.89	0.9976	0.0006	0.98
9HJFEC	X	0.9950	-0.0023	-3.81	0.9975	0.0005	0.90
A2UM8J		0.9978	0.0005	0.74	0.9973	0.0003	0.57
A4FVLR		0.9973	-0.0001	-0.10	0.9968	-0.0002	-0.29
AAHJ4E		0.9979	0.0005	0.89	0.9975	0.0005	0.81
ABGJ9K		0.9977	0.0004	0.71	0.9973	0.0003	0.50
AD27RC		0.9975	0.0002	0.35	0.9971	0.0002	0.28
ALCYTE		0.9974	0.0001	0.22	0.9968	-0.0001	-0.22
AWFFY6		0.9974	0.0000	0.07	0.9971	0.0001	0.13
AXQD7U		0.9976	0.0003	0.53	0.9973	0.0003	0.53
B2XV8A		0.9978	0.0005	0.81	0.9973	0.0003	0.56
BH8Q2A	X	0.9950	-0.0023	-3.81	0.9938	-0.0032	-5.39
BWT2TL		0.9974	0.0001	0.21	0.9971	0.0001	0.15
C23JM9	*	0.9983	0.0010	1.62	0.9983	0.0013	2.25



Analysis 906  
Specific Gravity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
CGW47G		0.9977	0.0004	0.65	0.9974	0.0004	0.64
CU4FTN		0.9976	0.0002	0.40	0.9972	0.0002	0.32
D9ZUQW		0.9976	0.0003	0.48	0.9970	0.0000	0.05
DWJCPD		0.9975	0.0002	0.28	0.9971	0.0001	0.20
EGTX4D		0.9969	-0.0004	-0.68	0.9967	-0.0003	-0.46
EMW3UC		0.9978	0.0004	0.73	0.9973	0.0003	0.47
FZHY9E		0.9973	0.0000	-0.02	0.9969	-0.0001	-0.12
G62N49		0.9974	0.0000	0.07	0.9971	0.0001	0.15
G7YYBY	X	0.9973	0.0000	0.05	0.9982	0.0012	2.06
GQ4CV6	*	0.9956	-0.0017	-2.82	0.9952	-0.0018	-3.01
H3UMH2		0.9961	-0.0012	-2.00	0.9956	-0.0014	-2.33
H8BE4H	*	0.9956	-0.0017	-2.82	0.9952	-0.0018	-3.01
HENAZB		0.9975	0.0001	0.23	0.9972	0.0002	0.30
HQ242B		0.9975	0.0002	0.32	0.9971	0.0001	0.25
HQ4RKA		0.9974	0.0001	0.12	0.9971	0.0001	0.25
HVYWM8		0.9975	0.0002	0.32	0.9975	0.0005	0.90
JAXRC8	X	0.9968	-0.0005	-0.86	0.9938	-0.0032	-5.41
JDTBZ4		0.9974	0.0001	0.15	0.9971	0.0001	0.22
JFUMR		0.9969	-0.0004	-0.68	0.9965	-0.0005	-0.80
JQV8BC	X	0.9974	0.0000	0.07	0.9960	-0.0010	-1.65
JRTH7F		0.9970	-0.0003	-0.51	0.9970	0.0000	0.05
JT7FTP		0.9982	0.0009	1.47	0.9978	0.0008	1.41
JUYFNF	X	0.9987	0.0014	2.26	0.9978	0.0008	1.41
KLMGU6		0.9972	-0.0002	-0.26	0.9971	0.0001	0.13
LVZR89		0.9974	0.0001	0.10	0.9970	0.0000	0.03
MDJBTY	X	1.0026	0.0053	8.72	0.9972	0.0002	0.34
MGKJW9		0.9974	0.0000	0.07	0.9972	0.0002	0.30
MTDZLA	X	0.9960	-0.0013	-2.16	0.9950	-0.0020	-3.35
NGUD72		0.9973	0.0000	0.01	0.9970	0.0000	-0.02
Q6VK4A		0.9974	0.0001	0.18	0.9970	0.0001	0.12
T8EFHD		0.9973	0.0000	-0.08	0.9972	0.0002	0.34
TLYZZL	*	0.9955	-0.0018	-2.96	0.9955	-0.0015	-2.48
U89ZUX		0.9966	-0.0008	-1.25	0.9962	-0.0008	-1.40
ULU46F		0.9969	-0.0004	-0.68	0.9965	-0.0005	-0.80
UXMWLY		0.9975	0.0002	0.32	0.9971	0.0001	0.22



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

**Report #072**  
**Fall 2022**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
VVXDB7		0.9975	0.0002	0.32	0.9971	0.0001	0.19
W2XQE2		0.9975	0.0002	0.27	0.9971	0.0001	0.22
WELG6C		0.9976	0.0003	0.45	0.9972	0.0002	0.36
WT2GYG		0.9975	0.0002	0.32	0.9973	0.0003	0.47
WUVMKW		0.9985	0.0012	2.04	0.9981	0.0011	1.91
WUW82P		0.9974	0.0001	0.09	0.9966	-0.0003	-0.59
X6AN9L		0.9975	0.0001	0.23	0.9971	0.0001	0.13
XWG9QA	*	0.9956	-0.0017	-2.79	0.9952	-0.0018	-2.99
YETFEB		0.9978	0.0005	0.81	0.9974	0.0004	0.73
YTFKM8	X	0.9955	-0.0018	-2.99	0.9950	-0.0020	-3.35
YVFAVM		0.9973	0.0000	-0.02	0.9969	-0.0001	-0.12
Z94Y4R		0.9976	0.0003	0.50	0.9972	0.0003	0.44
Z9ZCQK	*	0.9983	0.0009	1.55	0.9982	0.0012	2.09
ZB6XJQ		0.9975	0.0002	0.32	0.9971	0.0001	0.13
ZQ2JWQ	*	0.9957	-0.0017	-2.74	0.9957	-0.0013	-2.25

Grand Means		Summary Statistics	
0.99731	sp gr 20/20 C	0.99697	sp gr 20/20 C
Std Dev Btwn Labs		0.00059	sp gr 20/20 C
0.00061	sp gr 20/20 C	<b>Statistics based on 75 of 85 reporting participants</b>	

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio





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**Comments on Assigned Data Flags for Test #906**

YTFKM8 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample SA43.

JJFUMR (X) - Inconsistent in testing between samples.

MDJBTY (X) - Data for sample SA43 are high.

JUYFNF (X) - Inconsistent in testing between samples. Inconsistent within the determinations for Sample SA43.

MTDZLA (X) - Data for sample SA44 are low.

BH8Q2A (X) - Data for both samples are low. Inconsistent within the determinations of sample SA43.

9HJFEC (X) - Data for sample SA43 are low. Inconsistent within the determinations of sample SA44.

G7YYBY (X) - Inconsistent in testing between samples.

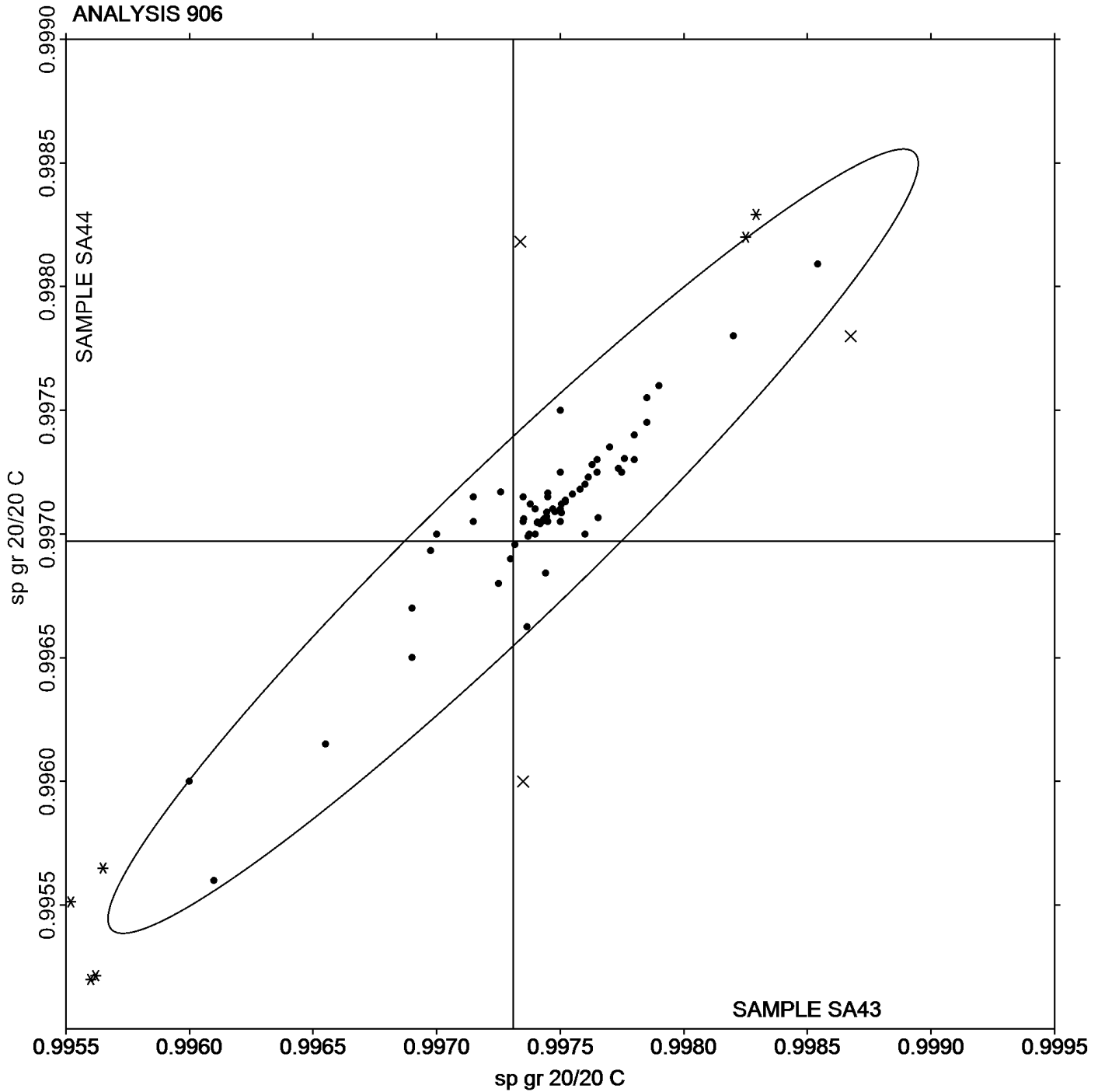
JAXRC8 (X) - Data for sample SA44 are low.

3UXHBV (M) - Participant did not submit data for sample SA43.

JQV8BC (X) - Inconsistent in testing between samples.



Analysis 906  
Specific Gravity





# ASEV-CTS Wine Industry Interlaboratory Testing Program

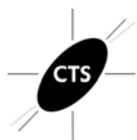
Report #072

## Analysis 907

Fall 2022

### pH

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		3.250	0.051	1.44	3.255	0.054	1.50
32QU7N	X	3.355	0.156	4.40	3.360	0.159	4.43
3TZ8FT		3.130	-0.069	-1.94	3.135	-0.066	-1.85
3UXHBV	X	3.080	-0.119	-3.34	3.080	-0.121	-3.39
4D6EGP		3.160	-0.039	-1.09	3.160	-0.041	-1.15
4JDYLA		3.200	0.001	0.04	3.200	-0.001	-0.04
674KXH		3.190	-0.009	-0.25	3.200	-0.001	-0.04
6NYDJF		3.190	-0.009	-0.25	3.190	-0.011	-0.32
6PVZAL		3.180	-0.019	-0.53	3.180	-0.021	-0.59
6Q8H3V		3.210	0.011	0.32	3.210	0.009	0.24
6RZJXL		3.190	-0.009	-0.25	3.205	0.004	0.10
6WTD4Z		3.205	0.006	0.18	3.210	0.009	0.24
6XAE6G		3.200	0.001	0.04	3.205	0.004	0.10
789U4K		3.215	0.016	0.46	3.220	0.019	0.52
7VHTT6		3.215	0.016	0.46	3.210	0.009	0.24
89JWPJ		3.150	-0.049	-1.37	3.145	-0.056	-1.57
8AR98K		3.212	0.013	0.37	3.220	0.019	0.52
8BKWPF	*	3.200	0.001	0.04	3.180	-0.021	-0.59
8PKBWJ		3.270	0.071	2.01	3.260	0.059	1.64
8UZ9FK		3.230	0.031	0.88	3.235	0.034	0.94
9BXHLH		3.195	-0.004	-0.11	3.205	0.004	0.10
9HJFEC		3.255	0.056	1.58	3.255	0.054	1.50
A2UM8J	X	3.180	-0.019	-0.53	3.150	-0.051	-1.43
A4FVLR		3.200	0.001	0.04	3.200	-0.001	-0.04
AAHJ4E		3.205	0.006	0.18	3.215	0.014	0.38
ABGJ9K		3.260	0.061	1.72	3.265	0.064	1.78
AD27RC		3.230	0.031	0.88	3.240	0.039	1.08
ALCYTE		3.195	-0.004	-0.11	3.205	0.004	0.10
AWFFY6		3.200	0.001	0.04	3.200	-0.001	-0.04
AXQD7U		3.195	-0.004	-0.11	3.180	-0.021	-0.59
B2XV8A		3.240	0.041	1.16	3.240	0.039	1.08
BH8Q2A		3.219	0.020	0.56	3.209	0.007	0.20
BWT2TL		3.200	0.001	0.04	3.210	0.009	0.24
BWVQWJ	X	3.130	-0.069	-1.94	3.170	-0.031	-0.87
C23JM9		3.160	-0.039	-1.09	3.160	-0.041	-1.15



**ASEV-CTS Wine Industry Interlaboratory Testing Program**  
**Analysis 907**  
**pH**

**Report #072**  
**Fall 2022**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
C2MPXC	M	No data reported for this sample			3.190	-0.011	-0.32
CGW47G		3.170	-0.029	-0.81	3.170	-0.031	-0.87
CU4FTN		3.160	-0.039	-1.09	3.175	-0.026	-0.73
D9ZUQW		3.216	0.017	0.47	3.231	0.030	0.83
DWJCPD		3.120	-0.079	-2.22	3.130	-0.071	-1.99
EGTX4D		3.220	0.021	0.60	3.220	0.019	0.52
EMW3UC		3.260	0.061	1.72	3.255	0.054	1.50
FZHY9E		3.230	0.031	0.88	3.225	0.024	0.66
G62N49		3.140	-0.059	-1.65	3.150	-0.051	-1.43
G7YYBY	*	3.100	-0.099	-2.78	3.110	-0.091	-2.55
GC7NYP		3.195	-0.004	-0.11	3.190	-0.011	-0.32
GECQPA	*	3.175	-0.024	-0.67	3.200	-0.001	-0.04
GQ4CV6		3.255	0.056	1.58	3.270	0.069	1.92
GYL9VQ	X	3.235	0.036	1.02	3.275	0.074	2.06
H3UMH2	X	3.350	0.151	4.26	3.350	0.149	4.15
H8BE4H	*	3.205	0.006	0.18	3.185	-0.016	-0.46
HENAZB		3.190	-0.009	-0.26	3.195	-0.007	-0.19
HQ242B	*	3.145	-0.054	-1.51	3.125	-0.076	-2.13
HQ4RKA	X	3.395	0.196	5.51	3.394	0.192	5.37
HVYWM8		3.230	0.031	0.88	3.230	0.029	0.80
JAXRC8		3.230	0.031	0.88	3.220	0.019	0.52
JDTBZ4		3.260	0.061	1.72	3.270	0.069	1.92
JFUMR		3.195	-0.004	-0.11	3.190	-0.011	-0.32
JQV8BC		3.250	0.051	1.44	3.235	0.034	0.94
JRTH7F		3.185	-0.014	-0.39	3.185	-0.016	-0.46
JT7FTP		3.195	-0.004	-0.11	3.195	-0.006	-0.18
JUYFNF		3.185	-0.014	-0.39	3.195	-0.006	-0.18
KLMGU6		3.145	-0.054	-1.51	3.145	-0.056	-1.57
LA32D3		3.220	0.021	0.60	3.225	0.024	0.66
LVZR89		3.180	-0.019	-0.54	3.194	-0.007	-0.20
MDJBTY		3.165	-0.034	-0.95	3.170	-0.031	-0.87
MGKJW9		3.220	0.021	0.60	3.220	0.019	0.52
MTDZLA	X	3.170	-0.029	-0.81	3.260	0.059	1.64
N8B2R4		3.245	0.046	1.30	3.250	0.049	1.36
NGUD72		3.140	-0.059	-1.65	3.155	-0.046	-1.29



WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NGXZH9		3.230	0.031	0.88	3.240	0.039	1.08
NJ3XZA		3.200	0.001	0.04	3.200	-0.001	-0.04
PMFQH9		3.220	0.021	0.60	3.210	0.009	0.24
Q6VK4A		3.230	0.031	0.88	3.230	0.029	0.80
T8EFHD		3.215	0.016	0.46	3.220	0.019	0.52
TC8KBG		3.185	-0.014	-0.39	3.190	-0.011	-0.32
TLYZZL		3.180	-0.019	-0.53	3.175	-0.026	-0.73
U89ZUX		3.250	0.051	1.44	3.255	0.054	1.50
UFZH4Z		3.200	0.001	0.04	3.220	0.019	0.52
ULU46F		3.200	0.001	0.04	3.210	0.009	0.24
UXMWLY		3.130	-0.069	-1.94	3.140	-0.061	-1.71
W2XQE2	*	3.120	-0.079	-2.22	3.105	-0.096	-2.69
WELG6C		3.220	0.021	0.60	3.235	0.034	0.94
WT2GYG		3.200	0.001	0.04	3.185	-0.016	-0.46
WTPKUC		3.150	-0.049	-1.37	3.155	-0.046	-1.29
WUVMKW		3.220	0.021	0.60	3.230	0.029	0.80
WUW82P		3.190	-0.009	-0.25	3.190	-0.011	-0.32
X4GXY2		3.195	-0.004	-0.11	3.190	-0.011	-0.32
X6AN9L		3.220	0.021	0.60	3.220	0.019	0.52
XHVZKW		3.170	-0.029	-0.81	3.165	-0.036	-1.01
XWG9QA		3.244	0.045	1.26	3.247	0.045	1.26
YETFEB		3.170	-0.029	-0.81	3.175	-0.026	-0.73
YFRVWW		3.175	-0.024	-0.67	3.180	-0.021	-0.59
YGM4X7		3.190	-0.009	-0.25	3.200	-0.001	-0.04
YTFKM8		3.175	-0.024	-0.67	3.180	-0.021	-0.59
YVFAVM		3.215	0.016	0.46	3.220	0.019	0.52
Z94Y4R		3.258	0.059	1.65	3.259	0.058	1.61
Z9ZCQK		3.190	-0.009	-0.25	3.200	-0.001	-0.04
ZB6XJQ		3.180	-0.019	-0.53	3.190	-0.011	-0.32
ZQ2JWQ		3.190	-0.009	-0.25	3.190	-0.011	-0.32

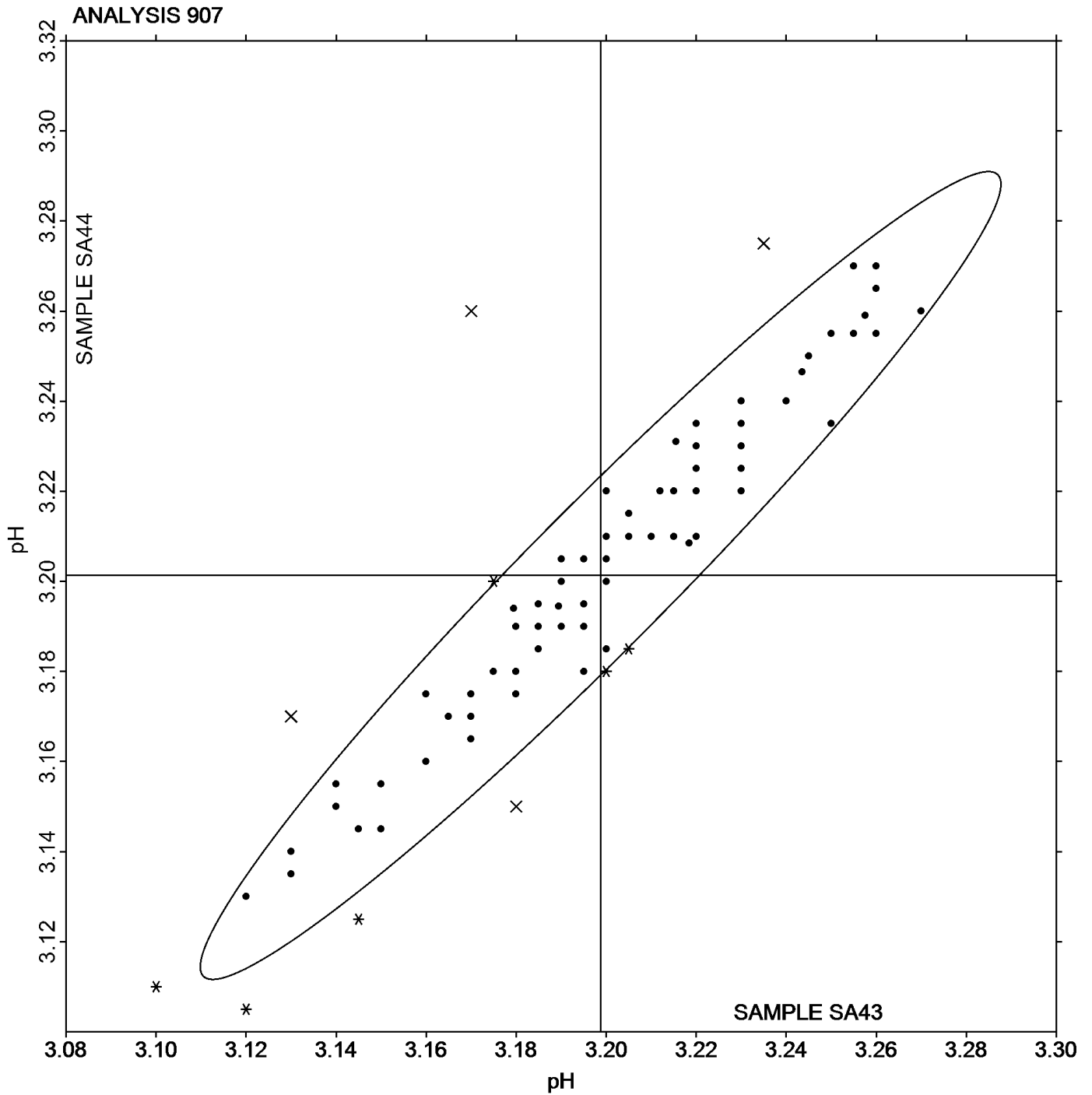


Grand Means	Summary Statistics
3.1987 pH	3.2013 pH
Stnd Dev Btwn Labs	
0.0355 pH	0.0358 pH
<b>Statistics based on 91 of 100 reporting participants</b>	

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #907**

- GYL9VQ (X) - Inconsistent in testing between samples.
- C2MPXC (M) - Participant did not submit data for sample SA43.
- MTDZLA (X) - Inconsistent in testing between samples.
- H3UMH2 (X) - Data for both samples are high. Possible Systematic Error.
- 32QU7N (X) - Data for both samples are high. Possible Systematic Error.
- HQ4RKA (X) - Data for both samples are high. Possible Systematic Error.
- A2UM8J (X) - Inconsistent in testing between samples.
- 3UXHBV (X) - Data for both samples are low. Possible Systematic Error.
- BWVQWJ (X) - Inconsistent in testing between samples.





