



## Wine Industry Interlaboratory Program

### Summary Report #065 - Summer 2020

---

#### Introduction to the Wine Program

#### Explanation of Tables and Definitions of Terms

Analysis	Analysis Name
<u>901</u>	<u>Ethanol (% of volume)</u>
<u>902</u>	<u>Total Sulfur Dioxide</u>
<u>903</u>	<u>Free Sulfur Dioxide</u>
<u>904</u>	<u>Titrateable Acidity</u>
<u>905</u>	<u>Volatile Acidity</u>
<u>906</u>	<u>Specific Gravity</u>
<u>907</u>	<u>pH</u>
<u>908</u>	<u>Residual Sugar</u>
<u>909</u>	<u>L-Malic Acid</u>
<u>910</u>	<u>Glucose + Fructose</u>
<u>911</u>	<u>Copper Content</u>
<u>912</u>	<u>Potassium Content</u>
<u>915</u>	<u>A420nm (1cm path)</u>
<u>916</u>	<u>A520nm (1cm path)</u>
<u>950</u>	<u>Research Property: L-Lactic Acid</u>
<u>951</u>	<u>Research: Conductivity at 20C</u>
<u>952</u>	<u>Research: Methanol Content</u>

---

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

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

### **About CTS**

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

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.

---

### Common Problems Highlighted in Footnotes

1. **Extreme data** - The laboratory's results for one or both samples are so inconsistent with those of the other participants that the lab mean(s) fall outside the plot. The participant is advised to immediately review his data and/or testing procedure.
2. **Systematic bias** - The laboratory's results are either consistently high or low for both samples when compared to the other participants (the plotted point falls near the top or bottom of the ellipse). This indicates that the participant is performing the test with a constant bias. Causes of systematic errors include improper calibration, the particular make/model of equipment or a modification to the testing procedure.
3. **Inconsistency in testing between samples/sample sets** - The laboratory's results indicate that there are differences in the way the two samples tested (the plotted point falls to the side of the ellipse). This type of error may be attributed to the analyst deviating from the procedure when testing one of the samples or a material interaction occurrence with the instrument or room conditions. The inconsistency is reflected in the CPVs for the two samples, such as a +1.5 CPV for sample A and a -2.2 CPV for sample B. CTS also will specify if the laboratory's data for one sample are high/low compared to the other participants. If this inconsistency is slight, the lab's plotted point will be an \* that falls on the edge of the ellipse.
4. **Inconsistency in testing within a sample** - The laboratory's within-lab standard deviation for a specified sample is high when compared to the other participants, often causing the lab's plotted point to fall outside of the ellipse.

---

Labs flagged with an \* are not typically included in the footnotes of a data table. These labs may locate their position in the control ellipse and use the definitions above to help identify the type of testing error. An \* should serve as a caution flag, a "yellow light", to a lab. If this error is repeated in future rounds, a lab may need to stop and review its testing procedures. The initial data flag is not cause for alarm. Interlaboratory tests conducted at regular intervals permit a lab to recognize trends in testing.



Analysis 901  
Ethanol (% of volume)