Analysis 908  
Residual Sugar

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		11.15	-0.31	-0.34	10.35	-0.26	-0.31
3UXHBV		12.07	0.61	0.65	11.47	0.86	1.02
674KXH		12.10	0.64	0.68	11.20	0.59	0.70
6NYDJF		11.63	0.16	0.17	10.60	-0.01	-0.02
6RZJXL		10.60	-0.86	-0.92	9.85	-0.76	-0.90
789U4K		11.10	-0.36	-0.39	10.30	-0.31	-0.37
8BKWPF		11.80	0.34	0.36	10.90	0.29	0.35
8MGYBW		12.14	0.67	0.72	11.33	0.72	0.85
8UZ9FK		11.70	0.24	0.25	11.20	0.59	0.70
9HJFEC		11.77	0.31	0.33	10.66	0.05	0.06
A2UM8J		12.50	1.04	1.11	11.30	0.69	0.82
BH8Q2A		10.29	-1.18	-1.26	9.50	-1.11	-1.32
FZHY9E		10.79	-0.68	-0.73	10.04	-0.57	-0.68
GECQPA	*	8.82	-2.65	-2.83	8.15	-2.46	-2.93
HQ4RKA		12.90	1.44	1.54	11.90	1.29	1.53
HVYWM8		12.20	0.74	0.79	11.40	0.79	0.94
JDTBZ4		11.00	-0.46	-0.50	10.25	-0.36	-0.43
JT7FTP		11.13	-0.33	-0.36	10.36	-0.25	-0.30
JUYFNF	*	11.50	0.04	0.04	9.85	-0.76	-0.90
KLMGU6		12.00	0.54	0.57	11.25	0.64	0.76
MDJBTY	*	9.82	-1.64	-1.76	9.82	-0.79	-0.94
MTDZLA		10.62	-0.85	-0.91	9.77	-0.84	-1.00
NGUD72		11.80	0.34	0.36	11.10	0.49	0.58
NGXZH9		13.10	1.64	1.75	11.90	1.29	1.53
T8EFHD		11.08	-0.39	-0.42	10.18	-0.43	-0.51
UXMWLY		11.67	0.20	0.22	10.46	-0.15	-0.18
YGM4X7	X	32.00	20.54	21.97	31.10	20.49	24.36
Z94Y4R		12.28	0.81	0.87	11.38	0.77	0.92





**Analysis 908  
Residual Sugar**

Grand Means		Summary Statistics	
	11.464 g/L		10.609 g/L
Std Dev Btwn Labs			0.841 g/L
	0.935 g/L		
<b>Statistics based on 27 of 28 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #908**

YGM4X7 (X) - Data for both samples are high.

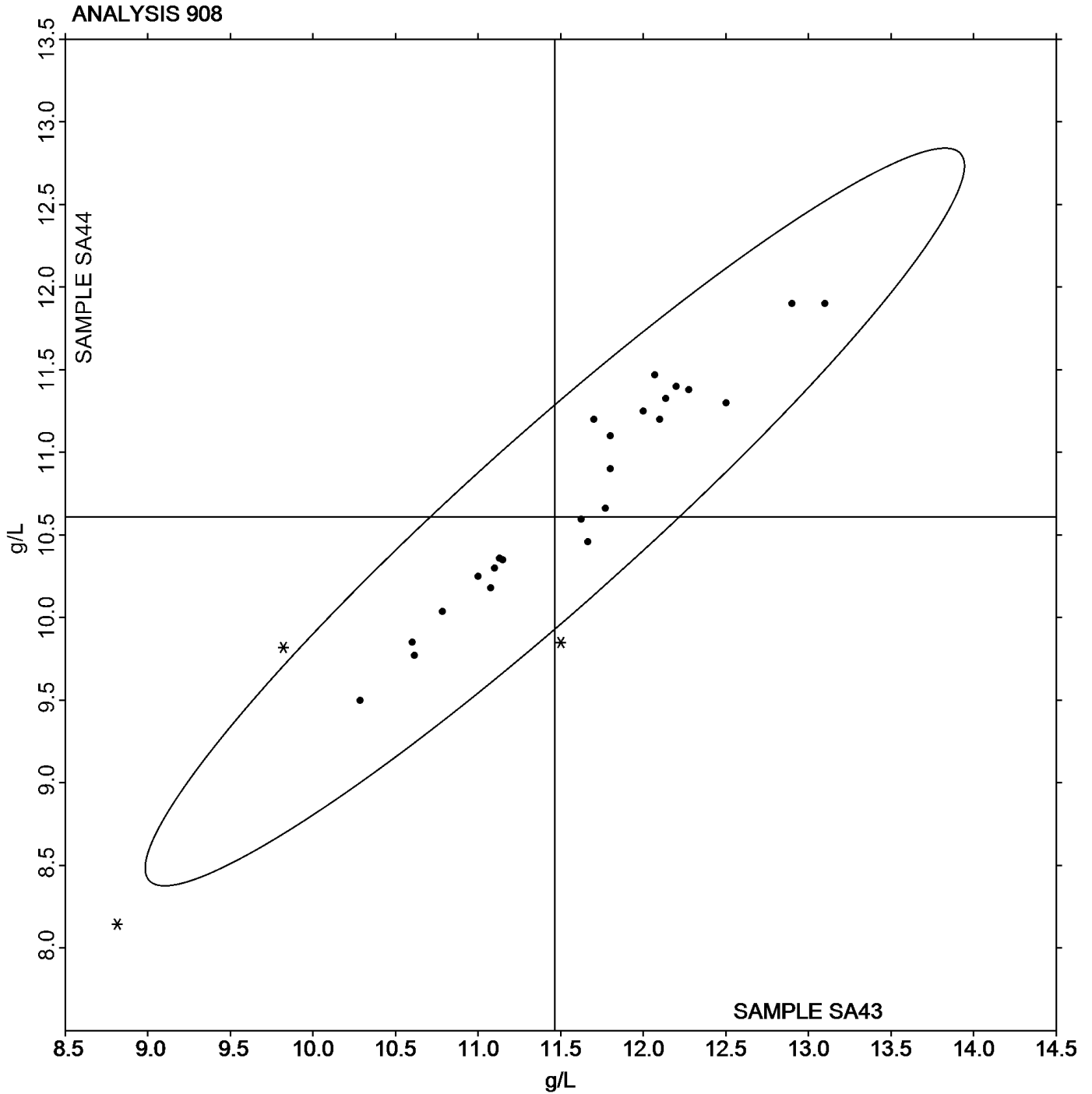
**Results by Methodology (as reported by laboratory)**

Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	11.888	0.548	0.42	10.615	1.082	0.01	2/2
Cu Reduction Method	11.844	0.954	0.38	10.951	0.679	0.34	8/9
Segmented Flow	12.135	0.000	0.67	11.325	0.000	0.72	1/1
FTIR	11.615	0.667	0.15	10.830	0.622	0.22	10/10
Other _____	10.451	0.859	-1.01	9.665	0.804	-0.94	6/6



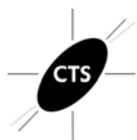
Analysis 908  
Residual Sugar

Fall 2022





WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		2.920	0.170	1.32	2.820	0.077	0.57
32QU7N	*	3.100	0.350	2.72	3.030	0.287	2.10
4D6EGP		2.771	0.021	0.17	2.772	0.029	0.21
4JDYLA		2.678	-0.072	-0.56	2.680	-0.063	-0.46
674KXH		2.600	-0.150	-1.16	2.530	-0.213	-1.55
6PVZAL		2.710	-0.040	-0.31	2.830	0.087	0.64
6Q8H3V		2.450	-0.300	-2.32	2.400	-0.343	-2.50
6WTD4Z		2.726	-0.024	-0.18	2.637	-0.106	-0.77
6XAE6G		2.760	0.010	0.08	2.688	-0.055	-0.40
789U4K	*	3.130	0.380	2.95	3.140	0.397	2.90
7VHTT6		2.545	-0.205	-1.59	2.575	-0.168	-1.22
89JWPJ		2.780	0.030	0.24	2.805	0.062	0.46
8AR98K	*	2.606	-0.144	-1.11	2.460	-0.283	-2.06
8BKWPF		2.650	-0.100	-0.77	2.700	-0.043	-0.31
8PKBWJ	X	1.925	-0.825	-6.39	1.960	-0.783	-5.72
8UZ9FK	*	2.750	0.000	0.00	2.600	-0.143	-1.04
9HJFEC	X	0.001	-2.749	-21.31	0.002	-2.741	-20.02
A2UM8J		2.700	-0.050	-0.38	2.729	-0.014	-0.10
A4FVLR		2.800	0.050	0.39	2.795	0.052	0.38
AAHJ4E		2.545	-0.205	-1.59	2.495	-0.248	-1.81
ABGJ9K		2.795	0.045	0.35	2.845	0.102	0.75
AD27RC		2.650	-0.100	-0.77	2.720	-0.023	-0.16
ALCYTE		2.825	0.075	0.58	2.770	0.027	0.20
AWFFY6		2.751	0.001	0.01	2.752	0.009	0.07
AXQD7U		2.900	0.150	1.17	2.900	0.157	1.15
BH8Q2A		2.770	0.020	0.16	2.810	0.067	0.49
BWT2TL		3.010	0.260	2.02	2.995	0.252	1.84
BWVQWJ		2.680	-0.070	-0.54	2.680	-0.063	-0.46
C2MPXC	M	No data reported for this sample			1.460	-1.283	-9.37
CGW47G	X	2.464	-0.286	-2.22	2.733	-0.010	-0.07
CU4FTN		2.883	0.133	1.03	2.901	0.158	1.16
D9ZUQW		2.840	0.090	0.70	2.855	0.112	0.82
DWJCPD		2.705	-0.045	-0.35	2.735	-0.008	-0.05
EGTX4D		2.490	-0.260	-2.01	2.480	-0.263	-1.92
EMW3UC		2.830	0.080	0.62	2.850	0.107	0.79



WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FZHY9E		2.620	-0.130	-1.00	2.575	-0.168	-1.22
G62N49		2.770	0.020	0.16	2.690	-0.053	-0.38
GC7NYP		2.870	0.120	0.93	2.828	0.085	0.62
GQ4CV6		2.804	0.054	0.42	2.683	-0.060	-0.43
GYL9VQ	X	2.590	-0.160	-1.24	2.768	0.025	0.18
H3UMH2		2.740	-0.010	-0.07	2.780	0.037	0.27
H8BE4H		2.825	0.075	0.58	2.875	0.132	0.97
HENAzb		2.852	0.102	0.79	2.846	0.103	0.76
HQ242B	X	2.435	-0.315	-2.44	2.615	-0.128	-0.93
HQ4RKA	X	3.210	0.460	3.57	3.080	0.337	2.47
HVYWM8		2.560	-0.190	-1.47	2.550	-0.193	-1.41
JDTBZ4		3.005	0.255	1.98	2.975	0.232	1.70
JFUMR		2.713	-0.037	-0.28	2.702	-0.041	-0.30
JQV8BC		2.665	-0.085	-0.66	2.660	-0.083	-0.60
JRTH7F		2.815	0.065	0.51	2.840	0.097	0.71
JT7FTP		2.830	0.080	0.62	2.850	0.107	0.79
JUYFNF	X	1.955	-0.795	-6.16	1.805	-0.938	-6.85
KLMGU6		2.625	-0.125	-0.97	2.630	-0.113	-0.82
LA32D3		2.835	0.085	0.66	2.795	0.052	0.38
LVZR89		2.820	0.070	0.55	2.755	0.012	0.09
MGKJW9		2.665	-0.085	-0.66	2.665	-0.078	-0.57
MTDZLA		2.850	0.100	0.78	2.800	0.057	0.42
N8B2R4		2.665	-0.085	-0.66	2.680	-0.063	-0.46
NGUD72		2.635	-0.115	-0.89	2.650	-0.093	-0.68
NJ3XZA		2.630	-0.120	-0.93	2.600	-0.143	-1.04
PMFQH9		2.800	0.050	0.39	2.790	0.047	0.35
Q6VK4A		2.814	0.064	0.50	2.790	0.047	0.34
T8EFHD	X	2.550	-0.200	-1.55	3.005	0.262	1.92
TC8KBG		2.780	0.030	0.24	2.805	0.062	0.46
TLYZZL		2.785	0.035	0.27	2.760	0.017	0.13
U89ZUX		2.705	-0.045	-0.35	2.730	-0.013	-0.09
UFZH4Z		2.975	0.225	1.75	2.975	0.232	1.70
ULU46F		2.650	-0.100	-0.78	2.633	-0.110	-0.80
UXMWLY		2.870	0.120	0.93	2.875	0.132	0.97
W2XQE2		2.631	-0.119	-0.92	2.720	-0.023	-0.16



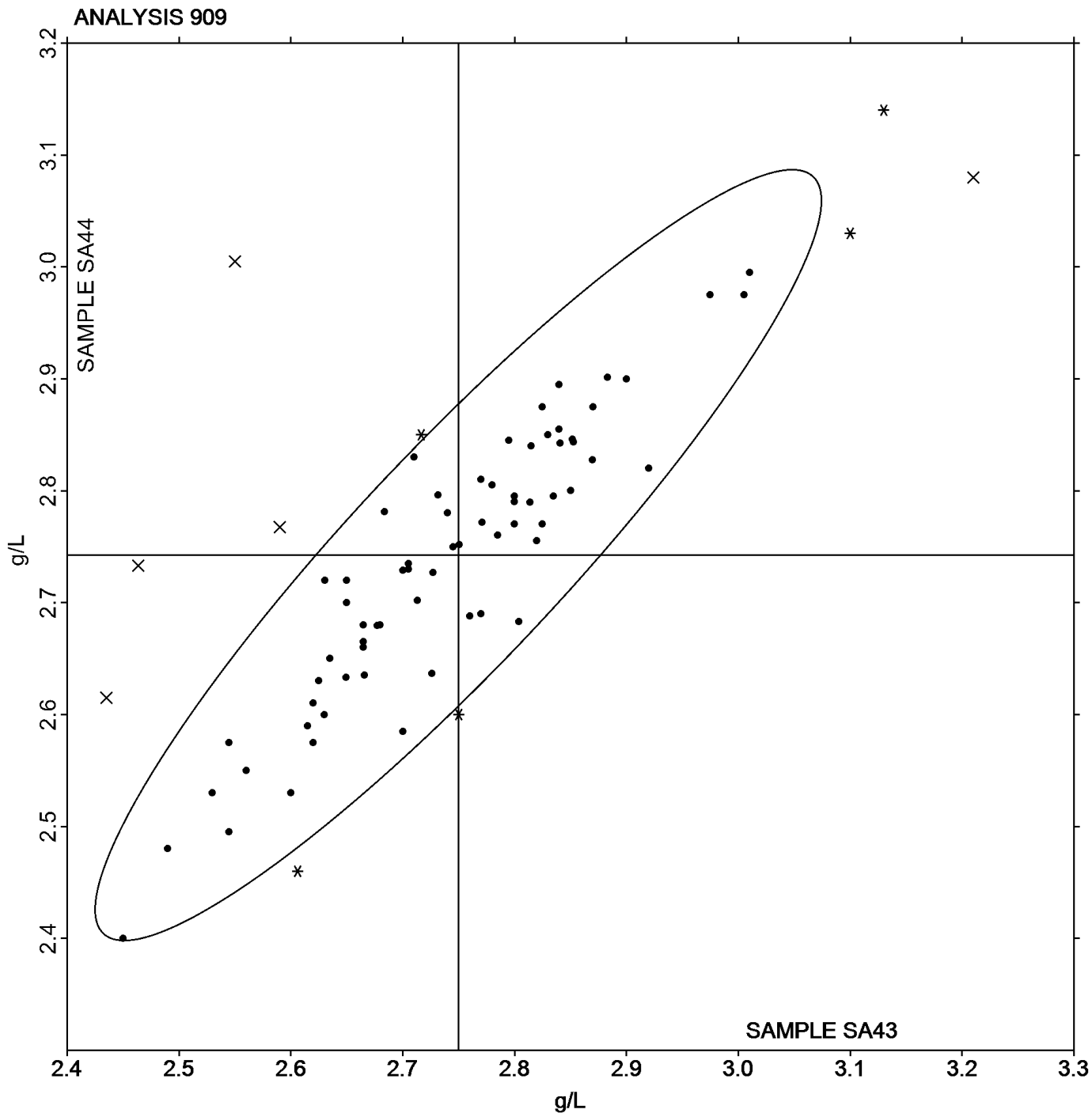
WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
WELG6C		2.727	-0.023	-0.18	2.727	-0.016	-0.11
WT2GYG		2.700	-0.050	-0.38	2.585	-0.158	-1.15
WTPKUC		2.620	-0.130	-1.00	2.610	-0.133	-0.97
WUVMKW		2.666	-0.084	-0.65	2.635	-0.107	-0.78
X4GXY2		2.745	-0.005	-0.04	2.750	0.007	0.05
X6AN9L		2.840	0.090	0.70	2.895	0.152	1.11
XHVZKW		2.684	-0.066	-0.51	2.781	0.038	0.28
XWG9QA		2.853	0.103	0.80	2.844	0.101	0.74
YETFEB		2.732	-0.018	-0.14	2.796	0.053	0.39
YFRVWW	X	4.930	2.180	16.90	5.130	2.387	17.44
YTFKM8		2.841	0.091	0.71	2.843	0.100	0.73
YVFAVM		2.615	-0.135	-1.04	2.590	-0.153	-1.11
Z9ZCQK	*	2.717	-0.033	-0.26	2.850	0.107	0.79
ZB6XJQ		2.530	-0.220	-1.70	2.530	-0.213	-1.55
ZQ2JWQ		2.800	0.050	0.39	2.770	0.027	0.20

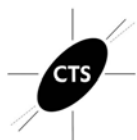
Grand Means	Summary Statistics
2.7496 g/L	2.7425 g/L
<b>Std Dev Btwn Labs</b>	
0.1290 g/L	0.1369 g/L
<b>Statistics based on 75 of 85 reporting participants</b>	

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #909**

- GYL9VQ (X) - Inconsistent in testing between samples.
- T8EFHD (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA44.
- C2MPXC (M) - Participant did not submit data for sample SA43.
- JUYFNF (X) - Data for both samples are low.
- 9HJFEC (X) - Extreme data.
- HQ242B (X) - Inconsistent in testing between samples.
- 8PKBJW (X) - Data for both samples are low.
- HQ4RKA (X) - Data for sample SA43 are high.
- CGW47G (X) - Inconsistent in testing between samples.
- YFRVWW (X) - Data for both samples are high. Inconsistent within the determinations of sample SA43.





# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #072

Fall 2022

## Analysis 910

### Glucose + Fructose

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		11.28	0.40	0.47	10.65	0.54	0.76
32QU7N		10.74	-0.14	-0.17	9.86	-0.24	-0.34
3TZ8FT	*	9.20	-1.68	-1.97	9.25	-0.85	-1.19
3UXHBV		10.66	-0.22	-0.25	10.46	0.36	0.50
4D6EGP		12.20	1.32	1.55	10.90	0.80	1.12
4JDYLA		10.25	-0.63	-0.73	9.60	-0.50	-0.70
674KXH		10.70	-0.18	-0.21	9.90	-0.20	-0.28
6PVZAL		9.95	-0.93	-1.09	9.14	-0.97	-1.35
6Q8H3V		10.45	-0.43	-0.50	9.70	-0.40	-0.56
6RZJXL	X	2.50	-8.38	-9.82	2.70	-7.40	-10.36
6WTD4Z		10.09	-0.79	-0.93	9.21	-0.90	-1.25
6XAE6G		11.25	0.37	0.44	10.50	0.40	0.56
789U4K		11.65	0.77	0.91	10.95	0.85	1.19
7VHTT6		10.54	-0.34	-0.40	9.64	-0.47	-0.65
89JWPJ		9.77	-1.11	-1.30	9.62	-0.48	-0.67
8AR98K		9.82	-1.06	-1.24	8.98	-1.12	-1.57
8BKWPF		11.15	0.27	0.32	10.30	0.20	0.28
8MGYBW		11.20	0.32	0.38	10.25	0.15	0.21
8PKBWJ	*	8.40	-2.48	-2.90	7.80	-2.30	-3.22
8UZ9FK		10.30	-0.58	-0.68	9.70	-0.40	-0.56
9BXHLH		10.51	-0.37	-0.44	10.20	0.10	0.14
9HJFEC	*	13.60	2.72	3.19	12.02	1.91	2.68
A2UM8J		11.19	0.31	0.37	10.04	-0.06	-0.08
A4FVLR		12.10	1.22	1.43	11.10	1.00	1.40
AAHJ4E		10.10	-0.78	-0.91	10.00	-0.10	-0.14
ABGJ9K		11.82	0.95	1.11	11.06	0.96	1.34
AD27RC	X	3.65	-7.23	-8.48	3.31	-6.80	-9.52
ALCYTE	X	13.76	2.88	3.37	12.74	2.64	3.70
AWFFY6		11.65	0.77	0.91	10.90	0.80	1.12
AXQD7U		10.67	-0.21	-0.24	9.69	-0.42	-0.58
BH8Q2A		10.29	-0.59	-0.69	9.50	-0.60	-0.84
BWT2TL		10.23	-0.65	-0.76	9.63	-0.47	-0.66
BWVQWJ		9.54	-1.34	-1.57	9.14	-0.97	-1.35
C2MPXC	M	No data reported for this sample			9.99	-0.11	-0.15
CGW47G		9.90	-0.98	-1.15	9.75	-0.35	-0.49



# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #072

Fall 2022

## Analysis 910 Glucose + Fructose

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
CU4FTN		12.00	1.12	1.32	11.05	0.95	1.33
D9ZUQW		10.68	-0.20	-0.23	9.78	-0.32	-0.45
DWJCPD		10.92	0.04	0.04	10.23	0.12	0.17
EGTX4D		10.50	-0.38	-0.44	9.61	-0.50	-0.69
EMW3UC		10.70	-0.18	-0.21	9.85	-0.26	-0.36
G62N49		10.95	0.07	0.09	10.05	-0.05	-0.07
GC7NYP		11.65	0.77	0.91	10.60	0.50	0.70
GECQPA	*	8.82	-2.06	-2.42	8.16	-1.94	-2.72
GQ4CV6		13.05	2.17	2.55	12.00	1.90	2.66
GYL9VQ		10.16	-0.72	-0.84	9.84	-0.27	-0.37
H3UMH2	X	11.72	0.84	0.99	9.95	-0.15	-0.21
H8BE4H		11.40	0.52	0.61	10.45	0.35	0.49
HENAZB		11.43	0.55	0.65	10.27	0.17	0.24
HQ242B	X	8.55	-2.33	-2.73	8.92	-1.19	-1.66
HQ4RKA		11.30	0.42	0.50	10.50	0.40	0.56
JDTBZ4	X	11.75	0.87	1.02	9.40	-0.70	-0.98
JFUMR		10.90	0.02	0.03	10.00	-0.10	-0.14
JQV8BC		10.83	-0.05	-0.06	9.91	-0.19	-0.27
JRTH7F		11.00	0.12	0.14	10.15	0.05	0.07
JT7FTP		11.13	0.25	0.30	10.36	0.26	0.36
KLMGU6		10.95	0.07	0.09	10.00	-0.10	-0.14
LA32D3		10.86	-0.02	-0.02	9.76	-0.35	-0.48
LVZR89		9.30	-1.58	-1.85	8.85	-1.25	-1.75
MDJBTY	X	10.53	-0.35	-0.41	10.83	0.73	1.02
MGKJW9		10.90	0.02	0.03	10.10	0.00	0.00
MTDZLA		10.62	-0.26	-0.31	9.77	-0.33	-0.46
N8B2R4		10.24	-0.64	-0.75	9.56	-0.54	-0.76
NGUD72		10.40	-0.48	-0.56	9.72	-0.38	-0.53
NJ3XZA		11.85	0.97	1.14	11.00	0.90	1.26
PMFQH9		10.70	-0.18	-0.21	9.70	-0.40	-0.56
Q6VK4A		11.22	0.34	0.40	10.13	0.03	0.04
TC8KBG		10.55	-0.33	-0.38	10.00	-0.10	-0.14
TLYZZL	X	10.30	-0.58	-0.68	10.61	0.51	0.71
U89ZUX		12.08	1.20	1.41	11.22	1.11	1.56
UFZH4Z		11.25	0.37	0.44	10.55	0.45	0.63





WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ULU46F		10.13	-0.75	-0.88	9.47	-0.63	-0.88
UXMWLY		10.95	0.07	0.09	10.20	0.10	0.14
W2XQE2	X	7.00	-3.88	-4.54	7.15	-2.95	-4.13
WELG6C		10.83	-0.05	-0.06	9.98	-0.13	-0.18
WT2GYG		12.07	1.19	1.40	11.06	0.95	1.34
WTPKUC		11.40	0.52	0.61	10.55	0.45	0.63
WUVMKW		10.33	-0.55	-0.65	9.47	-0.64	-0.89
WUW82P		10.78	-0.10	-0.11	10.06	-0.04	-0.06
X4GXY2		10.81	-0.07	-0.08	9.98	-0.12	-0.17
X6AN9L		11.05	0.17	0.20	10.25	0.15	0.21
XHVZKW		10.59	-0.29	-0.34	10.36	0.26	0.36
XWG9QA		12.02	1.14	1.34	10.88	0.77	1.08
YETFEB		10.45	-0.43	-0.50	9.65	-0.45	-0.63
YFRVWW		11.50	0.62	0.73	10.80	0.70	0.98
YGM4X7	X	3.20	-7.68	-9.00	3.11	-6.99	-9.79
YTFKM8		12.00	1.12	1.32	11.10	1.00	1.40
YVFAVM		10.80	-0.08	-0.10	9.86	-0.25	-0.34
Z9ZCQK		11.14	0.26	0.31	10.54	0.43	0.61
ZB6XJQ		10.10	-0.78	-0.91	9.30	-0.80	-1.12
ZQ2JWQ		11.48	0.60	0.71	10.61	0.50	0.71

Grand Means		Summary Statistics	
	10.877 g/L		10.100 g/L
Std Dev Btwn Labs			0.714 g/L
	0.853 g/L		
<b>Statistics based on 79 of 90 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

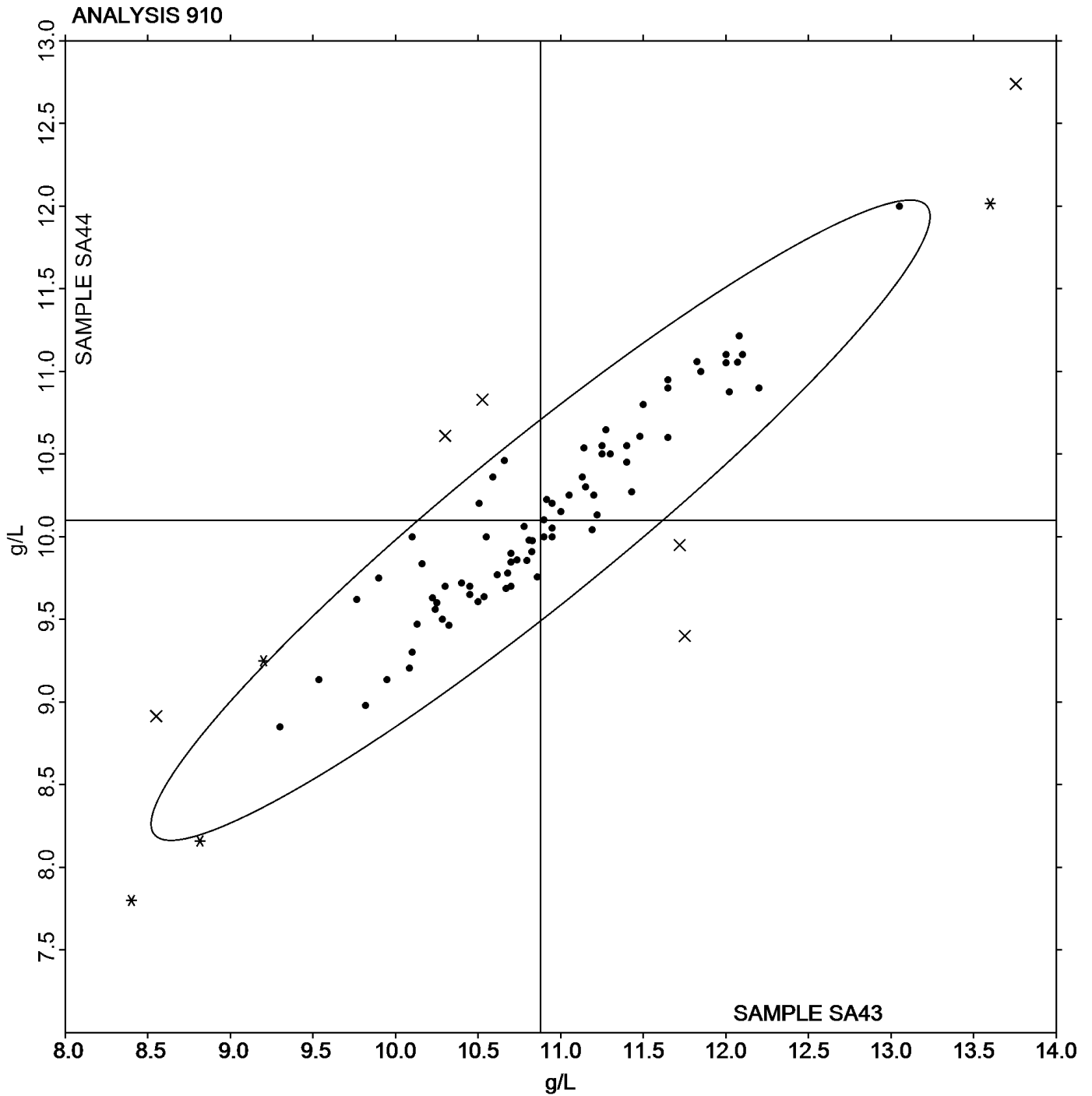


**Comments on Assigned Data Flags for Test #910**

- YGM4X7 (X) - Data for both samples are low.
- TLYZZL (X) - Inconsistent in testing between samples.
- C2MPXC (M) - Participant did not submit data for sample SA43.
- JDTBZ4 (X) - Inconsistent in testing between samples.
- MDJBTY (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA43.
- AD27RC (X) - Data for both samples are low.
- 6RZJXL (X) - Data for both samples are low.
- H3UMH2 (X) - Inconsistent in testing between samples.
- HQ242B (X) - Inconsistent in testing between samples.
- ALCYTE (X) - Data for both samples are high. Possible Systematic Error.
- W2XQE2 (X) - Data for both samples are low. Possible Systematic Error.

**Results by Methodology (as reported by laboratory)**

Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	10.660	0.000	-0.22	10.460	0.000	0.36	1/1
HPLC	11.200	0.000	0.32	10.250	0.000	0.15	1/1
Enzymatic/Spectrophotometric	10.810	0.791	-0.07	10.043	0.668	-0.06	69/80
FTIR	11.614	0.978	0.74	10.688	0.691	0.59	7/7
Other _____	8.815	0.000	-2.06	8.160	0.000	-1.94	1/1





**Analysis 911  
Copper Content**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		0.2280	0.0597	0.71	0.2275	0.0789	1.83
674KXH		0.2000	0.0317	0.38	0.2100	0.0614	1.43
6RZJXL	*	0.4000	0.2317	2.75	0.0300	-0.1186	-2.76
8BKWPF		0.1650	-0.0033	-0.04	0.1600	0.0114	0.26
8MGYBW		0.1225	-0.0458	-0.54	0.1345	-0.0141	-0.33
A2UM8J		0.1650	-0.0033	-0.04	0.1650	0.0164	0.38
A4FVLR		0.1205	-0.0478	-0.57	0.1350	-0.0136	-0.32
AXQD7U		0.1550	-0.0133	-0.16	0.1700	0.0214	0.50
CU4FTN		0.1450	-0.0233	-0.28	0.1550	0.0064	0.15
H8BE4H		0.1510	-0.0173	-0.21	0.1660	0.0174	0.40
KLMGU6		0.1150	-0.0533	-0.63	0.1430	-0.0056	-0.13
NGUD72		0.1870	0.0187	0.22	0.1995	0.0509	1.18
Q6VK4A		0.1100	-0.0583	-0.69	0.1450	-0.0036	-0.08
UXMWLY		0.3450	0.1767	2.09	0.1400	-0.0086	-0.20
W2XQE2		0.1100	-0.0583	-0.69	0.1200	-0.0286	-0.67
WELG6C		0.0550	-0.1133	-1.34	0.1050	-0.0436	-1.01
X6AN9L		0.1310	-0.0373	-0.44	0.1400	-0.0086	-0.20
YTFKM8		0.1250	-0.0433	-0.51	0.1300	-0.0186	-0.43

Grand Means		Summary Statistics	
	0.16833 mg/L		0.14864 mg/L
<b>Stnd Dev Btwn Labs</b>	0.08436 mg/L		0.04304 mg/L
<b>Statistics based on 18 of 18 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio



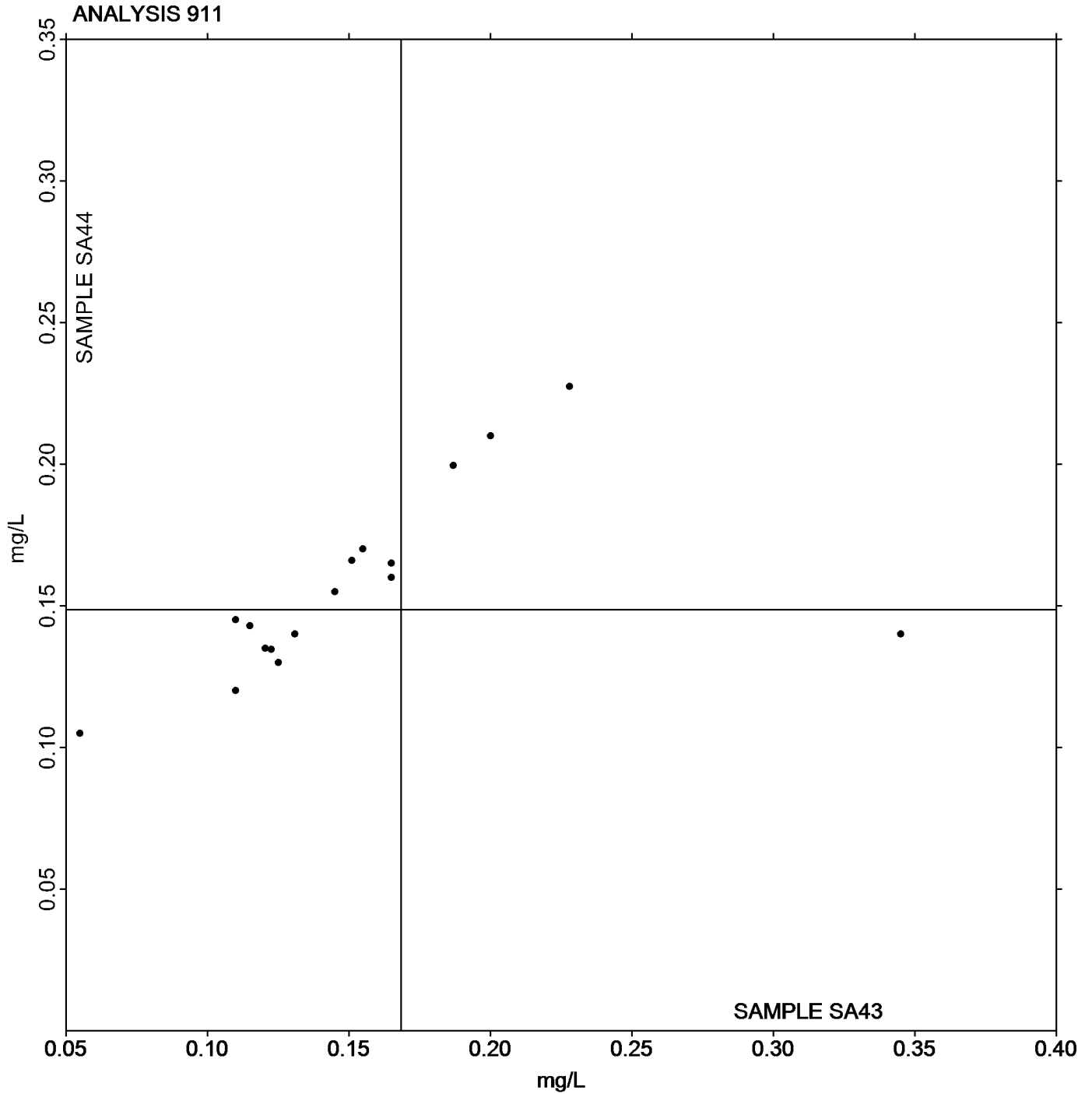
**Analysis 911  
Copper Content**

**Results by Methodology (as reported by laboratory)**

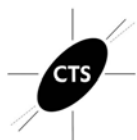
Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	0.400	0.000	0.2317	0.030	0.000	-0.1186	1/1
Atomic Absorption Spectroscopy	0.170	0.088	0.0012	0.157	0.042	0.0086	8/8
ICP	0.130	0.019	-0.0385	0.145	0.010	-0.0040	7/7
FTIR	0.165	0.000	-0.0033	0.165	0.000	0.0164	1/1
Colorimetric Analysis	0.200	0.000	0.0317	0.210	0.000	0.0614	1/1



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 SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		693.0	6.2	0.07	682.8	-9.7	-0.10
3TZ8FT	*	990.0	303.2	3.19	1,000.0	307.5	3.13
674KXH		724.0	37.2	0.39	726.0	33.5	0.34
6WTD4Z		753.0	66.2	0.70	776.0	83.5	0.85
8BKWPF		658.0	-28.8	-0.30	660.0	-32.5	-0.33
8MGYBW		641.5	-45.3	-0.48	635.0	-57.5	-0.59
A4FVLR		648.5	-38.3	-0.40	621.0	-71.5	-0.73
CU4FTN		625.0	-61.8	-0.65	623.0	-69.5	-0.71
EMW3UC		592.0	-94.8	-1.00	629.5	-63.0	-0.64
HENAZB		674.8	-12.0	-0.13	665.1	-27.4	-0.28
HQ242B		581.0	-105.8	-1.11	587.5	-105.0	-1.07
KLMGU6		637.5	-49.3	-0.52	635.0	-57.5	-0.59
NGUD72		784.3	97.5	1.03	791.0	98.5	1.00
Q6VK4A		636.3	-50.5	-0.53	650.9	-41.6	-0.42
T8EFHD		751.5	64.7	0.68	773.5	81.0	0.83
ULU46F		631.5	-55.3	-0.58	644.0	-48.5	-0.49
UXMWLY		606.0	-80.8	-0.85	607.5	-85.0	-0.87
VVXDB7		614.5	-72.3	-0.76	619.6	-73.0	-0.74
X6AN9L		699.0	12.2	0.13	715.0	22.5	0.23
YFRVWW		794.0	107.2	1.13	808.5	116.0	1.18

Grand Means		Summary Statistics	
	686.77 mg/L		692.54 mg/L
<b>Stnd Dev Btwn Labs</b>	94.97 mg/L		98.13 mg/L
<b>Statistics based on 20 of 20 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio



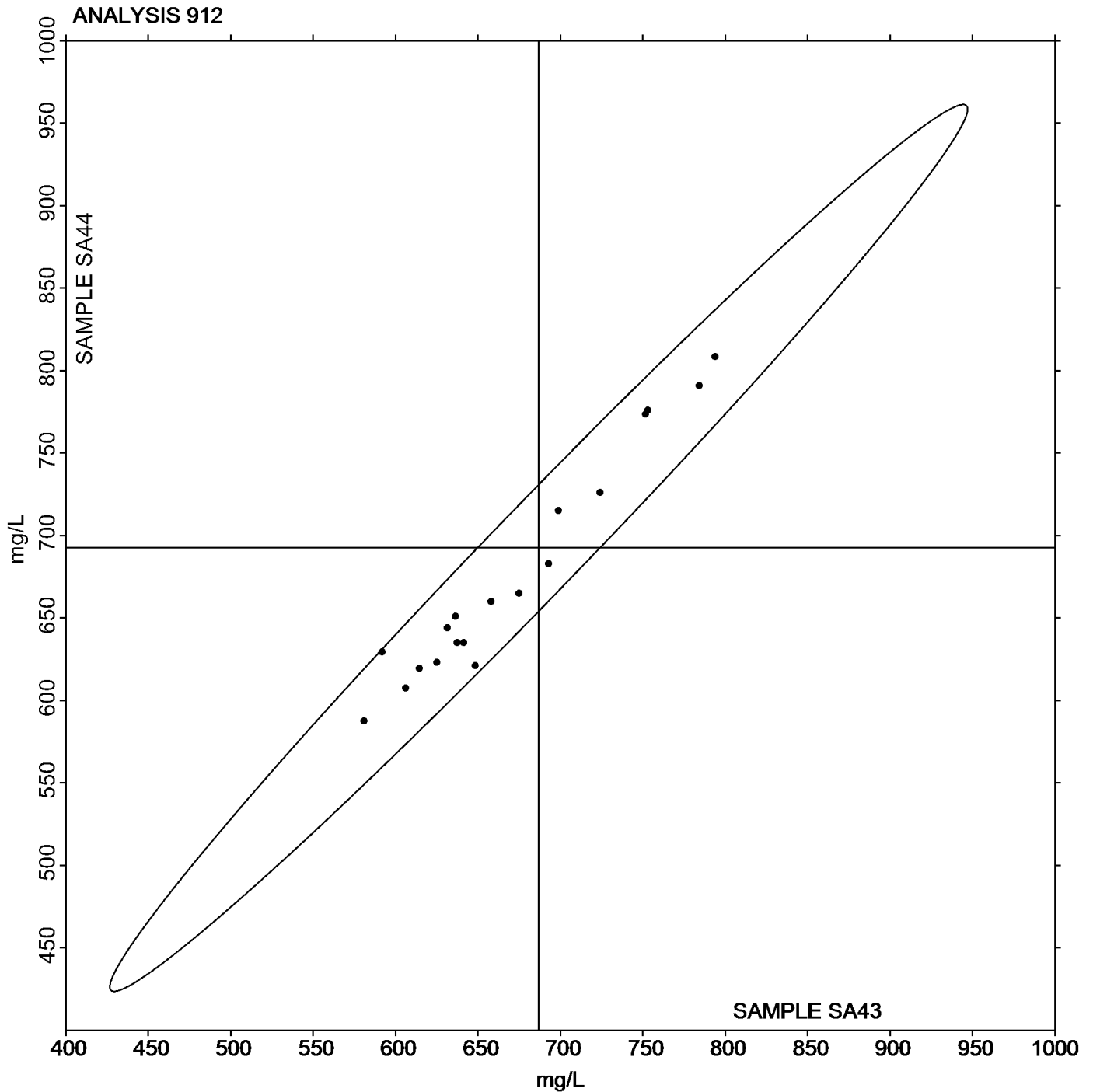
**Results by Methodology (as reported by laboratory)**

Test Methodology	Sample SA43 <i>Pinot Grigio</i>			Sample SA44 <i>Pinot Grigio</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Atomic Absorption Spectroscopy	653.548	73.091	-33.2	662.392	68.155	-30.2	6/6
ICP	649.393	24.177	-37.4	648.557	32.484	-44.0	7/7
Other _____	788.333	204.559	101.6	798.667	206.426	106.1	3/3
Colorimetric Analysis	725.825	36.536	39.1	735.150	52.058	42.6	4/4





Analysis 912  
Potassium (K) Content





# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #072

Fall 2022

## Analysis 915 A420nm (1cm path)

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		0.0455	0.0024	0.63	0.0473	0.0038	0.99
674KXH		0.0464	0.0033	0.88	0.0492	0.0057	1.48
6PVZAL		0.0410	-0.0021	-0.55	0.0420	-0.0015	-0.38
6Q8H3V		0.0450	0.0019	0.51	0.0455	0.0020	0.52
6RZJXL	X	0.0499	0.0068	1.81	0.0591	0.0156	4.04
6WTD4Z		0.0405	-0.0026	-0.68	0.0425	-0.0010	-0.25
789U4K		0.0420	-0.0011	-0.28	0.0420	-0.0015	-0.38
7VHTT6		0.0450	0.0019	0.51	0.0450	0.0015	0.40
8PKBWJ		0.0490	0.0059	1.57	0.0485	0.0050	1.30
9BXHLH		0.0455	0.0024	0.64	0.0460	0.0025	0.65
9HJFEC	X	0.0050	-0.0381	-10.07	0.0080	-0.0355	-9.17
A2UM8J		0.0415	-0.0016	-0.41	0.0420	-0.0015	-0.38
A4FVLR		0.0440	0.0009	0.25	0.0465	0.0030	0.78
AAHJ4E	*	0.0340	-0.0091	-2.40	0.0325	-0.0110	-2.84
AD27RC		0.0400	-0.0031	-0.81	0.0440	0.0005	0.14
AXQD7U	X	0.0310	-0.0121	-3.19	0.0180	-0.0255	-6.59
BWVQWJ		0.0440	0.0009	0.25	0.0465	0.0030	0.78
C23JM9		0.0430	-0.0001	-0.02	0.0440	0.0005	0.14
CU4FTN		0.0455	0.0024	0.64	0.0460	0.0025	0.65
G62N49		0.0405	-0.0026	-0.68	0.0405	-0.0030	-0.77
G7YYYYB	X	0.0500	0.0069	1.83	0.0430	-0.0005	-0.12
GYL9VQ		0.0445	0.0014	0.38	0.0410	-0.0025	-0.64
H8BE4H		0.0420	-0.0011	-0.28	0.0440	0.0005	0.14
HENAZB		0.0425	-0.0006	-0.15	0.0420	-0.0015	-0.38
HQ242B		0.0430	-0.0001	-0.02	0.0450	0.0015	0.40
HQ4RKA		0.0380	-0.0051	-1.34	0.0395	-0.0040	-1.03
HVYWM8		0.0396	-0.0035	-0.92	0.0446	0.0011	0.29
JAXRC8		0.0418	-0.0013	-0.35	0.0433	-0.0002	-0.06
JDTBZ4		0.0400	-0.0031	-0.81	0.0400	-0.0035	-0.90
JJFUMR		0.0410	-0.0021	-0.55	0.0390	-0.0045	-1.16
JUYFNF		0.0515	0.0084	2.23	0.0510	0.0075	1.95
KLMGU6		0.0440	0.0009	0.25	0.0415	-0.0020	-0.51
LVZR89		0.0440	0.0009	0.25	0.0440	0.0005	0.14
MDJBTY		0.0470	0.0039	1.04	0.0465	0.0030	0.78
NGUD72	*	0.0530	0.0099	2.63	0.0520	0.0085	2.21



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

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NGXZH9	X	0.0260	-0.0171	-4.51	0.0270	-0.0165	-4.26
NJ3XZA		0.0400	-0.0031	-0.81	0.0400	-0.0035	-0.90
T8EFHD		0.0380	-0.0051	-1.34	0.0380	-0.0055	-1.42
TLYZZL		0.0370	-0.0061	-1.60	0.0370	-0.0065	-1.67
ULU46F		0.0430	-0.0001	-0.02	0.0455	0.0020	0.52
UXMWLY		0.0490	0.0059	1.57	0.0485	0.0050	1.30
WELG6C	X	0.0295	-0.0136	-3.59	0.0430	-0.0005	-0.12
WTPKUC		0.0395	-0.0036	-0.94	0.0410	-0.0025	-0.64
X6AN9L		0.0420	-0.0011	-0.28	0.0430	-0.0005	-0.12
XWG9QA	X	0.0426	-0.0005	-0.13	0.0342	-0.0092	-2.39
YFRVWW	*	0.0450	0.0019	0.51	0.0400	-0.0035	-0.90
Z9ZCQK		0.0450	0.0019	0.51	0.0425	-0.0010	-0.25
ZB6XJQ	X	0.0050	-0.0381	-10.07	0.0020	-0.0415	-10.73

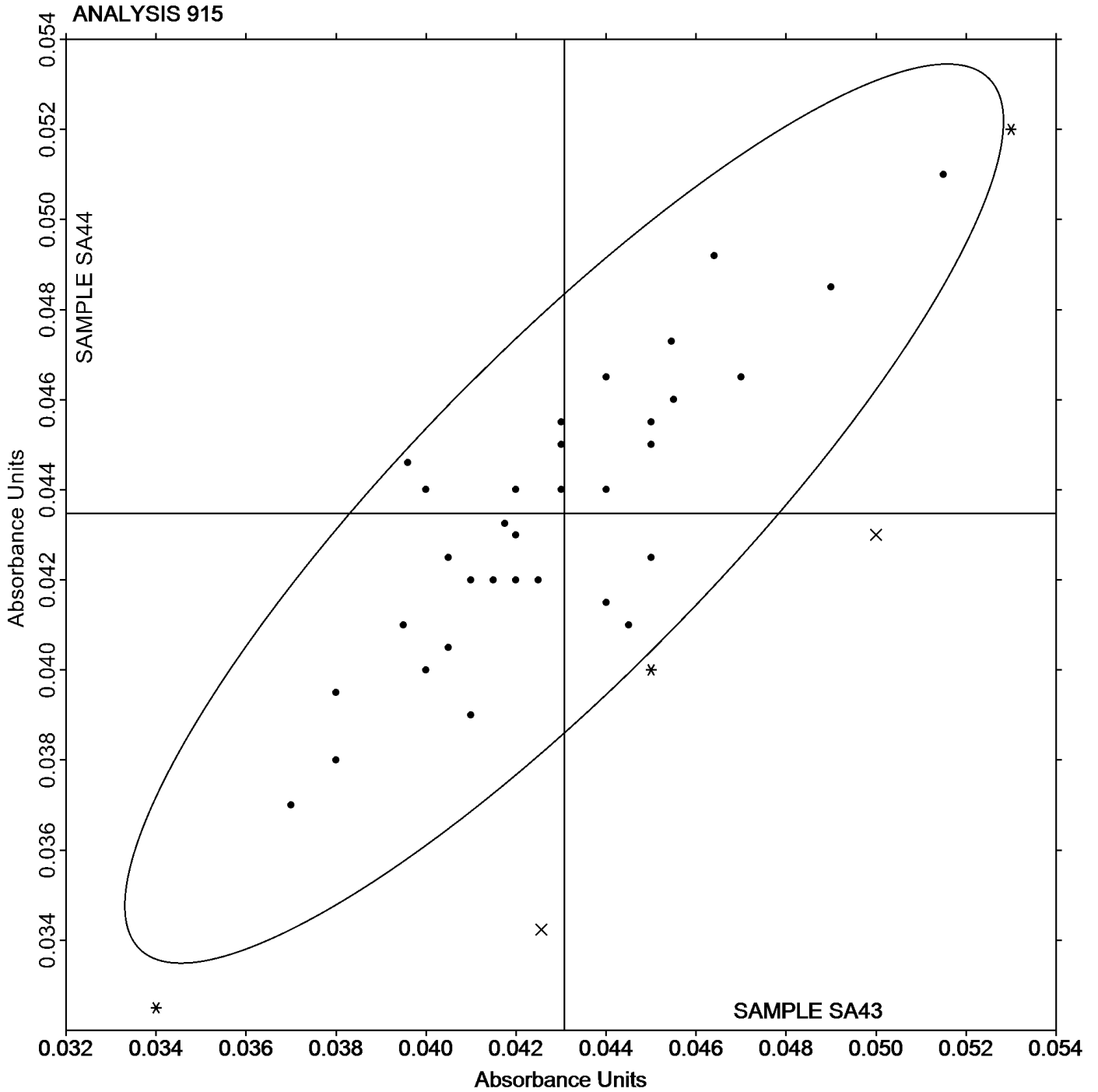
Grand Means		Summary Statistics	
0.04307	Absorbance Units	0.04347	Absorbance Units
0.00378	Absorbance Units	0.00387	Absorbance Units

**Statistics based on 40 of 48 reporting participants**

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #915**

- WELG6C (X) - Data for sample SA43 are low.
- XWG9QA (X) - Inconsistent in testing between samples.
- AXQD7U (X) - Data for both samples are low.
- 6RZJXL (X) - Data for sample SA44 are high.
- 9HJFEC (X) - Data for both samples are low.
- G7YYYY (X) - Inconsistent in testing between samples.
- ZB6XJQ (X) - Data for both samples are low.
- NGXZH9 (X) - Data for both samples are low. Possible Systematic Error.





# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #072

Fall 2022

## Analysis 916 A520nm (1cm path)

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N	*	0.0106	0.0020	0.81	0.0152	0.0062	2.23
674KXH		0.0096	0.0010	0.40	0.0116	0.0027	0.96
6PVZAL		0.0080	-0.0006	-0.26	0.0080	-0.0009	-0.33
6Q8H3V		0.0105	0.0019	0.77	0.0100	0.0011	0.39
6RZJXL	X	0.0165	0.0079	3.24	0.0213	0.0123	4.42
6WTD4Z		0.0060	-0.0026	-1.08	0.0070	-0.0019	-0.69
789U4K		0.0080	-0.0006	-0.26	0.0080	-0.0009	-0.33
7VHTT6		0.0090	0.0004	0.15	0.0090	0.0001	0.03
8PKBWJ		0.0100	0.0014	0.56	0.0105	0.0016	0.56
9BXHLH		0.0115	0.0029	1.18	0.0110	0.0021	0.74
9HJFEC	*	0.0010	-0.0076	-3.14	0.0020	-0.0069	-2.48
A2UM8J		0.0075	-0.0011	-0.46	0.0075	-0.0014	-0.51
A4FVLR		0.0090	0.0004	0.15	0.0110	0.0021	0.74
AAHJ4E		0.0040	-0.0046	-1.90	0.0030	-0.0059	-2.12
AD27RC		0.0085	-0.0001	-0.05	0.0090	0.0001	0.03
AXQD7U	X	0.0150	0.0064	2.62	0.0025	-0.0064	-2.30
BWVQWJ		0.0105	0.0019	0.77	0.0135	0.0046	1.64
C23JM9		0.0070	-0.0016	-0.67	0.0100	0.0011	0.39
CU4FTN		0.0090	0.0004	0.15	0.0095	0.0006	0.21
G62N49		0.0070	-0.0016	-0.67	0.0085	-0.0004	-0.15
G7YYYYB	*	0.0130	0.0044	1.80	0.0090	0.0001	0.03
GYL9VQ		0.0075	-0.0011	-0.46	0.0040	-0.0049	-1.76
HENAZB		0.0080	-0.0006	-0.26	0.0080	-0.0009	-0.33
HQ242B		0.0090	0.0004	0.15	0.0100	0.0011	0.39
HQ4RKA		0.0075	-0.0011	-0.46	0.0070	-0.0019	-0.69
HVYWM8		0.0063	-0.0023	-0.96	0.0089	0.0000	-0.01
JDTBZ4	X	0.0100	0.0014	0.56	0.1450	0.1361	48.76
JJFUMR		0.0100	0.0014	0.56	0.0080	-0.0009	-0.33
JUYFNF		0.0110	0.0024	0.97	0.0115	0.0026	0.92
KLMGU6		0.0079	-0.0007	-0.30	0.0080	-0.0009	-0.33
LVZR89		0.0095	0.0009	0.36	0.0085	-0.0004	-0.15
MDJBTY		0.0120	0.0034	1.39	0.0115	0.0026	0.92
NGUD72		0.0130	0.0044	1.80	0.0140	0.0051	1.82
NJ3XZA		0.0090	0.0004	0.15	0.0090	0.0001	0.03
T8EFHD		0.0080	-0.0006	-0.26	0.0080	-0.0009	-0.33



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

**Report #072**  
**Fall 2022**

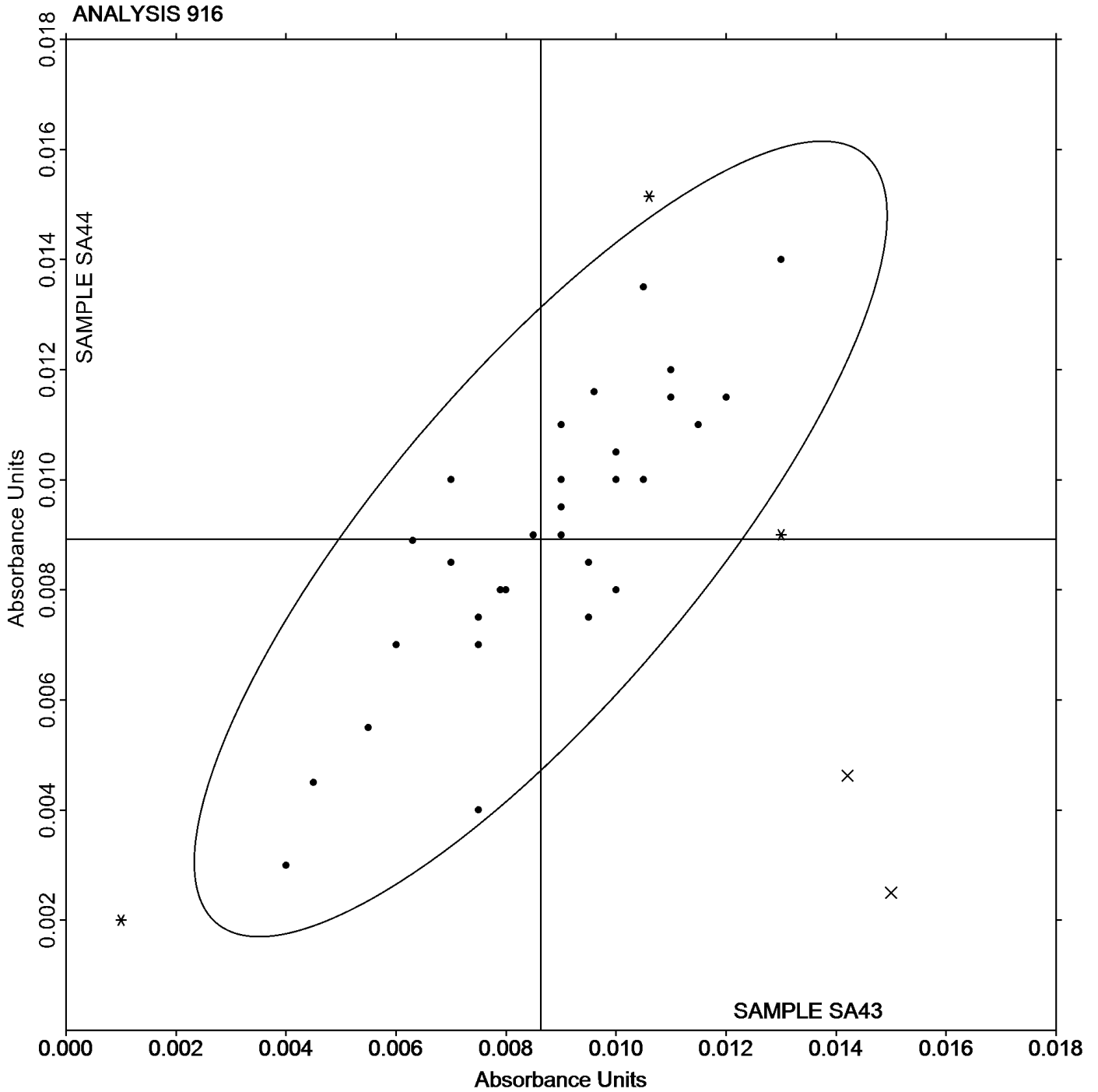
WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TLYZZL		0.0045	-0.0041	-1.70	0.0045	-0.0044	-1.59
ULU46F		0.0055	-0.0031	-1.29	0.0055	-0.0034	-1.23
UXMWLY		0.0110	0.0024	0.97	0.0120	0.0031	1.10
WELG6C	M	No data reported for this sample			0.0080	-0.0009	-0.33
X6AN9L		0.0090	0.0004	0.15	0.0100	0.0011	0.39
XWG9QA	X	0.0142	0.0056	2.29	0.0046	-0.0043	-1.54
YFRVWW		0.0100	0.0014	0.56	0.0100	0.0011	0.39
Z9ZCQK		0.0095	0.0009	0.36	0.0075	-0.0014	-0.51
ZB6XJQ	X	0.0290	0.0204	8.37	0.0310	0.0221	7.91

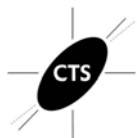
Grand Means		Summary Statistics	
0.00863	Absorbance Units	0.00893	Absorbance Units
Std Dev Btw Labs		0.00279 Absorbance Units	
0.00243	Absorbance Units		
<b>Statistics based on 38 of 44 reporting participants</b>			

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio

**Comments on Assigned Data Flags for Test #916**

- WELG6C (M) - Participant did not submit data for sample SA43.
- XWG9QA (X) - Inconsistent in testing between samples.
- AXQD7U (X) - Inconsistent in testing between samples.
- JDTBZ4 (X) - Data for sample SA44 are high. Inconsistent within the determinations of sample SA44.
- 6RZJXL (X) - Data for both samples are high. Possible Systematic Error.
- ZB6XJQ (X) - Data for both samples are high.





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

**Report #072**  
**Fall 2022**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
32QU7N		0.4185	-0.0137	-0.28	0.4215	-0.0065	-0.14
674KXH		0.3900	-0.0422	-0.86	0.3900	-0.0380	-0.80
6PVZAL		0.3810	-0.0512	-1.04	0.3860	-0.0420	-0.89
7VHTT6		0.4240	-0.0082	-0.17	0.4190	-0.0090	-0.19
9HJFEC		0.5595	0.1273	2.59	0.5570	0.1290	2.73
A2UM8J		0.5150	0.0828	1.68	0.5150	0.0870	1.84
A4FVLR		0.4200	-0.0122	-0.25	0.4200	-0.0080	-0.17
CU4FTN		0.4280	-0.0042	-0.09	0.4310	0.0030	0.06
H8BE4H		0.3800	-0.0522	-1.06	0.3800	-0.0480	-1.02
HQ4RKA	M	No data reported for this sample			0.5800	0.1520	3.22
KLMGU6		0.4850	0.0528	1.07	0.4650	0.0370	0.78
LVZR89		0.4400	0.0078	0.16	0.4150	-0.0130	-0.28
NGUD72		0.4440	0.0118	0.24	0.4170	-0.0110	-0.23
Q6VK4A		0.4055	-0.0267	-0.54	0.4115	-0.0165	-0.35
UXMWLY		0.4000	-0.0322	-0.66	0.4000	-0.0280	-0.59
WELG6C		0.4050	-0.0272	-0.55	0.4000	-0.0280	-0.59
X6AN9L		0.4200	-0.0122	-0.25	0.4200	-0.0080	-0.17

**Research Property Consensus Value**

Consensus Average

0.43222 g/L

0.42800 g/L

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

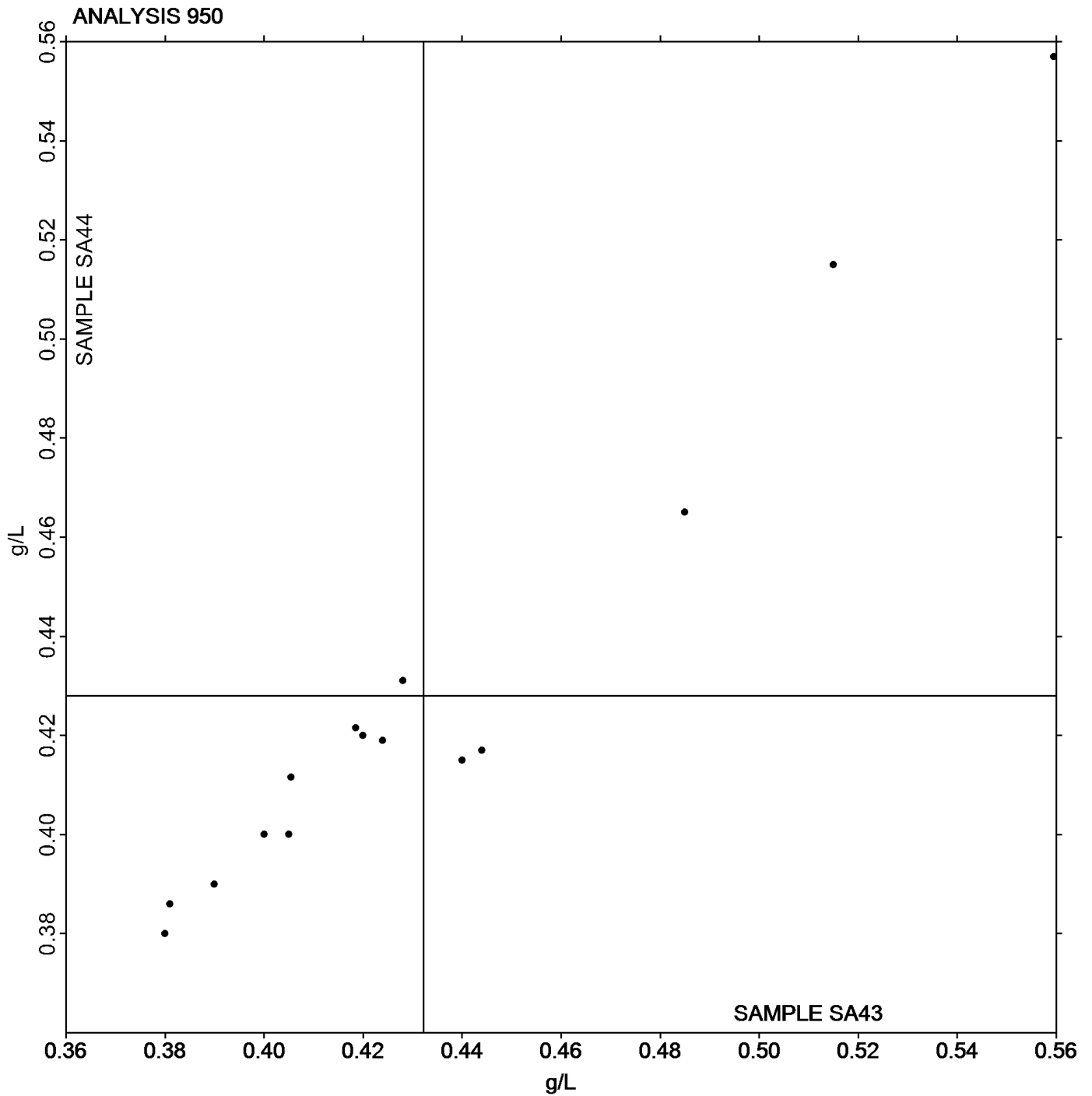
*This consensus average is based on 16 reporting participants.*

**Wines tested:** SA43: Pinot Grigio; SA44: Pinot Grigio

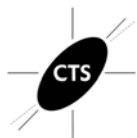
**Comments on Assigned Data Flags for Test #950**

HQ4RKA (M) - Participant did not submit data for sample SA43.





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: Iron Content**

**Report #072**  
**Fall 2022**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
32QU7N	*	2.848	1.035	2.98	2.844	1.025	2.93
674KXH		2.000	0.187	0.54	2.000	0.181	0.52
7VHTT6		1.345	-0.468	-1.35	1.325	-0.494	-1.41
8BKWPF		1.700	-0.113	-0.32	1.730	-0.089	-0.26
8MGYBW		1.720	-0.093	-0.27	1.705	-0.114	-0.33
A2UM8J		1.610	-0.203	-0.58	1.605	-0.214	-0.61
A4FVLR		1.745	-0.068	-0.19	1.685	-0.134	-0.38
AXQD7U		1.535	-0.278	-0.80	1.550	-0.269	-0.77
CU4FTN		1.800	-0.013	-0.04	1.795	-0.024	-0.07
KLMGU6		1.855	0.042	0.12	1.845	0.026	0.07
NGUD72		1.584	-0.229	-0.66	1.586	-0.234	-0.67
Q6VK4A	*	1.755	-0.058	-0.17	1.915	0.096	0.27
UXMWLY		2.000	0.187	0.54	2.000	0.181	0.52
X6AN9L		1.880	0.067	0.19	1.885	0.066	0.19

**Research Property Consensus Value**

Consensus Average

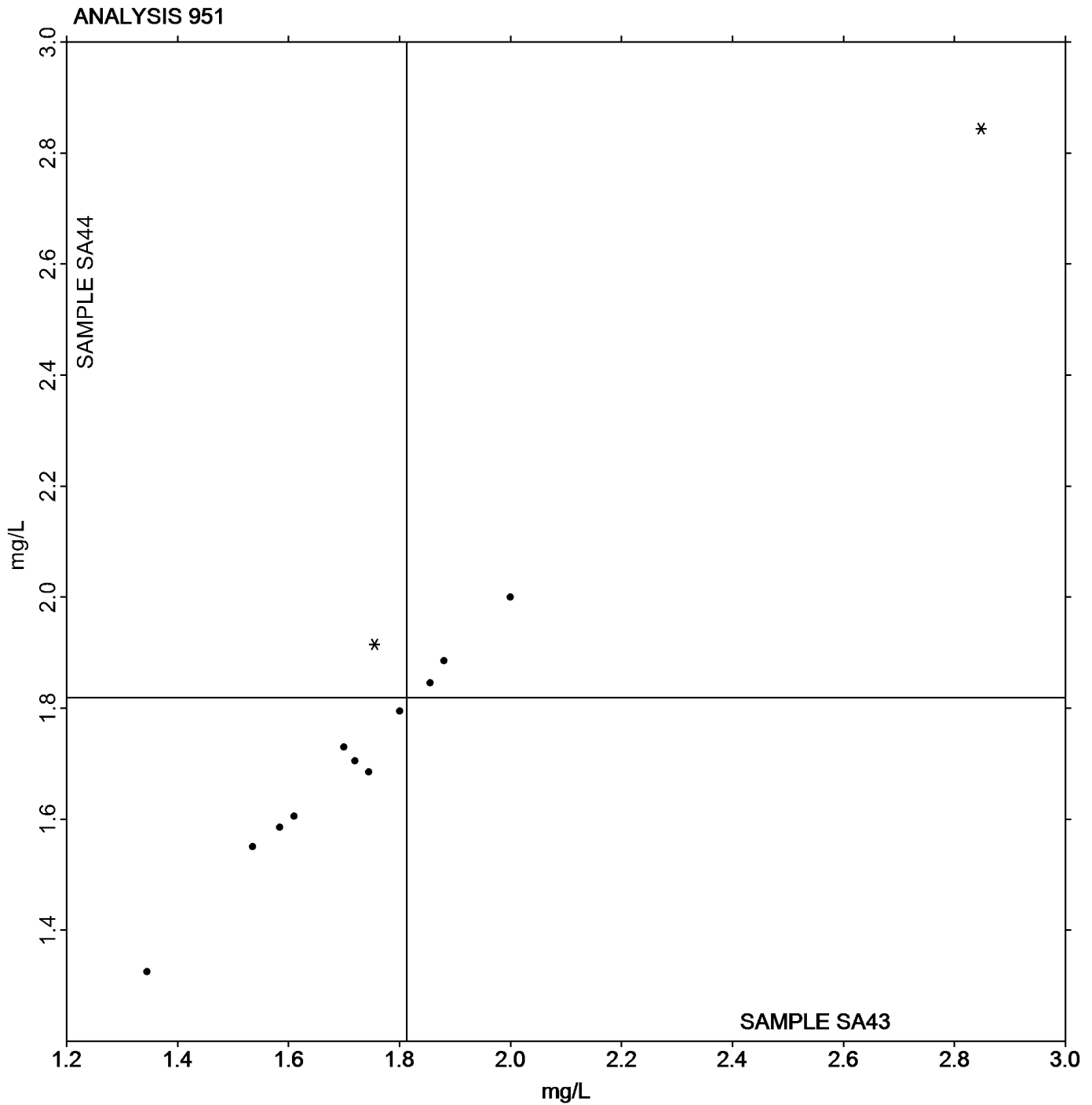
1.8126 mg/L

1.8193 mg/L

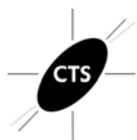
Note: Tests 950, 951 and 952, are research tests. As a result participants should use caution when evaluating data for these tests.

*This consensus average is based on 14 reporting participants.*

**Wines tested:** SA43: Pinot Grigio; SA44: Pinot Grigio



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 SA43			Sample SA44		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
32QU7N		52.00	-3.28	-0.51	52.00	-0.81	-0.11
3TZ8FT		42.00	-13.28	-2.05	41.00	-11.81	-1.53
674KXH		66.63	11.35	1.75	60.33	7.52	0.98
8BKWPF		56.50	1.22	0.19	47.50	-5.31	-0.69
8MGYBW		54.50	-0.78	-0.12	58.00	5.19	0.67
A4FVLR		54.50	-0.78	-0.12	54.50	1.69	0.22
AD27RC		48.00	-7.28	-1.12	50.00	-2.81	-0.36
AXQD7U		52.50	-2.78	-0.43	52.50	-0.31	-0.04
CU4FTN		52.75	-2.53	-0.39	52.70	-0.11	-0.01
JQV8BC		59.70	4.42	0.68	38.55	-14.26	-1.85
NGUD72		62.50	7.22	1.12	65.60	12.79	1.66
X6AN9L		55.00	-0.28	-0.04	52.00	-0.81	-0.11
XWG9QA		62.01	6.74	1.04	61.85	9.04	1.17

Research Property Consensus Value

Consensus Average

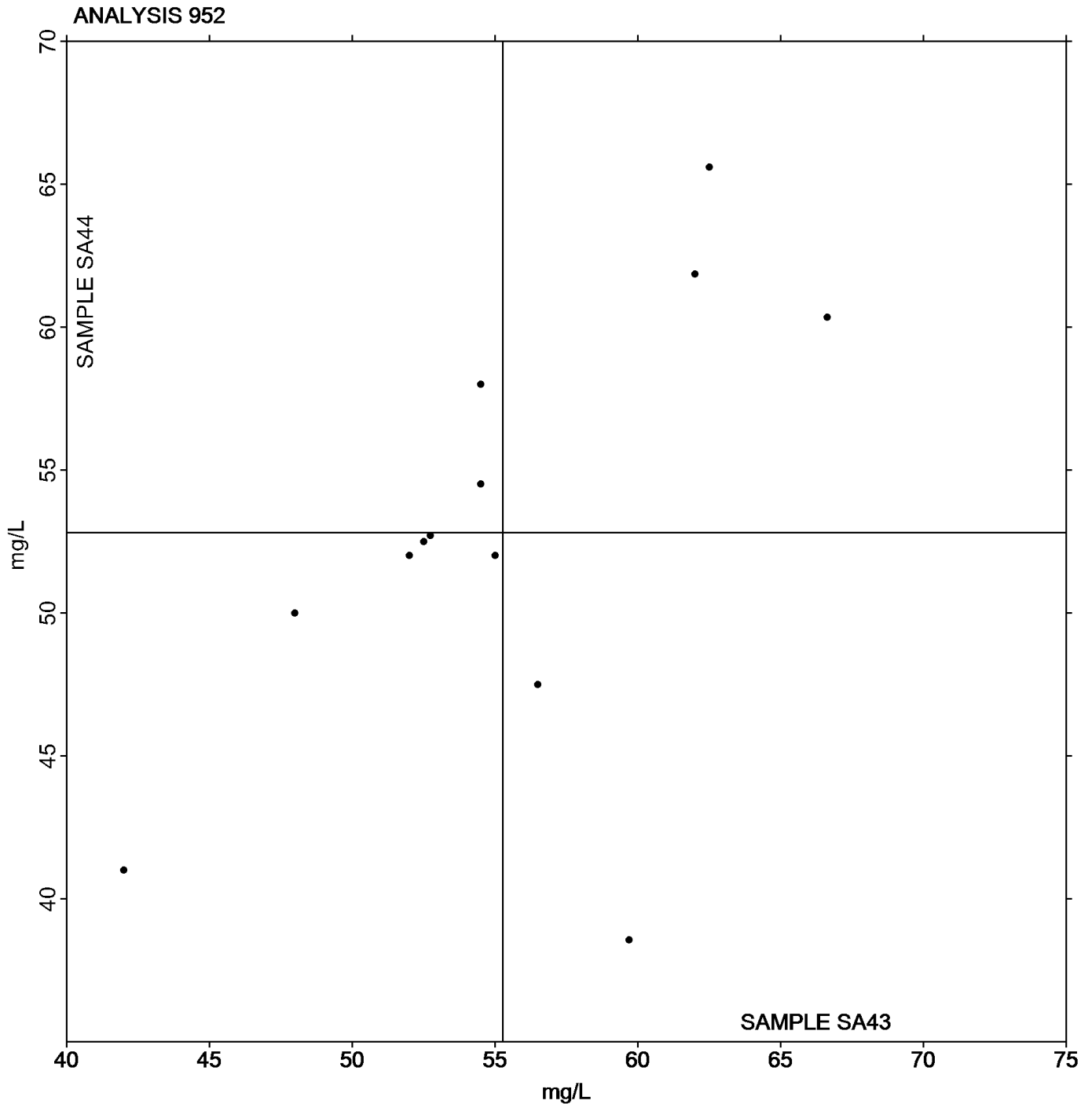
55.276 mg/L

52.810 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 13 reporting participants.

Wines tested: SA43: Pinot Grigio; SA44: Pinot Grigio



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-



## Wine Industry Interlaboratory Program

### Appendix Summary for Cycle #072b - Fall 2022

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For Wine Cycle 072, some participants received improperly labelled samples which led to data being swapped between sample sets. CTS identified the labs that were affected and swapped the data for these participants into the correctly identified samples set.

This appendix represents the original data as reported by the participants.

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**ASEV-CTS Wine Industry Interlaboratory Testing Program Appendix #072b****Fall 2022****Analysis 901  
Ethanol (% of volume)**

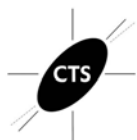
WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		11.29	0.02	0.47	11.26	0.00	-0.07
32QU7N		11.28	0.01	0.25	11.28	0.02	0.36
3TZ8FT		11.15	-0.11	-2.53	11.25	-0.02	-0.38
3UXHBV		11.20	-0.06	-1.42	11.20	-0.06	-1.34
4D6EGP		11.27	0.01	0.14	11.27	0.01	0.15
4JDYLA		11.29	0.03	0.58	11.28	0.02	0.36
674KXH		11.26	0.00	-0.09	11.28	0.02	0.36
6NYDJF		11.20	-0.06	-1.42	11.20	-0.06	-1.34
6PVZAL		11.10	-0.16	-3.64	11.26	0.00	-0.07
6Q8H3V		11.31	0.04	0.91	11.31	0.04	0.89
6RZJXL		11.32	0.06	1.25	11.30	0.04	0.78
6WTD4Z		11.28	0.02	0.36	11.29	0.03	0.57
6XAE6G		11.32	0.06	1.25	11.32	0.06	1.20
789U4K		11.25	-0.01	-0.31	11.24	-0.02	-0.49
7VHTT6		11.32	0.06	1.25	11.29	0.02	0.46
89JWPJ		11.27	0.01	0.14	11.25	-0.01	-0.28
8AR98K		11.26	0.00	-0.09	11.25	-0.01	-0.28
8BKWPF		11.27	0.01	0.14	11.27	0.00	0.04
8DDLE3		11.26	0.00	-0.09	11.20	-0.06	-1.34
8MGYBW		11.21	-0.06	-1.31	11.18	-0.08	-1.76
8PKBWJ		11.26	-0.01	-0.20	11.26	-0.01	-0.17
8UZ9FK		11.21	-0.05	-1.20	11.22	-0.04	-0.91
9BXHLH		11.28	0.02	0.36	11.30	0.03	0.68
9HJFEC		11.06	-0.21	-4.64	11.20	-0.06	-1.34
A2UM8J		10.99	-0.27	-6.08	10.97	-0.30	-6.31
A4FVLR		11.26	0.00	-0.09	11.28	0.01	0.25
AAHJ4E		11.28	0.01	0.25	11.30	0.03	0.68
ABGJ9K		11.22	-0.05	-1.08	11.17	-0.09	-1.97
AD27RC		11.26	0.00	-0.09	11.26	0.00	-0.07
ALCYTE		11.34	0.07	1.58	11.34	0.07	1.52
AWFFY6		11.30	0.04	0.80	11.29	0.03	0.57
AXQD7U		11.14	-0.13	-2.86	11.14	-0.13	-2.71
B2XV8A		11.40	0.14	3.02	11.40	0.14	2.90
BH8Q2A		11.36	0.09	2.02	11.43	0.17	3.53
BWT2TL		11.28	0.02	0.36	11.27	0.01	0.15



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

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
BWVQWJ		11.00	-0.26	-5.86	11.10	-0.16	-3.45
C23JM9		11.15	-0.11	-2.53	11.15	-0.11	-2.40
C2MPXC		11.39	0.13	2.80	No data reported for this sample		
CGW47G		11.27	0.01	0.14	11.27	0.01	0.15
CU4FTN		11.28	0.01	0.25	11.29	0.03	0.57
D9ZUQW		11.26	-0.01	-0.20	11.25	-0.01	-0.28
DWJCPD		11.28	0.02	0.36	11.27	0.01	0.15
EGTX4D		11.28	0.01	0.25	11.25	-0.02	-0.38
EMW3UC		11.50	0.24	5.24	11.40	0.14	2.90
FZHY9E		11.28	0.01	0.25	11.25	-0.01	-0.28
G62N49		11.31	0.04	0.91	11.31	0.05	0.99
G7YYBY		11.26	0.00	-0.09	11.28	0.02	0.36
GC7NYP		11.29	0.02	0.47	11.30	0.03	0.68
GECQPA		8.82	-2.45	-54.36	8.16	-3.10	-65.71
GQ4CV6		11.29	0.03	0.58	11.30	0.04	0.78
GYL9VQ		11.22	-0.05	-1.08	11.25	-0.01	-0.28
H3UMH2		11.36	0.10	2.13	11.35	0.09	1.84
H8BE4H		11.30	0.03	0.69	11.28	0.01	0.25
HENAZB		11.26	-0.01	-0.20	11.26	0.00	-0.07
HQ242B		11.35	0.09	1.91	11.36	0.10	2.05
HQ4RKA		11.20	-0.06	-1.42	11.14	-0.12	-2.61
HVYWM8		11.30	0.04	0.80	11.30	0.04	0.78
JAXRC8		11.10	-0.16	-3.64	11.10	-0.16	-3.45
JDTBZ4		11.20	-0.06	-1.42	11.20	-0.06	-1.34
JFUMR		11.27	0.01	0.14	11.26	0.00	-0.07
JQV8BC		11.29	0.02	0.47	11.28	0.01	0.25
JRTH7F		11.23	-0.04	-0.86	11.22	-0.04	-0.91
JT7FTP		3.20	-8.07	-179.11	3.20	-8.07	-170.86
JUYFNF		11.29	0.02	0.47	11.25	-0.02	-0.38
KLMGU6		11.25	-0.02	-0.42	11.26	-0.01	-0.17
LA32D3		11.33	0.07	1.47	11.34	0.08	1.63
LVZR89		11.26	0.00	-0.09	11.28	0.02	0.36
MDJBTY		11.29	0.02	0.47	11.29	0.02	0.46
MGKJW9		11.23	-0.03	-0.75	11.24	-0.03	-0.60
MTDZLA		11.22	-0.05	-1.08	11.23	-0.04	-0.81





Analysis 901  
Ethanol (% of volume)

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
N8B2R4		11.19	-0.07	-1.64	11.18	-0.08	-1.76
NGUD72		11.40	0.14	3.02	11.25	-0.01	-0.28
NGXZH9		11.16	-0.10	-2.31	11.09	-0.17	-3.67
NJ3XZA		11.27	0.01	0.14	11.27	0.01	0.15
PMFQH9		11.30	0.04	0.80	11.28	0.02	0.36
Q6VK4A		11.29	0.02	0.47	11.29	0.02	0.46
T8EFHD		11.22	-0.04	-0.97	11.23	-0.04	-0.81
TC8KBG		11.33	0.06	1.36	11.34	0.08	1.63
TLYZZL		11.26	0.00	-0.09	11.26	0.00	-0.07
U89ZUX		11.27	0.01	0.14	11.29	0.02	0.46
UFZH4Z		11.16	-0.10	-2.31	11.17	-0.09	-1.97
ULU46F		11.25	-0.01	-0.31	11.24	-0.02	-0.49
UXMWLY		11.20	-0.06	-1.42	11.17	-0.10	-2.08
W2XQE2		11.26	0.00	-0.09	11.26	-0.01	-0.17
WELG6C		11.26	-0.01	-0.20	11.28	0.01	0.25
WT2GYG		11.50	0.24	5.24	11.50	0.24	5.02
WTPKUC		11.19	-0.08	-1.75	11.19	-0.07	-1.55
WUVMKW		11.25	-0.01	-0.31	11.26	-0.01	-0.17
WUW82P		11.29	0.03	0.58	11.29	0.03	0.57
X4GXY2		11.16	-0.10	-2.31	11.21	-0.05	-1.12
X6AN9L		11.25	-0.01	-0.31	11.26	0.00	-0.07
XHVZKW		11.28	0.02	0.36	11.29	0.03	0.57
XWG9QA		11.30	0.04	0.83	11.34	0.07	1.57
YETFEB		11.28	0.02	0.36	11.27	0.01	0.15
YGM4X7		11.39	0.12	2.69	11.29	0.03	0.57
YTFKM8		11.22	-0.04	-0.97	11.22	-0.05	-1.02
YVFAVM		11.28	0.02	0.36	11.29	0.03	0.57
Z94Y4R		11.26	-0.01	-0.20	11.27	0.01	0.15
Z9ZCQK		11.25	-0.01	-0.31	11.25	-0.01	-0.28
ZB6XJQ		11.23	-0.03	-0.75	11.23	-0.03	-0.70
ZQ2JWQ		11.28	0.01	0.25	11.28	0.02	0.36

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Analysis 902
Total Sulfur Dioxide

Table with columns: WebCode, Data Flag, Sample SA43 (Lab Mean, Diff from Grand Mean, CPV), Sample SA44 (Lab Mean, Diff from Grand Mean, CPV). Rows list various wine samples and their corresponding test results.



**Analysis 902  
Total Sulfur Dioxide**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
C23JM9		126.7	2.5	0.23	114.0	-9.3	-0.91
C2MPXC		117.0	-7.2	-0.66	No data reported for this sample		
CGW47G		128.0	3.8	0.35	121.5	-1.8	-0.18
CU4FTN		137.5	13.3	1.22	125.0	1.7	0.17
D9ZUQW		119.0	-5.2	-0.48	124.5	1.2	0.12
DWJCPD		115.0	-9.2	-0.84	128.0	4.7	0.46
EGTX4D		116.0	-8.2	-0.75	123.0	-0.3	-0.03
EMW3UC		130.0	5.8	0.53	130.0	6.7	0.65
FZHY9E		121.0	-3.2	-0.29	134.0	10.7	1.04
G62N49		121.0	-3.2	-0.29	109.0	-14.3	-1.40
G7YYYYB		125.0	0.8	0.07	120.0	-3.3	-0.32
GC7NYP		138.0	13.8	1.26	118.5	-4.8	-0.47
GECQPA		102.3	-22.0	-2.01	102.0	-21.3	-2.08
GQ4CV6		134.0	9.8	0.90	118.0	-5.3	-0.52
GYL9VQ		134.0	9.8	0.90	134.5	11.2	1.09
H3UMH2		142.0	17.8	1.63	128.0	4.7	0.46
H8BE4H		126.0	1.8	0.16	137.5	14.2	1.38
HENAZB		139.7	15.5	1.42	125.7	2.4	0.23
HQ242B		103.5	-20.7	-1.89	101.0	-22.3	-2.18
HQ4RKA		116.0	-8.2	-0.75	120.0	-3.3	-0.32
HVYWM8		110.2	-14.0	-1.28	122.0	-1.3	-0.13
JAXRC8		121.6	-2.6	-0.24	128.0	4.7	0.46
JDTBZ4		143.0	18.8	1.72	130.5	7.2	0.70
JJFUMR		143.5	19.3	1.76	130.5	7.2	0.70
JQV8BC		109.5	-14.7	-1.34	122.0	-1.3	-0.13
JRTH7F		109.5	-14.7	-1.34	118.5	-4.8	-0.47
JT7FTP		129.0	4.8	0.44	121.0	-2.3	-0.23
JUYFNF		117.0	-7.2	-0.66	128.0	4.7	0.46
KLMGU6		98.0	-26.2	-2.39	100.5	-22.8	-2.22
LA32D3		124.5	0.3	0.03	116.0	-7.3	-0.71
LVZR89		132.0	7.8	0.71	126.0	2.7	0.26
MDJBTY		123.5	-0.7	-0.06	117.5	-5.8	-0.57
MGKJW9		124.5	0.3	0.03	114.5	-8.8	-0.86
MTDZLA		117.0	-7.2	-0.66	107.5	-15.8	-1.54
N8B2R4		133.5	9.3	0.85	118.5	-4.8	-0.47



Analysis 902  
Total Sulfur Dioxide

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NGUD72		120.0	-4.2	-0.38	133.5	10.2	0.99
NGXZH9		117.0	-7.2	-0.66	130.0	6.7	0.65
NJ3XZA		139.0	14.8	1.35	122.0	-1.3	-0.13
PMFQH9		121.0	-3.2	-0.29	130.0	6.7	0.65
Q6VK4A		121.0	-3.2	-0.29	131.0	7.7	0.75
T8EFHD		131.0	6.8	0.62	143.0	19.7	1.92
TC8KBG		136.5	12.3	1.12	126.0	2.7	0.26
TLYZZL		86.5	-37.7	-3.45	95.0	-28.3	-2.76
U89ZUX		116.0	-8.2	-0.75	102.5	-20.8	-2.03
UFZH4Z		129.5	5.3	0.48	122.0	-1.3	-0.13
ULU46F		115.0	-9.2	-0.84	126.5	3.2	0.31
UXMWLY		131.0	6.8	0.62	145.0	21.7	2.12
VVXDB7		115.7	-8.5	-0.78	122.7	-0.6	-0.06
W2XQE2		99.5	-24.7	-2.26	107.0	-16.3	-1.59
WELG6C		118.0	-6.2	-0.57	109.0	-14.3	-1.40
WT2GYG		112.5	-11.7	-1.07	120.0	-3.3	-0.32
WTPKUC		140.0	15.8	1.44	151.0	27.7	2.70
WUVMKW		135.5	11.3	1.03	124.0	0.7	0.07
WUW82P		128.9	4.7	0.43	119.4	-3.9	-0.38
X4GXY2		134.5	10.3	0.94	126.0	2.7	0.26
X6AN9L		129.0	4.8	0.44	118.5	-4.8	-0.47
XHVZKW		122.0	-2.2	-0.20	119.5	-3.8	-0.37
XWG9QA		128.1	3.9	0.36	115.5	-7.8	-0.76
YETFEB		116.0	-8.2	-0.75	126.5	3.2	0.31
YFRVWW		126.4	2.1	0.20	138.2	14.9	1.45
YGM4X7		155.0	30.8	2.81	146.0	22.7	2.21
YTFKM8		137.0	12.8	1.17	124.0	0.7	0.07
YVFAVM		117.5	-6.7	-0.61	108.5	-14.8	-1.44
Z94Y4R		134.6	10.4	0.95	124.5	1.2	0.11
ZB6XJQ		128.0	3.8	0.35	119.0	-4.3	-0.42
ZQ2JWQ		130.5	6.3	0.58	142.5	19.2	1.87

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Analysis 903  
Free Sulfur Dioxide

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		23.00	-5.23	-1.37	26.50	-1.34	-0.32
32QU7N		33.50	5.27	1.38	29.50	1.66	0.40
3TZ8FT		27.00	-1.23	-0.32	32.00	4.16	1.00
3UXHBV		24.00	-4.23	-1.11	29.00	1.16	0.28
4D6EGP		34.00	5.77	1.51	28.00	0.16	0.04
4JDYLA		27.00	-1.23	-0.32	32.00	4.16	1.00
674KXH		29.00	0.77	0.20	25.00	-2.84	-0.68
6NYDJF		29.50	1.27	0.33	33.50	5.66	1.36
6PVZAL		33.00	4.77	1.25	28.00	0.16	0.04
6Q8H3V		30.50	2.27	0.59	24.50	-3.34	-0.80
6RZJXL		24.00	-4.23	-1.11	28.50	0.66	0.16
6WTD4Z		30.55	2.32	0.61	24.75	-3.09	-0.74
6XAE6G		37.00	8.77	2.29	32.00	4.16	1.00
789U4K		27.00	-1.23	-0.32	28.00	0.16	0.04
7VHTT6		28.50	0.27	0.07	34.00	6.16	1.49
89JWPJ		28.00	-0.23	-0.06	31.00	3.16	0.76
8AR98K		27.40	-0.83	-0.22	32.45	4.61	1.11
8BKWPF		33.00	4.77	1.25	28.00	0.16	0.04
8DDLE3		22.50	-5.73	-1.50	28.00	0.16	0.04
8MGYBW		23.00	-5.23	-1.37	24.30	-3.54	-0.85
8PKBWJ		33.50	5.27	1.38	30.50	2.66	0.64
8UZ9FK		32.50	4.27	1.12	24.50	-3.34	-0.80
9BXHLH		30.50	2.27	0.59	26.00	-1.84	-0.44
9HJFEC		25.50	-2.73	-0.71	31.00	3.16	0.76
A2UM8J		26.50	-1.73	-0.45	31.00	3.16	0.76
A4FVLR		30.50	2.27	0.59	24.00	-3.84	-0.93
AAHJ4E		31.00	2.77	0.72	27.50	-0.34	-0.08
ABGJ9K		29.50	1.27	0.33	36.00	8.16	1.97
AD27RC		37.00	8.77	2.29	30.00	2.16	0.52
ALCYTE		25.50	-2.73	-0.71	21.25	-6.59	-1.59
AWFFY6		21.00	-7.23	-1.89	26.00	-1.84	-0.44
AXQD7U		27.00	-1.23	-0.32	32.00	4.16	1.00
B2XV8A		20.40	-7.83	-2.05	27.20	-0.64	-0.15
BH8Q2A		22.95	-5.28	-1.38	17.80	-10.04	-2.42
BWT2TL		26.50	-1.73	-0.45	30.50	2.66	0.64



Analysis 903  
Free Sulfur Dioxide

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
BWVQWJ		24.15	-4.08	-1.07	27.20	-0.64	-0.15
C23JM9		34.60	6.37	1.66	29.50	1.66	0.40
C2MPXC		25.50	-2.73	-0.71	No data reported for this sample		
CGW47G		32.50	4.27	1.12	27.00	-0.84	-0.20
CU4FTN		29.00	0.77	0.20	24.00	-3.84	-0.93
D9ZUQW		29.50	1.27	0.33	33.00	5.16	1.24
DWJCPD		28.00	-0.23	-0.06	34.00	6.16	1.49
EGTX4D		26.00	-2.23	-0.58	31.50	3.66	0.88
EMW3UC		23.35	-4.88	-1.27	28.45	0.61	0.15
FZHY9E		22.00	-6.23	-1.63	27.00	-0.84	-0.20
G62N49		28.00	-0.23	-0.06	22.00	-5.84	-1.41
G7YYYB		32.00	3.77	0.98	28.00	0.16	0.04
GC7NYP		34.00	5.77	1.51	27.50	-0.34	-0.08
GECQPA		17.60	-10.63	-2.78	17.20	-10.64	-2.56
GQ4CV6		32.00	3.77	0.98	23.00	-4.84	-1.17
GYL9VQ		25.00	-3.23	-0.84	25.00	-2.84	-0.68
H3UMH2		26.00	-2.23	-0.58	23.00	-4.84	-1.17
H8BE4H		23.00	-5.23	-1.37	28.00	0.16	0.04
HENAZB		28.65	0.42	0.11	22.65	-5.19	-1.25
HQ242B		27.70	-0.53	-0.14	24.55	-3.29	-0.79
HQ4RKA		27.00	-1.23	-0.32	31.00	3.16	0.76
HVYWM8		31.03	2.80	0.73	36.38	8.54	2.06
JAXRC8		35.80	7.57	1.98	35.80	7.96	1.92
JDTBZ4		38.00	9.77	2.55	32.00	4.16	1.00
JFUMR		33.00	4.77	1.25	38.50	10.66	2.57
JQV8BC		26.00	-2.23	-0.58	31.00	3.16	0.76
JRTH7F		22.50	-5.73	-1.50	29.00	1.16	0.28
JT7FTP		32.50	4.27	1.12	27.00	-0.84	-0.20
JUYFNF		25.50	-2.73	-0.71	21.00	-6.84	-1.65
KLMGU6		28.50	0.27	0.07	31.50	3.66	0.88
LA32D3		28.50	0.27	0.07	23.50	-4.34	-1.05
LVZR89		31.00	2.77	0.72	25.00	-2.84	-0.68
MDJBTY		29.00	0.77	0.20	25.00	-2.84	-0.68
MGKJW9		29.00	0.77	0.20	25.00	-2.84	-0.68
MTDZLA		29.00	0.77	0.20	25.50	-2.34	-0.56



**Analysis 903  
Free Sulfur Dioxide**

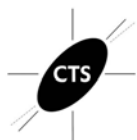
WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
N8B2R4		26.40	-1.83	-0.48	22.00	-5.84	-1.41
NGUD72		25.50	-2.73	-0.71	31.00	3.16	0.76
NGXZH9		21.00	-7.23	-1.89	27.50	-0.34	-0.08
NJ3XZA		29.00	0.77	0.20	24.00	-3.84	-0.93
PMFQH9		24.00	-4.23	-1.11	30.00	2.16	0.52
Q6VK4A		28.50	0.27	0.07	33.50	5.66	1.36
T8EFHD		25.50	-2.73	-0.71	30.50	2.66	0.64
TC8KBG		29.45	1.22	0.32	24.95	-2.89	-0.70
TLYZZL		29.00	0.77	0.20	29.50	1.66	0.40
U89ZUX		24.00	-4.23	-1.11	18.50	-9.34	-2.25
UFZH4Z		33.00	4.77	1.25	28.00	0.16	0.04
ULU46F		27.00	-1.23	-0.32	31.00	3.16	0.76
UXMWLY		21.00	-7.23	-1.89	27.00	-0.84	-0.20
W2XQE2		24.00	-4.23	-1.11	30.00	2.16	0.52
WELG6C		22.00	-6.23	-1.63	18.00	-9.84	-2.37
WT2GYG		28.70	0.47	0.12	34.74	6.90	1.66
WTPKUC		27.50	-0.73	-0.19	33.00	5.16	1.24
WUVMKW		30.55	2.32	0.61	24.80	-3.04	-0.73
WUW82P		29.45	1.22	0.32	22.25	-5.59	-1.35
X4GXY2		29.00	0.77	0.20	24.50	-3.34	-0.80
X6AN9L		30.00	1.77	0.46	25.00	-2.84	-0.68
XHVZKW		29.50	1.27	0.33	27.00	-0.84	-0.20
XWG9QA		28.42	0.19	0.05	22.75	-5.09	-1.23
YETFEB		26.00	-2.23	-0.58	31.50	3.66	0.88
YFRVWW		28.86	0.62	0.16	33.53	5.69	1.37
YGM4X7		44.00	15.77	4.12	35.00	7.16	1.73
YTFKM8		29.50	1.27	0.33	23.50	-4.34	-1.05
YVFAVM		30.50	2.27	0.59	26.00	-1.84	-0.44
Z94Y4R		28.91	0.67	0.18	24.17	-3.67	-0.89
Z9ZCQK		32.00	3.77	0.98	26.00	-1.84	-0.44
ZB6XJQ		29.00	0.77	0.20	26.00	-1.84	-0.44
ZQ2JWQ		24.50	-3.73	-0.97	29.00	1.16	0.28



**Analysis 904  
Titratable Acidity**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		6.420	-0.163	-0.60	6.430	-0.165	-0.63
32QU7N		6.460	-0.123	-0.45	6.460	-0.135	-0.52
3TZ8FT		6.500	-0.083	-0.31	6.550	-0.045	-0.17
3UXHBV		6.300	-0.283	-1.04	6.450	-0.145	-0.56
4D6EGP		7.000	0.417	1.54	6.900	0.305	1.17
4JDYLA		6.795	0.212	0.78	6.900	0.305	1.17
674KXH		6.300	-0.283	-1.04	6.300	-0.295	-1.13
6NYDJF		6.110	-0.473	-1.74	6.145	-0.450	-1.72
6PVZAL		6.600	0.017	0.06	6.700	0.105	0.40
6Q8H3V		6.550	-0.033	-0.12	6.475	-0.120	-0.46
6RZJXL		6.250	-0.333	-1.23	6.300	-0.295	-1.13
6WTD4Z		6.405	-0.178	-0.66	6.335	-0.260	-1.00
6XAE6G		7.000	0.417	1.54	7.000	0.405	1.55
789U4K		6.620	0.037	0.14	6.585	-0.010	-0.04
7VHTT6		6.500	-0.083	-0.31	6.450	-0.145	-0.56
89JWPJ		6.455	-0.128	-0.47	6.435	-0.160	-0.61
8AR98K		6.380	-0.203	-0.75	6.395	-0.200	-0.77
8MGYBW		6.740	0.157	0.58	6.890	0.295	1.13
8PKBWJ		6.400	-0.183	-0.67	6.600	0.005	0.02
8UZ9FK		6.300	-0.283	-1.04	6.350	-0.245	-0.94
9BXHLH		7.100	0.517	1.91	7.200	0.605	2.31
9HJFEC		6.150	-0.433	-1.60	6.410	-0.185	-0.71
A2UM8J		6.455	-0.128	-0.47	6.500	-0.095	-0.36
A4FVLR		6.760	0.177	0.65	6.785	0.190	0.73
AAHJ4E		6.350	-0.233	-0.86	6.300	-0.295	-1.13
ABGJ9K		6.845	0.262	0.97	6.890	0.295	1.13
AD27RC		6.800	0.217	0.80	6.700	0.105	0.40
ALCYTE		6.305	-0.278	-1.03	6.355	-0.240	-0.92
AWFFY6		6.570	-0.013	-0.05	6.485	-0.110	-0.42
AXQD7U		6.200	-0.383	-1.41	6.500	-0.095	-0.36
B2XV8A		6.410	-0.173	-0.64	6.413	-0.183	-0.70
BH8Q2A		7.915	1.332	4.91	7.865	1.270	4.86
BWT2TL		6.405	-0.178	-0.66	6.420	-0.175	-0.67
BWVQWJ		6.590	0.007	0.03	6.770	0.175	0.67
C23JM9		6.980	0.397	1.46	6.980	0.385	1.47





**Analysis 904  
Titratable Acidity**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
C2MPXC		6.350	-0.233	-0.86	No data reported for this sample		
CGW47G		6.400	-0.183	-0.67	6.450	-0.145	-0.56
CU4FTN		6.150	-0.433	-1.60	6.300	-0.295	-1.13
D9ZUQW		6.889	0.306	1.13	6.925	0.330	1.26
DWJCPD		6.450	-0.133	-0.49	6.500	-0.095	-0.36
EGTX4D		6.835	0.252	0.93	6.750	0.155	0.59
EMW3UC		7.296	0.713	2.63	7.314	0.718	2.75
FZHY9E		6.950	0.367	1.35	7.000	0.405	1.55
G62N49		6.850	0.267	0.98	6.800	0.205	0.78
G7YYYB		4.450	-2.133	-7.86	4.330	-2.265	-8.67
GC7NYP		6.750	0.167	0.62	6.800	0.205	0.78
GECQPA		6.465	-0.118	-0.44	6.615	0.020	0.08
GQ4CV6		6.885	0.302	1.11	6.815	0.220	0.84
GYL9VQ		6.450	-0.133	-0.49	6.650	0.055	0.21
H3UMH2		7.350	0.767	2.83	7.280	0.685	2.62
H8BE4H		6.395	-0.188	-0.69	6.410	-0.185	-0.71
HENAZB		6.555	-0.028	-0.10	6.550	-0.045	-0.17
HQ242B		7.050	0.467	1.72	6.900	0.305	1.17
HQ4RKA		6.120	-0.463	-1.71	6.070	-0.525	-2.01
HVYWM8		6.075	-0.508	-1.87	6.075	-0.520	-1.99
JAXRC8		6.450	-0.133	-0.49	6.400	-0.195	-0.75
JDTBZ4		6.600	0.017	0.06	6.500	-0.095	-0.36
JFUMR		6.410	-0.173	-0.64	6.370	-0.225	-0.86
JQV8BC		6.600	0.017	0.06	6.750	0.155	0.59
JRTH7F		6.500	-0.083	-0.31	6.500	-0.095	-0.36
JT7FTP		6.300	-0.283	-1.04	6.225	-0.370	-1.42
JUYFNF		8.250	1.667	6.15	6.850	0.255	0.98
KLMGU6		6.375	-0.208	-0.77	6.395	-0.200	-0.77
LA32D3		6.700	0.117	0.43	6.600	0.005	0.02
LVZR89		7.215	0.632	2.33	6.900	0.305	1.17
MGKJW9		6.415	-0.168	-0.62	6.395	-0.200	-0.77
MTDZLA		6.480	-0.103	-0.38	6.505	-0.090	-0.34
N8B2R4		6.600	0.017	0.06	6.900	0.305	1.17
NGUD72		6.490	-0.093	-0.34	6.435	-0.160	-0.61
NGXZH9		6.620	0.037	0.14	6.600	0.005	0.02

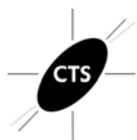


**Analysis 904  
Titratable Acidity**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NJ3XZA		6.530	-0.053	-0.20	6.540	-0.055	-0.21
PMFQH9		6.500	-0.083	-0.31	6.600	0.005	0.02
Q6VK4A		6.450	-0.133	-0.49	6.450	-0.145	-0.56
T8EFHD		6.950	0.367	1.35	6.905	0.310	1.19
TC8KBG		6.350	-0.233	-0.86	6.500	-0.095	-0.36
TLYZZL		6.750	0.167	0.62	6.900	0.305	1.17
U89ZUX		6.850	0.267	0.98	6.750	0.155	0.59
UFZH4Z		6.500	-0.083	-0.31	6.500	-0.095	-0.36
ULU46F		6.500	-0.083	-0.31	6.500	-0.095	-0.36
UXMWLY		6.400	-0.183	-0.67	6.300	-0.295	-1.13
VVXDB7		6.893	0.310	1.14	6.932	0.336	1.29
W2XQE2		6.450	-0.133	-0.49	6.450	-0.145	-0.56
WELG6C		6.700	0.117	0.43	6.650	0.055	0.21
WT2GYG		6.390	-0.193	-0.71	6.350	-0.245	-0.94
WTPKUC		6.645	0.062	0.23	6.675	0.080	0.31
WUVMKW		6.835	0.252	0.93	6.755	0.160	0.61
WUW82P		6.590	0.007	0.03	6.520	-0.075	-0.29
X4GXY2		6.610	0.027	0.10	6.610	0.015	0.06
X6AN9L		6.310	-0.273	-1.01	6.315	-0.280	-1.07
XHVZKW		6.665	0.082	0.30	6.765	0.170	0.65
XWG9QA		6.225	-0.358	-1.32	6.200	-0.395	-1.51
YETFEB		6.915	0.332	1.22	6.895	0.300	1.15
YFRVWW		6.885	0.302	1.11	6.895	0.300	1.15
YGM4X7		6.750	0.167	0.62	6.845	0.250	0.96
YTFKM8		7.300	0.717	2.64	7.250	0.655	2.51
YVFAVM		6.800	0.217	0.80	6.705	0.110	0.42
Z94Y4R		6.670	0.087	0.32	6.550	-0.045	-0.17
Z9ZCQK		6.150	-0.433	-1.60	6.350	-0.245	-0.94
ZB6XJQ		6.550	-0.033	-0.12	6.500	-0.095	-0.36
ZQ2JWQ		6.450	-0.133	-0.49	6.450	-0.145	-0.56

Analysis 905  
Volatile Acidity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		0.0965	-0.0099	-0.32	0.0965	-0.0102	-0.34
32QU7N		0.1850	0.0786	2.56	0.3800	0.2733	9.03
3TZ8FT		0.1750	0.0686	2.24	0.1600	0.0533	1.76
3UXHBV		0.1400	0.0336	1.10	0.1100	0.0033	0.11
4D6EGP		0.1400	0.0336	1.10	0.1500	0.0433	1.43
4JDYLA		0.1400	0.0336	1.10	0.1300	0.0233	0.77
674KXH		0.0700	-0.0364	-1.19	0.0700	-0.0367	-1.21
6NYDJF		0.1500	0.0436	1.42	0.1550	0.0483	1.60
6PVZAL		0.0800	-0.0264	-0.86	0.0900	-0.0167	-0.55
6Q8H3V		0.1050	-0.0014	-0.04	0.1100	0.0033	0.11
6RZJXL		0.1000	-0.0064	-0.21	0.1000	-0.0067	-0.22
6WTD4Z		0.0900	-0.0164	-0.53	0.0900	-0.0167	-0.55
6XAE6G		0.0900	-0.0164	-0.53	0.1050	-0.0017	-0.06
789U4K		0.1000	-0.0064	-0.21	0.1000	-0.0067	-0.22
7VHTT6		0.0700	-0.0364	-1.19	0.0550	-0.0517	-1.71
89JWPJ		0.0800	-0.0264	-0.86	0.0800	-0.0267	-0.88
8AR98K		0.0790	-0.0274	-0.89	0.0810	-0.0257	-0.85
8BKWPF		0.1000	-0.0064	-0.21	0.1000	-0.0067	-0.22
8MGYBW		0.1300	0.0236	0.77	0.1200	0.0133	0.44
8PKBWJ		0.1050	-0.0014	-0.04	0.1050	-0.0017	-0.06
8UZ9FK		0.0800	-0.0264	-0.86	0.0700	-0.0367	-1.21
9BXHLH		0.1200	0.0136	0.44	0.1150	0.0083	0.27
9HJFEC		0.1015	-0.0049	-0.16	0.0790	-0.0277	-0.91
A2UM8J		0.2450	0.1386	4.52	0.2200	0.1133	3.74
A4FVLR		0.0800	-0.0264	-0.86	0.0800	-0.0267	-0.88
AAHJ4E		0.1450	0.0386	1.26	0.1550	0.0483	1.60
ABGJ9K		0.1000	-0.0064	-0.21	0.1000	-0.0067	-0.22
AD27RC		0.1280	0.0216	0.71	0.1150	0.0083	0.27
ALCYTE		0.0850	-0.0214	-0.70	0.0900	-0.0167	-0.55
AWFFY6		0.1100	0.0036	0.12	0.1250	0.0183	0.60
AXQD7U		0.0450	-0.0614	-2.00	0.0500	-0.0567	-1.87
BH8Q2A		0.0900	-0.0164	-0.53	0.0900	-0.0167	-0.55
BWT2TL		0.0855	-0.0209	-0.68	0.0695	-0.0372	-1.23
BWVQWJ		0.0850	-0.0214	-0.70	0.0850	-0.0217	-0.72
C23JM9		0.0950	-0.0114	-0.37	0.0950	-0.0117	-0.39



**Analysis 905  
Volatile Acidity**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
C2MPXC		0.0650	-0.0414	-1.35	No data reported for this sample		
CGW47G		0.0950	-0.0114	-0.37	0.1100	0.0033	0.11
CU4FTN		0.1100	0.0036	0.12	0.1100	0.0033	0.11
D9ZUQW		0.0700	-0.0364	-1.19	0.0700	-0.0367	-1.21
DWJCPD		0.0700	-0.0364	-1.19	0.0800	-0.0267	-0.88
EGTX4D		0.0550	-0.0514	-1.68	0.0600	-0.0467	-1.54
EMW3UC		0.0710	-0.0354	-1.15	0.0990	-0.0077	-0.25
FZHY9E		0.1350	0.0286	0.93	0.1400	0.0333	1.10
G62N49		0.1000	-0.0064	-0.21	0.0900	-0.0167	-0.55
G7YYYB		0.3400	0.2336	7.62	0.3700	0.2633	8.70
GC7NYP		0.1300	0.0236	0.77	0.1150	0.0083	0.27
GECQPA		0.2850	0.1786	5.83	0.3050	0.1983	6.55
GQ4CV6		0.0600	-0.0464	-1.51	0.0700	-0.0367	-1.21
GYL9VQ		0.0900	-0.0164	-0.53	0.1000	-0.0067	-0.22
H3UMH2		0.3000	0.1936	6.32	0.3000	0.1933	6.38
H8BE4H		0.1800	0.0736	2.40	0.1800	0.0733	2.42
HENAZB		0.0960	-0.0104	-0.34	0.0950	-0.0117	-0.39
HQ242B		0.1000	-0.0064	-0.21	0.1050	-0.0017	-0.06
HQ4RKA		0.1000	-0.0064	-0.21	0.0700	-0.0367	-1.21
HVYWM8		0.1260	0.0196	0.64	0.1260	0.0193	0.64
JDTBZ4		0.1700	0.0636	2.08	0.1700	0.0633	2.09
JJFUMR		0.1100	0.0036	0.12	0.1150	0.0083	0.27
JQV8BC		0.1350	0.0286	0.93	0.1500	0.0433	1.43
JRTH7F		0.0800	-0.0264	-0.86	0.0800	-0.0267	-0.88
JT7FTP		0.0600	-0.0464	-1.51	0.0900	-0.0167	-0.55
JUYFNF		0.0800	-0.0264	-0.86	0.0750	-0.0317	-1.05
KLMGU6		0.1150	0.0086	0.28	0.1150	0.0083	0.27
LA32D3		0.1200	0.0136	0.44	0.1250	0.0183	0.60
LVZR89		0.1300	0.0236	0.77	0.1350	0.0283	0.93
MDJBTY		0.1400	0.0336	1.10	0.1400	0.0333	1.10
MGKJW9		0.1350	0.0286	0.93	0.1350	0.0283	0.93
MTDZLA		0.1200	0.0136	0.44	0.1200	0.0133	0.44
N8B2R4		0.0900	-0.0164	-0.53	0.0850	-0.0217	-0.72
NGUD72		0.0890	-0.0174	-0.57	0.0980	-0.0087	-0.29
NGXZH9		0.1900	0.0836	2.73	0.2900	0.1833	6.05



Analysis 905  
Volatile Acidity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NJ3XZA		0.1200	0.0136	0.44	0.1200	0.0133	0.44
PMFQH9		0.1000	-0.0064	-0.21	0.0900	-0.0167	-0.55
Q6VK4A		0.1050	-0.0014	-0.04	0.1100	0.0033	0.11
T8EFHD		0.1560	0.0496	1.62	0.1545	0.0478	1.58
TC8KBG		0.1000	-0.0064	-0.21	0.1000	-0.0067	-0.22
TLYZZL		0.2050	0.0986	3.22	0.2200	0.1133	3.74
U89ZUX		0.1500	0.0436	1.42	0.1500	0.0433	1.43
UFZH4Z		0.1300	0.0236	0.77	0.1200	0.0133	0.44
ULU46F		0.1000	-0.0064	-0.21	0.0950	-0.0117	-0.39
UXMWLY		0.1850	0.0786	2.56	0.1900	0.0833	2.75
W2XQE2		0.1050	-0.0014	-0.04	0.1050	-0.0017	-0.06
WELG6C		0.1660	0.0596	1.94	0.1605	0.0538	1.78
WT2GYG		0.1037	-0.0027	-0.09	0.1015	-0.0052	-0.17
WTPKUC		0.0400	-0.0664	-2.17	0.0400	-0.0667	-2.20
WUVMKW		0.1275	0.0211	0.69	0.1351	0.0284	0.94
WUW82P		0.1065	0.0001	0.00	0.1190	0.0123	0.41
X4GXY2		0.0800	-0.0264	-0.86	0.0800	-0.0267	-0.88
X6AN9L		0.1150	0.0086	0.28	0.1150	0.0083	0.27
XHVZKW		0.1050	-0.0014	-0.04	0.0850	-0.0217	-0.72
XWG9QA		0.1005	-0.0059	-0.19	0.1020	-0.0047	-0.15
YETFEB		0.0900	-0.0164	-0.53	0.0900	-0.0167	-0.55
YFRVWW		0.0900	-0.0164	-0.53	0.0890	-0.0177	-0.58
YGM4X7		0.1500	0.0436	1.42	0.1500	0.0433	1.43
YTFKM8		0.1600	0.0536	1.75	0.1650	0.0583	1.93
YVFAVM		0.0850	-0.0214	-0.70	0.0800	-0.0267	-0.88
Z94Y4R		0.2000	0.0936	3.05	0.3000	0.1933	6.38
Z9ZCQK		0.0450	-0.0614	-2.00	0.0800	-0.0267	-0.88
ZB6XJQ		0.0600	-0.0464	-1.51	0.0850	-0.0217	-0.72
ZQ2JWQ		0.0850	-0.0214	-0.70	0.0850	-0.0217	-0.72



Analysis 906  
Specific Gravity

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		0.9960	-0.0013	-4.41	0.9960	-0.0013	-4.35
32QU7N		0.9970	-0.0003	-0.99	0.9969	-0.0004	-1.21
3TZ8FT		0.9973	0.0000	0.14	0.9977	0.0004	1.21
3UXHBV		0.9990	0.0017	6.09	No data reported for this sample		
4D6EGP		0.9976	0.0003	1.19	0.9972	-0.0001	-0.31
4JDYLA		0.9970	-0.0003	-0.91	0.9974	0.0001	0.37
674KXH		0.9974	0.0002	0.65	0.9971	-0.0002	-0.69
6PVZAL		0.9975	0.0003	0.91	0.9971	-0.0002	-0.54
6Q8H3V		0.9974	0.0001	0.52	0.9970	-0.0002	-0.82
6RZJXL		0.9970	-0.0003	-0.91	0.9970	-0.0003	-0.98
6WTD4Z		0.9972	-0.0001	-0.38	0.9972	-0.0001	-0.48
6XAE6G		0.9979	0.0006	2.24	0.9976	0.0003	1.04
789U4K		0.9970	-0.0002	-0.75	0.9974	0.0001	0.39
7VHTT6		0.9970	-0.0003	-0.91	0.9974	0.0001	0.28
89JWPJ		0.9971	-0.0002	-0.56	0.9975	0.0002	0.70
8AR98K		0.9973	0.0000	-0.03	0.9977	0.0004	1.21
8BKWPF		0.9975	0.0002	0.67	0.9972	-0.0001	-0.43
8DDLE3		0.9971	-0.0002	-0.73	0.9974	0.0001	0.45
8MGYBW		0.9971	-0.0002	-0.66	0.9974	0.0002	0.52
8PKBWJ		0.9977	0.0004	1.38	0.9971	-0.0002	-0.76
8UZ9FK		0.9970	-0.0003	-0.91	0.9970	-0.0003	-0.98
9BXHLH		0.9979	0.0006	2.07	0.9976	0.0003	0.87
9HJFEC		0.9975	0.0002	0.84	0.9950	-0.0023	-7.71
A2UM8J		0.9973	0.0000	0.16	0.9978	0.0005	1.58
A4FVLR		0.9973	0.0000	-0.03	0.9968	-0.0005	-1.65
AAHJ4E		0.9979	0.0006	2.07	0.9975	0.0002	0.53
ABGJ9K		0.9973	0.0000	0.02	0.9977	0.0004	1.50
AD27RC		0.9975	0.0003	0.92	0.9971	-0.0002	-0.52
ALCYTE		0.9974	0.0002	0.64	0.9968	-0.0005	-1.52
AWFFY6		0.9971	-0.0002	-0.73	0.9974	0.0001	0.20
AXQD7U		0.9973	0.0000	0.07	0.9976	0.0003	1.14
B2XV8A		0.9973	0.0000	0.14	0.9978	0.0005	1.71
BH8Q2A		0.9950	-0.0023	-7.91	0.9938	-0.0035	-11.75
BWT2TL		0.9971	-0.0002	-0.70	0.9974	0.0001	0.48
C23JM9		0.9983	0.0010	3.61	0.9983	0.0010	3.37



Analysis 906
Specific Gravity

Table with 8 columns: WebCode, Data Flag, Lab Mean, Diff from Grand Mean, CPV (for Sample SA43), Lab Mean, Diff from Grand Mean, CPV (for Sample SA44). Rows list various sample codes and their corresponding measurements.



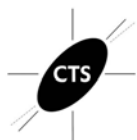
Analysis 906  
Specific Gravity

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
VVXDB7		0.9971	-0.0002	-0.61	0.9975	0.0002	0.72
W2XQE2		0.9971	-0.0002	-0.56	0.9975	0.0002	0.60
WELG6C		0.9976	0.0003	1.12	0.9972	-0.0001	-0.38
WT2GYG		0.9973	0.0000	-0.03	0.9975	0.0002	0.70
WUVMKW		0.9985	0.0013	4.49	0.9981	0.0008	2.69
WUW82P		0.9974	0.0001	0.37	0.9966	-0.0007	-2.24
X6AN9L		0.9975	0.0002	0.67	0.9971	-0.0002	-0.81
XWG9QA		0.9956	-0.0016	-5.74	0.9952	-0.0021	-6.99
YETFEB		0.9974	0.0001	0.49	0.9978	0.0005	1.71
YTFKM8		0.9955	-0.0018	-6.16	0.9950	-0.0023	-7.71
YVFAVM		0.9973	0.0000	0.14	0.9969	-0.0004	-1.32
Z94Y4R		0.9976	0.0004	1.24	0.9972	-0.0001	-0.21
Z9ZCQK		0.9983	0.0010	3.47	0.9982	0.0009	3.06
ZB6XJQ		0.9975	0.0002	0.84	0.9971	-0.0002	-0.81
ZQ2JWQ		0.9957	-0.0016	-5.64	0.9957	-0.0016	-5.53

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**Analysis 907**

**pH**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		3.255	0.056	1.59	3.250	0.049	1.35
32QU7N		3.355	0.156	4.42	3.360	0.159	4.41
3TZ8FT		3.135	-0.064	-1.81	3.130	-0.071	-1.97
3UXHBV		3.080	-0.119	-3.37	3.080	-0.121	-3.36
4D6EGP		3.160	-0.039	-1.10	3.160	-0.041	-1.14
4JDYLA		3.200	0.001	0.03	3.200	-0.001	-0.03
674KXH		3.190	-0.009	-0.25	3.200	-0.001	-0.03
6NYDJF		3.190	-0.009	-0.25	3.190	-0.011	-0.31
6PVZAL		3.180	-0.019	-0.54	3.180	-0.021	-0.59
6Q8H3V		3.210	0.011	0.31	3.210	0.009	0.25
6RZJXL		3.205	0.006	0.17	3.190	-0.011	-0.31
6WTD4Z		3.205	0.006	0.17	3.210	0.009	0.25
6XAE6G		3.200	0.001	0.03	3.205	0.004	0.11
789U4K		3.220	0.021	0.60	3.215	0.014	0.38
7VHTT6		3.210	0.011	0.31	3.215	0.014	0.38
89JWPJ		3.145	-0.054	-1.53	3.150	-0.051	-1.42
8AR98K		3.220	0.021	0.60	3.212	0.011	0.30
8BKWPF		3.200	0.001	0.03	3.180	-0.021	-0.59
8PKBWJ		3.270	0.071	2.01	3.260	0.059	1.63
8UZ9FK		3.230	0.031	0.88	3.235	0.034	0.94
9BXHLH		3.195	-0.004	-0.11	3.205	0.004	0.11
9HJFEC		3.255	0.056	1.59	3.255	0.054	1.49
A2UM8J		3.150	-0.049	-1.39	3.180	-0.021	-0.59
A4FVLR		3.200	0.001	0.03	3.200	-0.001	-0.03
AAHJ4E		3.205	0.006	0.17	3.215	0.014	0.38
ABGJ9K		3.265	0.066	1.87	3.260	0.059	1.63
AD27RC		3.230	0.031	0.88	3.240	0.039	1.08
ALCYTE		3.195	-0.004	-0.11	3.205	0.004	0.11
AWFFY6		3.200	0.001	0.03	3.200	-0.001	-0.03
AXQD7U		3.180	-0.019	-0.54	3.195	-0.006	-0.17
B2XV8A		3.240	0.041	1.16	3.240	0.039	1.08
BH8Q2A		3.219	0.020	0.56	3.209	0.007	0.20
BWT2TL		3.210	0.011	0.31	3.200	-0.001	-0.03
BWVQWJ		3.170	-0.029	-0.82	3.130	-0.071	-1.97
C23JM9		3.160	-0.039	-1.10	3.160	-0.041	-1.14



Analysis 907

pH

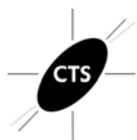
WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
C2MPXC		3.190	-0.009	-0.25	No data reported for this sample		
CGW47G		3.170	-0.029	-0.82	3.170	-0.031	-0.86
CU4FTN		3.160	-0.039	-1.10	3.175	-0.026	-0.73
D9ZUQW		3.231	0.032	0.91	3.216	0.014	0.40
DWJCPD		3.130	-0.069	-1.95	3.120	-0.081	-2.25
EGTX4D		3.220	0.021	0.60	3.220	0.019	0.52
EMW3UC		3.255	0.056	1.59	3.260	0.059	1.63
FZHY9E		3.225	0.026	0.74	3.230	0.029	0.80
G62N49		3.140	-0.059	-1.67	3.150	-0.051	-1.42
G7YYBY		3.100	-0.099	-2.80	3.110	-0.091	-2.53
GC7NYP		3.195	-0.004	-0.11	3.190	-0.011	-0.31
GECQPA		3.175	-0.024	-0.68	3.200	-0.001	-0.03
GQ4CV6		3.255	0.056	1.59	3.270	0.069	1.91
GYL9VQ		3.235	0.036	1.02	3.275	0.074	2.05
H3UMH2		3.350	0.151	4.28	3.350	0.149	4.13
H8BE4H		3.185	-0.014	-0.39	3.205	0.004	0.11
HENAZB		3.190	-0.009	-0.27	3.195	-0.007	-0.18
HQ242B		3.145	-0.054	-1.53	3.125	-0.076	-2.11
HQ4RKA		3.394	0.195	5.51	3.395	0.193	5.36
HVYWM8		3.230	0.031	0.88	3.230	0.029	0.80
JAXRC8		3.220	0.021	0.60	3.230	0.029	0.80
JDTBZ4		3.260	0.061	1.73	3.270	0.069	1.91
JFUMR		3.190	-0.009	-0.25	3.195	-0.006	-0.17
JQV8BC		3.235	0.036	1.02	3.250	0.049	1.35
JRTH7F		3.185	-0.014	-0.39	3.185	-0.016	-0.45
JT7FTP		3.195	-0.004	-0.11	3.195	-0.006	-0.17
JUYFNF		3.185	-0.014	-0.39	3.195	-0.006	-0.17
KLMGU6		3.145	-0.054	-1.53	3.145	-0.056	-1.56
LA32D3		3.220	0.021	0.60	3.225	0.024	0.66
LVZR89		3.180	-0.019	-0.55	3.194	-0.007	-0.20
MDJBTY		3.165	-0.034	-0.96	3.170	-0.031	-0.86
MGKJW9		3.220	0.021	0.60	3.220	0.019	0.52
MTDZLA		3.170	-0.029	-0.82	3.260	0.059	1.63
N8B2R4		3.245	0.046	1.31	3.250	0.049	1.35
NGUD72		3.155	-0.044	-1.24	3.140	-0.061	-1.70



Analysis 907

pH

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NGXZH9		3.240	0.041	1.16	3.230	0.029	0.80
NJ3XZA		3.200	0.001	0.03	3.200	-0.001	-0.03
PMFQH9		3.210	0.011	0.31	3.220	0.019	0.52
Q6VK4A		3.230	0.031	0.88	3.230	0.029	0.80
T8EFHD		3.220	0.021	0.60	3.215	0.014	0.38
TC8KBG		3.185	-0.014	-0.39	3.190	-0.011	-0.31
TLYZZL		3.175	-0.024	-0.68	3.180	-0.021	-0.59
U89ZUX		3.250	0.051	1.45	3.255	0.054	1.49
UFZH4Z		3.200	0.001	0.03	3.220	0.019	0.52
ULU46F		3.210	0.011	0.31	3.200	-0.001	-0.03
UXMWLY		3.140	-0.059	-1.67	3.130	-0.071	-1.97
W2XQE2		3.105	-0.094	-2.66	3.120	-0.081	-2.25
WELG6C		3.220	0.021	0.60	3.235	0.034	0.94
WT2GYG		3.185	-0.014	-0.39	3.200	-0.001	-0.03
WTPKUC		3.155	-0.044	-1.24	3.150	-0.051	-1.42
WUVMKW		3.220	0.021	0.60	3.230	0.029	0.80
WUW82P		3.190	-0.009	-0.25	3.190	-0.011	-0.31
X4GXY2		3.195	-0.004	-0.11	3.190	-0.011	-0.31
X6AN9L		3.220	0.021	0.60	3.220	0.019	0.52
XHVZKW		3.170	-0.029	-0.82	3.165	-0.036	-1.00
XWG9QA		3.244	0.045	1.26	3.247	0.045	1.26
YETFEB		3.175	-0.024	-0.68	3.170	-0.031	-0.86
YFRVWW		3.180	-0.019	-0.54	3.175	-0.026	-0.73
YGM4X7		3.190	-0.009	-0.25	3.200	-0.001	-0.03
YTFKM8		3.175	-0.024	-0.68	3.180	-0.021	-0.59
YVFAVM		3.215	0.016	0.46	3.220	0.019	0.52
Z94Y4R		3.258	0.059	1.66	3.259	0.058	1.60
Z9ZCQK		3.190	-0.009	-0.25	3.200	-0.001	-0.03
ZB6XJQ		3.180	-0.019	-0.54	3.190	-0.011	-0.31
ZQ2JWQ		3.190	-0.009	-0.25	3.190	-0.011	-0.31



Analysis 908  
Residual Sugar

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		11.15	0.97	0.36	10.35	0.00	0.00
3UXHBV		11.47	1.29	0.48	12.07	1.72	0.60
674KXH		12.10	1.92	0.71	11.20	0.85	0.30
6NYDJF		10.60	0.42	0.15	11.63	1.28	0.45
6RZJXL		9.85	-0.33	-0.12	10.60	0.25	0.09
789U4K		10.30	0.12	0.04	11.10	0.75	0.26
8BKWPF		11.80	1.62	0.60	10.90	0.55	0.19
8MGYBW		11.33	1.15	0.42	12.14	1.79	0.63
8UZ9FK		11.70	1.52	0.56	11.20	0.85	0.30
9HJFEC		10.66	0.48	0.18	11.77	1.42	0.50
A2UM8J		11.30	1.12	0.41	12.50	2.15	0.76
BH8Q2A		10.29	0.11	0.04	9.50	-0.85	-0.30
FZHY9E		10.04	-0.14	-0.05	10.79	0.44	0.15
GECQPA		8.82	-1.36	-0.50	8.15	-2.20	-0.77
HQ4RKA		11.90	1.72	0.63	12.90	2.55	0.90
HVYWM8		11.40	1.22	0.45	12.20	1.85	0.65
JDTBZ4		11.00	0.82	0.30	10.25	-0.10	-0.03
JT7FTP		11.13	0.95	0.35	10.36	0.01	0.00
JUYFNF		1.15	-9.03	-3.33	0.99	-9.36	-3.29
KLMGU6		11.25	1.07	0.39	12.00	1.65	0.58
MDJBTY		9.82	-0.36	-0.13	9.82	-0.53	-0.19
MTDZLA		10.62	0.44	0.16	9.77	-0.58	-0.20
NGUD72		11.10	0.92	0.34	11.80	1.45	0.51
NGXZH9		1.19	-8.99	-3.31	1.31	-9.04	-3.18
T8EFHD		10.18	0.00	0.00	11.08	0.73	0.26
UXMWLY		10.46	0.28	0.10	11.67	1.32	0.46
YGM4X7		32.00	21.82	8.04	31.10	20.75	7.29
Z94Y4R		12.28	2.10	0.77	11.38	1.03	0.36

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Analysis 909

L-Malic Acid

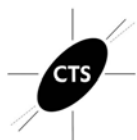
WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		2.820	0.074	0.55	2.920	0.176	1.33
32QU7N		3.100	0.354	2.64	3.030	0.286	2.17
4D6EGP		2.771	0.025	0.19	2.772	0.027	0.21
4JDYLA		2.680	-0.067	-0.50	2.678	-0.067	-0.51
674KXH		2.600	-0.146	-1.09	2.530	-0.214	-1.63
6PVZAL		2.710	-0.036	-0.27	2.830	0.086	0.65
6Q8H3V		2.450	-0.296	-2.21	2.400	-0.344	-2.61
6WTD4Z		2.726	-0.020	-0.15	2.637	-0.108	-0.82
6XAE6G		2.760	0.014	0.10	2.688	-0.056	-0.43
789U4K		3.140	0.394	2.94	3.130	0.386	2.93
7VHTT6		2.575	-0.171	-1.28	2.545	-0.199	-1.51
89JWPJ		2.805	0.059	0.44	2.780	0.036	0.27
8AR98K		2.460	-0.286	-2.14	2.606	-0.138	-1.05
8BKWPF		2.650	-0.096	-0.72	2.700	-0.044	-0.34
8PKBJW		1.925	-0.821	-6.13	1.960	-0.784	-5.96
8UZ9FK		2.750	0.004	0.03	2.600	-0.144	-1.10
9HJFEC		0.002	-2.744	-20.50	0.001	-2.743	-20.83
A2UM8J		2.729	-0.017	-0.13	2.700	-0.044	-0.34
A4FVLR		2.800	0.054	0.40	2.795	0.051	0.39
AAHJ4E		2.545	-0.201	-1.50	2.495	-0.249	-1.89
ABGJ9K		2.845	0.099	0.74	2.795	0.051	0.39
AD27RC		2.650	-0.096	-0.72	2.720	-0.024	-0.18
ALCYTE		2.825	0.079	0.59	2.770	0.026	0.20
AWFFY6		2.752	0.005	0.04	2.751	0.006	0.05
AXQD7U		2.900	0.154	1.15	2.900	0.156	1.18
BH8Q2A		2.770	0.024	0.18	2.810	0.066	0.50
BWT2TL		2.995	0.249	1.86	3.010	0.266	2.02
BWVQWJ		2.680	-0.066	-0.49	2.680	-0.064	-0.49
C2MPXC		1.460	-1.286	-9.61	No data reported for this sample		
CGW47G		2.464	-0.283	-2.11	2.733	-0.011	-0.09
CU4FTN		2.883	0.137	1.02	2.901	0.157	1.19
D9ZUQW		2.855	0.109	0.81	2.840	0.096	0.73
DWJCPD		2.735	-0.011	-0.08	2.705	-0.039	-0.30
EGTX4D		2.480	-0.266	-1.99	2.490	-0.254	-1.93
EMW3UC		2.850	0.104	0.78	2.830	0.086	0.65



Analysis 909

L-Malic Acid

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FZHY9E		2.575	-0.171	-1.28	2.620	-0.124	-0.94
G62N49		2.770	0.024	0.18	2.690	-0.054	-0.41
GC7NYP		2.870	0.123	0.92	2.828	0.083	0.63
GQ4CV6		2.804	0.058	0.43	2.683	-0.061	-0.47
GYL9VQ		2.590	-0.156	-1.17	2.768	0.023	0.18
H3UMH2		2.740	-0.006	-0.05	2.780	0.036	0.27
H8BE4H		2.875	0.129	0.96	2.825	0.081	0.61
HENAZB		2.852	0.105	0.79	2.846	0.102	0.77
HQ242B		2.435	-0.311	-2.32	2.615	-0.129	-0.98
HQ4RKA		3.080	0.334	2.49	3.210	0.466	3.54
HVYWM8		2.550	-0.196	-1.46	2.560	-0.184	-1.40
JDTBZ4		3.005	0.259	1.93	2.975	0.231	1.75
JFUMR		2.702	-0.044	-0.33	2.713	-0.031	-0.24
JQV8BC		2.660	-0.086	-0.64	2.665	-0.079	-0.60
JRTH7F		2.840	0.094	0.70	2.815	0.071	0.54
JT7FTP		2.830	0.084	0.63	2.850	0.106	0.80
JUYFNF		1.955	-0.791	-5.91	1.805	-0.939	-7.13
KLMGU6		2.630	-0.116	-0.87	2.625	-0.119	-0.91
LA32D3		2.835	0.089	0.66	2.795	0.051	0.39
LVZR89		2.820	0.074	0.55	2.755	0.011	0.08
MGKJW9		2.665	-0.081	-0.61	2.665	-0.079	-0.60
MTDZLA		2.850	0.104	0.78	2.800	0.056	0.42
N8B2R4		2.665	-0.081	-0.61	2.680	-0.064	-0.49
NGUD72		2.650	-0.096	-0.72	2.635	-0.109	-0.83
NJ3XZA		2.630	-0.116	-0.87	2.600	-0.144	-1.10
PMFQH9		2.790	0.044	0.33	2.800	0.056	0.42
Q6VK4A		2.790	0.043	0.32	2.814	0.070	0.53
T8EFHD		3.005	0.259	1.93	2.550	-0.194	-1.48
TC8KBG		2.780	0.034	0.25	2.805	0.061	0.46
TLYZZL		2.760	0.014	0.10	2.785	0.041	0.31
U89ZUX		2.705	-0.041	-0.31	2.730	-0.014	-0.11
UFZH4Z		2.975	0.229	1.71	2.975	0.231	1.75
ULU46F		2.633	-0.113	-0.84	2.650	-0.095	-0.72
UXMWLY		2.875	0.129	0.96	2.870	0.126	0.95
W2XQE2		2.720	-0.026	-0.19	2.631	-0.114	-0.86



Analysis 909

L-Malic Acid

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
WELG6C		2.727	-0.019	-0.14	2.727	-0.017	-0.13
WT2GYG		2.585	-0.161	-1.20	2.700	-0.044	-0.34
WTPKUC		2.610	-0.136	-1.02	2.620	-0.124	-0.94
WUVMKW		2.666	-0.080	-0.60	2.635	-0.109	-0.83
X4GXY2		2.745	-0.001	-0.01	2.750	0.006	0.04
X6AN9L		2.840	0.094	0.70	2.895	0.151	1.14
XHVZKW		2.684	-0.062	-0.46	2.781	0.037	0.28
XWG9QA		2.853	0.106	0.80	2.844	0.099	0.75
YETFEB		2.796	0.050	0.37	2.732	-0.013	-0.10
YFRVWW		5.130	2.384	17.81	4.930	2.186	16.60
YTFKM8		2.841	0.095	0.71	2.843	0.098	0.75
YVFAVM		2.615	-0.131	-0.98	2.590	-0.154	-1.17
Z9ZCQK		2.717	-0.030	-0.22	2.850	0.106	0.80
ZB6XJQ		2.530	-0.216	-1.61	2.530	-0.214	-1.63
ZQ2JWQ		2.770	0.024	0.18	2.800	0.056	0.42

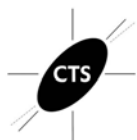
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**Analysis 910  
Glucose + Fructose**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2GDH8N		10.65	0.13	0.16	11.28	0.89	1.15
32QU7N		10.74	0.22	0.26	9.86	-0.53	-0.69
3TZ8FT		9.25	-1.26	-1.48	9.20	-1.19	-1.54
3UXHBV		10.46	-0.05	-0.06	10.66	0.27	0.35
4D6EGP		12.20	1.69	1.98	10.90	0.51	0.66
4JDYLA		9.60	-0.91	-1.07	10.25	-0.14	-0.18
674KXH		10.70	0.19	0.22	9.90	-0.49	-0.63
6PVZAL		9.95	-0.56	-0.66	9.14	-1.25	-1.63
6Q8H3V		10.45	-0.06	-0.07	9.70	-0.69	-0.89
6RZJXL		2.70	-7.81	-9.15	2.50	-7.89	-10.24
6WTD4Z		10.09	-0.43	-0.50	9.21	-1.18	-1.54
6XAE6G		11.25	0.74	0.86	10.50	0.11	0.15
789U4K		10.95	0.44	0.51	11.65	1.26	1.64
7VHTT6		9.64	-0.88	-1.03	10.54	0.15	0.19
89JWPJ		9.62	-0.89	-1.05	9.77	-0.62	-0.81
8AR98K		8.98	-1.53	-1.79	9.82	-0.57	-0.74
8BKWPF		11.15	0.64	0.75	10.30	-0.09	-0.11
8MGYBW		10.25	-0.26	-0.31	11.20	0.81	1.05
8PKBWJ		8.40	-2.11	-2.47	7.80	-2.59	-3.36
8UZ9FK		10.30	-0.21	-0.25	9.70	-0.69	-0.89
9BXHLH		10.51	-0.01	-0.01	10.20	-0.19	-0.24
9HJFEC		12.02	1.50	1.76	13.60	3.21	4.17
A2UM8J		10.04	-0.47	-0.55	11.19	0.80	1.04
A4FVLR		12.10	1.59	1.86	11.10	0.71	0.92
AAHJ4E		10.10	-0.41	-0.48	10.00	-0.39	-0.50
ABGJ9K		11.06	0.55	0.64	11.82	1.44	1.86
AD27RC		3.65	-6.87	-8.04	3.31	-7.08	-9.20
ALCYTE		13.76	3.24	3.80	12.74	2.35	3.05
AWFFY6		10.90	0.39	0.45	11.65	1.26	1.64
AXQD7U		9.69	-0.83	-0.97	10.67	0.28	0.37
BH8Q2A		10.29	-0.23	-0.27	9.50	-0.89	-1.15
BWT2TL		9.63	-0.88	-1.03	10.23	-0.16	-0.21
BWVQWJ		9.14	-1.38	-1.61	9.54	-0.85	-1.11
C2MPXC		9.99	-0.52	-0.61	No data reported for this sample		
CGW47G		9.90	-0.61	-0.72	9.75	-0.64	-0.83



**ASEV-CTS Wine Industry Interlaboratory Testing Program Appendix #072b****Fall 2022****Analysis 910  
Glucose + Fructose**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
CU4FTN		12.00	1.49	1.74	11.05	0.66	0.86
D9ZUQW		9.78	-0.73	-0.86	10.68	0.29	0.38
DWJCPD		10.23	-0.29	-0.34	10.92	0.53	0.68
EGTX4D		9.61	-0.91	-1.06	10.50	0.11	0.15
EMW3UC		9.85	-0.67	-0.78	10.70	0.31	0.40
G62N49		10.95	0.44	0.51	10.05	-0.34	-0.44
GC7NYP		11.65	1.14	1.33	10.60	0.21	0.28
GECQPA		8.82	-1.70	-1.99	8.16	-2.23	-2.89
GQ4CV6		13.05	2.54	2.97	12.00	1.61	2.09
GYL9VQ		10.16	-0.35	-0.41	9.84	-0.55	-0.72
H3UMH2		11.72	1.21	1.41	9.95	-0.44	-0.57
H8BE4H		10.45	-0.06	-0.07	11.40	1.01	1.31
HENAZB		11.43	0.92	1.07	10.27	-0.12	-0.15
HQ242B		8.55	-1.96	-2.30	8.92	-1.47	-1.91
HQ4RKA		10.50	-0.01	-0.01	11.30	0.91	1.18
JDTBZ4		11.75	1.24	1.45	9.40	-0.99	-1.28
JFUMR		10.00	-0.51	-0.60	10.90	0.51	0.66
JQV8BC		9.91	-0.60	-0.71	10.83	0.44	0.57
JRTH7F		10.15	-0.36	-0.42	11.00	0.61	0.79
JT7FTP		11.13	0.62	0.72	10.36	-0.03	-0.04
KLMGU6		10.00	-0.51	-0.60	10.95	0.56	0.73
LA32D3		10.86	0.35	0.41	9.76	-0.63	-0.82
LVZR89		9.30	-1.21	-1.42	8.85	-1.54	-2.00
MDJBTY		10.53	0.01	0.01	10.83	0.44	0.57
MGKJW9		10.90	0.39	0.45	10.10	-0.29	-0.37
MTDZLA		10.62	0.10	0.12	9.77	-0.62	-0.80
N8B2R4		10.24	-0.27	-0.32	9.56	-0.83	-1.08
NGUD72		9.72	-0.79	-0.93	10.40	0.01	0.02
NJ3XZA		11.85	1.34	1.57	11.00	0.61	0.79
PMFQH9		9.70	-0.81	-0.95	10.70	0.31	0.40
Q6VK4A		10.13	-0.38	-0.45	11.22	0.83	1.08
TC8KBG		10.55	0.04	0.04	10.00	-0.39	-0.50
TLYZZL		10.61	0.10	0.11	10.30	-0.09	-0.11
U89ZUX		12.08	1.57	1.84	11.22	0.83	1.07
UFZH4Z		11.25	0.74	0.86	10.55	0.16	0.21



Analysis 910  
Glucose + Fructose

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ULU46F		9.47	-1.04	-1.22	10.13	-0.26	-0.34
UXMWLY		10.20	-0.31	-0.37	10.95	0.56	0.73
W2XQE2		7.15	-3.36	-3.94	7.00	-3.39	-4.40
WELG6C		10.83	0.32	0.37	9.98	-0.41	-0.54
WT2GYG		11.06	0.54	0.64	12.07	1.68	2.18
WTPKUC		10.55	0.04	0.04	11.40	1.01	1.31
WUVMKW		10.33	-0.19	-0.22	9.47	-0.92	-1.20
WUW82P		10.78	0.27	0.31	10.06	-0.33	-0.43
X4GXY2		10.81	0.30	0.35	9.98	-0.41	-0.53
X6AN9L		11.05	0.54	0.63	10.25	-0.14	-0.18
XHVZKW		10.59	0.08	0.09	10.36	-0.03	-0.04
XWG9QA		12.02	1.51	1.77	10.88	0.49	0.63
YETFEB		9.65	-0.86	-1.01	10.45	0.06	0.08
YFRVWW		1.08	-9.43	-11.05	1.15	-9.24	-12.00
YGM4X7		3.20	-7.31	-8.56	3.11	-7.28	-9.45
YTFKM8		12.00	1.49	1.74	11.10	0.71	0.92
YVFAVM		10.80	0.28	0.33	9.86	-0.53	-0.69
Z9ZCQK		11.14	0.63	0.73	10.54	0.15	0.19
ZB6XJQ		10.10	-0.41	-0.48	9.30	-1.09	-1.41
ZQ2JWQ		10.61	0.09	0.11	11.48	1.09	1.42

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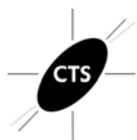


Analysis 911  
Copper Content

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		0.2280	0.0845	1.79	0.2275	0.0540	0.67
674KXH		0.2000	0.0565	1.20	0.2100	0.0365	0.45
6RZJXL		0.0300	-0.1135	-2.40	0.4000	0.2265	2.82
8BKWPF		0.1650	0.0215	0.46	0.1600	-0.0135	-0.17
8MGYBW		0.1345	-0.0090	-0.19	0.1225	-0.0510	-0.63
A2UM8J		0.1650	0.0215	0.46	0.1650	-0.0085	-0.11
A4FVLR		0.1205	-0.0230	-0.49	0.1350	-0.0385	-0.48
AXQD7U		0.1700	0.0265	0.56	0.1550	-0.0185	-0.23
CU4FTN		0.1450	0.0015	0.03	0.1550	-0.0185	-0.23
H8BE4H		0.1660	0.0225	0.48	0.1510	-0.0225	-0.28
KLMGU6		0.1430	-0.0005	-0.01	0.1150	-0.0585	-0.73
NGUD72		0.1995	0.0560	1.19	0.1870	0.0135	0.17
Q6VK4A		0.1450	0.0015	0.03	0.1100	-0.0635	-0.79
UXMWLY		0.1400	-0.0035	-0.07	0.3450	0.1715	2.13
W2XQE2		0.1200	-0.0235	-0.50	0.1100	-0.0635	-0.79
WELG6C		0.0550	-0.0885	-1.87	0.1050	-0.0685	-0.85
X6AN9L		0.1310	-0.0125	-0.26	0.1400	-0.0335	-0.42
YTFKM8		0.1250	-0.0185	-0.39	0.1300	-0.0435	-0.54

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Analysis 912  
Potassium (K) Content

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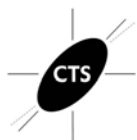
WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		693.0	0.4	0.00	682.8	-4.0	-0.04
3TZ8FT		1,000.0	307.5	3.19	990.0	303.2	3.14
674KXH		724.0	31.5	0.33	726.0	39.2	0.41
6WTD4Z		753.0	60.5	0.63	776.0	89.2	0.92
8BKWPF		658.0	-34.5	-0.36	660.0	-26.8	-0.28
8MGYBW		635.0	-57.5	-0.60	641.5	-45.3	-0.47
A4FVLR		648.5	-44.0	-0.46	621.0	-65.8	-0.68
CU4FTN		625.0	-67.5	-0.70	623.0	-63.8	-0.66
EMW3UC		629.5	-63.0	-0.65	592.0	-94.8	-0.98
HENAZB		674.8	-17.7	-0.18	665.1	-21.7	-0.22
HQ242B		581.0	-111.5	-1.16	587.5	-99.3	-1.03
KLMGU6		635.0	-57.5	-0.60	637.5	-49.3	-0.51
NGUD72		791.0	98.5	1.02	784.3	97.5	1.01
Q6VK4A		650.9	-41.6	-0.43	636.3	-50.5	-0.52
T8EFHD		773.5	81.0	0.84	751.5	64.7	0.67
ULU46F		644.0	-48.5	-0.50	631.5	-55.3	-0.57
UXMWLY		607.5	-85.0	-0.88	606.0	-80.8	-0.84
VVXDB7		619.6	-73.0	-0.76	614.5	-72.3	-0.75
X6AN9L		699.0	6.5	0.07	715.0	28.2	0.29
YFRVWW		808.5	116.0	1.20	794.0	107.2	1.11

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Analysis 915  
A420nm (1cm path)

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		0.0455	0.0021	0.57	0.0473	0.0044	1.05
674KXH		0.0464	0.0031	0.82	0.0492	0.0063	1.51
6PVZAL		0.0410	-0.0023	-0.61	0.0420	-0.0009	-0.23
6Q8H3V		0.0450	0.0017	0.45	0.0455	0.0026	0.62
6RZJXL		0.0591	0.0158	4.20	0.0499	0.0070	1.68
6WTD4Z		0.0405	-0.0028	-0.75	0.0425	-0.0004	-0.11
789U4K		0.0420	-0.0013	-0.35	0.0420	-0.0009	-0.23
7VHTT6		0.0450	0.0017	0.45	0.0450	0.0021	0.50
8PKBJWJ		0.4900	0.4467	118.87	0.4850	0.4421	106.52
9BXHLH		0.0455	0.0022	0.58	0.0460	0.0031	0.74
9HJFEC		0.0080	-0.0353	-9.40	0.0050	-0.0379	-9.14
A2UM8J		0.0420	-0.0013	-0.35	0.0415	-0.0014	-0.35
A4FVLR		0.0440	0.0007	0.18	0.0465	0.0036	0.86
AAHJ4E		0.0340	-0.0093	-2.48	0.0325	-0.0104	-2.52
AD27RC		0.0400	-0.0033	-0.88	0.0440	0.0011	0.25
AXQD7U		0.0180	-0.0253	-6.73	0.0310	-0.0119	-2.88
BWVQWJ		0.0465	0.0032	0.85	0.0440	0.0011	0.25
C23JM9		0.0430	-0.0003	-0.08	0.0440	0.0011	0.25
CU4FTN		0.0455	0.0022	0.58	0.0460	0.0031	0.74
G62N49		0.0405	-0.0028	-0.75	0.0405	-0.0024	-0.59
G7YYYYB		0.0500	0.0067	1.78	0.0430	0.0001	0.01
GYL9VQ		0.0445	0.0012	0.32	0.0410	-0.0019	-0.47
H8BE4H		0.0440	0.0007	0.18	0.0420	-0.0009	-0.23
HENAZB		0.0425	-0.0008	-0.22	0.0420	-0.0009	-0.23
HQ242B		0.0430	-0.0003	-0.08	0.0450	0.0021	0.50
HQ4RKA		0.0395	-0.0038	-1.01	0.0380	-0.0049	-1.19
HVYWM8		0.0446	0.0013	0.34	0.0396	-0.0033	-0.81
JAXRC8		43.2500	43.2067	11,497.70	41.7500	41.7071	110,050.37
JDTBZ4		0.0400	-0.0033	-0.88	0.0400	-0.0029	-0.71
JJFUMR		0.0390	-0.0043	-1.15	0.0410	-0.0019	-0.47
JUYFNF		0.0515	0.0082	2.18	0.0510	0.0081	1.94
KLMGU6		0.0415	-0.0018	-0.48	0.0440	0.0011	0.25
LVZR89		0.0440	0.0007	0.18	0.0440	0.0011	0.25
MDJBTY		0.0470	0.0037	0.98	0.0465	0.0036	0.86
NGUD72		0.0520	0.0087	2.31	0.0530	0.0101	2.42



**ASEV-CTS Wine Industry Interlaboratory Testing Program Appendix #072b**

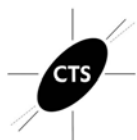
**Fall 2022**

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

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NGXZH9		0.0270	-0.0163	-4.34	0.0260	-0.0169	-4.08
NJ3XZA		0.0400	-0.0033	-0.88	0.0400	-0.0029	-0.71
T8EFHD		0.0380	-0.0053	-1.41	0.0380	-0.0049	-1.19
TLYZZL		0.0370	-0.0063	-1.68	0.0370	-0.0059	-1.43
ULU46F		0.0455	0.0022	0.58	0.0430	0.0001	0.01
UXMWLY		0.0485	0.0052	1.38	0.0490	0.0061	1.46
WELG6C		0.0295	-0.0138	-3.67	0.0430	0.0001	0.01
WTPKUC		0.0410	-0.0023	-0.61	0.0395	-0.0034	-0.83
X6AN9L		0.0420	-0.0013	-0.35	0.0430	0.0001	0.01
XWG9QA		0.0426	-0.0007	-0.20	0.0342	-0.0087	-2.10
YFRVWW		0.0040	-0.0393	-10.46	0.0045	-0.0384	-9.26
Z9ZCQK		0.0450	0.0017	0.45	0.0425	-0.0004	-0.11
ZB6XJQ		0.0050	-0.0383	-10.19	0.0020	-0.0409	-9.87

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

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
32QU7N		0.0106	0.0020	0.73	0.0152	0.0066	2.21
674KXH		0.0096	0.0010	0.37	0.0116	0.0031	1.03
6PVZAL		0.0080	-0.0006	-0.20	0.0080	-0.0005	-0.18
6Q8H3V		0.0105	0.0019	0.69	0.0100	0.0015	0.49
6RZJXL		0.0213	0.0127	4.53	0.0165	0.0080	2.66
6WTD4Z		0.0060	-0.0026	-0.91	0.0070	-0.0015	-0.51
789U4K		0.0080	-0.0006	-0.20	0.0080	-0.0005	-0.18
7VHTT6		0.0090	0.0004	0.16	0.0090	0.0005	0.16
8PKBWJ		0.0100	0.0014	0.52	0.0105	0.0020	0.66
9BXHLH		0.0115	0.0029	1.05	0.0110	0.0025	0.83
9HJFEC		0.0020	-0.0066	-2.34	0.0010	-0.0075	-2.51
A2UM8J		0.0075	-0.0011	-0.38	0.0075	-0.0010	-0.34
A4FVLR		0.0090	0.0004	0.16	0.0110	0.0025	0.83
AAHJ4E		0.0040	-0.0046	-1.62	0.0030	-0.0055	-1.85
AD27RC		0.0085	-0.0001	-0.02	0.0090	0.0005	0.16
AXQD7U		0.0025	-0.0061	-2.16	0.0150	0.0065	2.16
BWVQWJ		0.0135	0.0049	1.76	0.0105	0.0020	0.66
C23JM9		0.0070	-0.0016	-0.55	0.0100	0.0015	0.49
CU4FTN		0.0090	0.0004	0.16	0.0095	0.0010	0.33
G62N49		0.0070	-0.0016	-0.55	0.0085	0.0000	-0.01
G7YYYYB		0.0130	0.0044	1.59	0.0090	0.0005	0.16
GYL9VQ		0.0075	-0.0011	-0.38	0.0040	-0.0045	-1.51
HENAZB		0.0080	-0.0006	-0.20	0.0080	-0.0005	-0.18
HQ242B		0.0090	0.0004	0.16	0.0100	0.0015	0.49
HQ4RKA		0.0070	-0.0016	-0.55	0.0075	-0.0010	-0.34
HVYWM8		0.0089	0.0003	0.12	0.0063	-0.0022	-0.74
JDTBZ4		0.0100	0.0014	0.52	0.1450	0.1365	45.59
JJFUMR		0.0080	-0.0006	-0.20	0.0100	0.0015	0.49
JUYFNF		0.0110	0.0024	0.87	0.0115	0.0030	0.99
KLMGU6		0.0080	-0.0006	-0.20	0.0079	-0.0006	-0.21
LVZR89		0.0095	0.0009	0.34	0.0085	0.0000	-0.01
MDJBTY		0.0120	0.0034	1.23	0.0115	0.0030	0.99
NGUD72		0.0140	0.0054	1.94	0.0130	0.0045	1.50
NJ3XZA		0.0090	0.0004	0.16	0.0090	0.0005	0.16
T8EFHD		0.0080	-0.0006	-0.20	0.0080	-0.0005	-0.18



Analysis 916  
A520nm (1cm path)

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TLYZZL		0.0045	-0.0041	-1.45	0.0045	-0.0040	-1.34
ULU46F		0.0055	-0.0031	-1.09	0.0055	-0.0030	-1.01
UXMWLY		0.0120	0.0034	1.23	0.0110	0.0025	0.83
WELG6C		No data reported for this sample			0.0080	-0.0005	-0.18
X6AN9L		0.0090	0.0004	0.16	0.0100	0.0015	0.49
XWG9QA		0.0142	0.0057	2.02	0.0046	-0.0039	-1.30
YFRVWW		0.0010	-0.0076	-2.69	0.0010	-0.0075	-2.51
Z9ZCQK		0.0095	0.0009	0.34	0.0075	-0.0010	-0.34
ZB6XJQ		-0.0290	-0.0376	-13.39	-0.0310	-0.0395	-13.20

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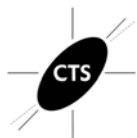




**ASEV-CTS Wine Industry Interlaboratory Testing Program**  
**Research Property 950**  
**Research Property: Citric Acid**

**Report #072b**  
**Fall 2022**

WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
32QU7N		0.4185	-0.3481	-0.26	0.4215	-0.3482	-0.26
674KXH		0.3900	-0.3766	-0.28	0.3900	-0.3797	-0.28
6PVZAL		381.0000	380.2334	286.06	386.0000	385.2303	288.49
7VHTT6		0.4190	-0.3476	-0.26	0.4240	-0.3457	-0.26
9HJFEC		5.5700	4.8034	3.61	5.5950	4.8253	3.61
A2UM8J		0.5150	-0.2516	-0.19	0.5150	-0.2547	-0.19
A4FVLR		0.4200	-0.3466	-0.26	0.4200	-0.3497	-0.26
CU4FTN		0.4280	-0.3386	-0.25	0.4310	-0.3387	-0.25
H8BE4H		0.3800	-0.3866	-0.29	0.3800	-0.3897	-0.29
HQ4RKA		0.5800	-0.1866	-0.14	No data reported for this sample		
KLMGU6		0.4650	-0.3016	-0.23	0.4850	-0.2847	-0.21
LVZR89		0.4400	-0.3266	-0.25	0.4150	-0.3547	-0.27
NGUD72		0.4170	-0.3496	-0.26	0.4440	-0.3257	-0.24
Q6VK4A		0.4115	-0.3551	-0.27	0.4055	-0.3642	-0.27
UXMWLY		0.4000	-0.3666	-0.28	0.4000	-0.3697	-0.28
WELG6C		0.4050	-0.3616	-0.27	0.4000	-0.3697	-0.28
X6AN9L		0.4200	-0.3466	-0.26	0.4200	-0.3497	-0.26



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

**Report #072b**  
**Fall 2022**

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
32QU7N		2.848	1.026	2.94	2.844	1.034	2.98
674KXH		2.000	0.178	0.51	2.000	0.190	0.55
7VHTT6		1.325	-0.497	-1.42	1.345	-0.465	-1.34
8BKWPF		1.700	-0.122	-0.35	1.730	-0.080	-0.23
8MGYBW		1.705	-0.117	-0.33	1.720	-0.090	-0.26
A2UM8J		1.605	-0.217	-0.62	1.610	-0.200	-0.58
A4FVLR		1.745	-0.077	-0.22	1.685	-0.125	-0.36
AXQD7U		1.550	-0.272	-0.78	1.535	-0.275	-0.79
CU4FTN		1.800	-0.022	-0.06	1.795	-0.015	-0.04
KLMGU6		1.845	0.023	0.07	1.855	0.045	0.13
NGUD72		1.586	-0.236	-0.68	1.584	-0.226	-0.65
Q6VK4A		1.915	0.093	0.27	1.755	-0.055	-0.16
UXMWLY		2.000	0.178	0.51	2.000	0.190	0.55
X6AN9L		1.880	0.058	0.17	1.885	0.075	0.22

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**Analysis 952**

**Research Property: Methanol Content**

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WebCode	Data Flag	Sample SA43			Sample SA44		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
32QU7N		52.00	-47.50	-0.28	52.00	-45.28	-0.29
3TZ8FT		41.00	-58.50	-0.35	42.00	-55.28	-0.35
674KXH		66.63	-32.87	-0.20	60.33	-36.95	-0.23
8BKWPF		56.50	-43.00	-0.26	47.50	-49.78	-0.31
8MGYBW		58.00	-41.50	-0.25	54.50	-42.78	-0.27
A4FVLR		54.50	-45.00	-0.27	54.50	-42.78	-0.27
AD27RC		48.00	-51.50	-0.31	50.00	-47.28	-0.30
AXQD7U		52.50	-47.00	-0.28	52.50	-44.78	-0.28
CU4FTN		52.75	-46.75	-0.28	52.70	-44.58	-0.28
JQV8BC		38.55	-60.95	-0.36	59.70	-37.58	-0.24
NGUD72		656.00	556.50	3.32	625.00	527.72	3.33
X6AN9L		55.00	-44.50	-0.27	52.00	-45.28	-0.29
XWG9QA		62.01	-37.48	-0.22	61.85	-35.42	-0.22

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-End of Appendix-