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2DNPYM		11.15	0.04	0.56	12.04	0.03	0.43
2FV9WJ	X	11.35	0.24	3.08	12.02	0.01	0.12
2JWCQQ		11.04	-0.06	-0.77	11.93	-0.08	-0.99
2MVMMQ		11.14	0.03	0.43	12.02	0.01	0.18
2Y8UJQ		11.24	0.14	1.75	12.14	0.13	1.67
37K7BH		11.08	-0.02	-0.26	11.94	-0.07	-0.81
3MUXDM		11.12	0.01	0.18	12.01	0.00	0.06
3R8T3X	X	10.99	-0.12	-1.46	12.04	0.03	0.37
4JBA2U		11.09	-0.02	-0.20	11.98	-0.03	-0.31
4RZ7XN		11.04	-0.07	-0.83	11.91	-0.10	-1.24
4WFDLN		11.08	-0.02	-0.26	11.99	-0.02	-0.19
4ZGGFV		11.07	-0.03	-0.39	11.96	-0.05	-0.56
6WAJFM		11.13	0.03	0.32	12.07	0.07	0.86
78BBHM	*	10.91	-0.19	-2.40	11.92	-0.09	-1.05
7NYGUM		11.08	-0.03	-0.33	11.98	-0.03	-0.31
7PAJFL		11.09	-0.02	-0.20	11.98	-0.03	-0.37
7W3VCE		11.11	0.00	0.05	11.95	-0.06	-0.68
82TPLK		11.07	-0.04	-0.45	11.97	-0.04	-0.50
8ABXBG		11.24	0.14	1.75	12.13	0.12	1.54
8E6QQQ		11.19	0.09	1.12	12.10	0.09	1.17
8VQJ8H		11.13	0.02	0.30	12.01	0.00	0.00
938EMC		11.10	0.00	-0.01	11.99	-0.02	-0.19
9TE4DG	X	11.03	-0.07	-0.89	11.59	-0.42	-5.13
AEG7UH		11.02	-0.08	-1.02	11.93	-0.08	-0.99
B7G7VG		11.08	-0.03	-0.33	12.00	-0.01	-0.06
BBDX4D		11.15	0.05	0.62	12.00	-0.01	-0.13
BFHYXF		11.07	-0.04	-0.45	11.96	-0.05	-0.62
C9F6JE	*	11.30	0.20	2.51	12.25	0.24	3.03
DNBQJE		11.13	0.02	0.30	12.01	0.00	0.06
DTGL3E	X	11.00	-0.10	-1.27	12.50	0.49	6.12
EAKFAE		11.14	0.03	0.43	12.06	0.05	0.62
F2PX9B	X	10.86	-0.24	-3.03	11.94	-0.07	-0.81
F6P4T9		11.10	-0.01	-0.07	11.99	-0.02	-0.25
FDK2KH		11.14	0.03	0.43	11.93	-0.08	-0.93
FKZML9		11.23	0.13	1.63	12.13	0.12	1.54



Analysis 901  
Ethanol (% of volume)

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
H232Y9	*	11.25	0.15	1.88	12.23	0.22	2.78
HDTXZ7		11.23	0.13	1.63	12.14	0.13	1.61
HGXLHG		11.10	0.00	-0.01	12.10	0.09	1.17
HM2AD4	X	10.59	-0.52	-6.50	11.94	-0.07	-0.87
HN9PKA		11.13	0.03	0.37	12.01	0.00	0.06
HP9N4H		11.10	-0.01	-0.07	12.04	0.03	0.37
JLZW72		11.10	-0.01	-0.07	12.01	0.00	0.00
JNTTRA		11.08	-0.02	-0.26	11.97	-0.04	-0.43
JRR4NA		11.14	0.04	0.49	12.05	0.04	0.49
JYRL68		11.11	0.01	0.12	12.00	-0.01	-0.13
JZ3FPE		11.11	0.00	0.05	12.00	-0.01	-0.06
K4FKW8		11.10	0.00	-0.01	12.00	-0.01	-0.13
KHWKM7		11.06	-0.04	-0.51	11.94	-0.07	-0.81
KUBDG8		11.15	0.04	0.56	12.03	0.02	0.25
L27ZG7		11.05	-0.06	-0.70	11.96	-0.05	-0.56
L7M3V4		11.17	0.06	0.81	12.07	0.06	0.74
LD24UD		11.12	0.01	0.18	12.00	-0.01	-0.13
LMBDH7		11.19	0.08	1.06	12.11	0.10	1.30
LUTNQZ		11.25	0.15	1.88	12.10	0.09	1.17
LWWMZ8		11.11	0.01	0.12	12.00	-0.01	-0.06
M4E8N6	*	10.90	-0.20	-2.53	11.90	-0.11	-1.30
M7GDY6	*	10.87	-0.24	-2.97	11.86	-0.15	-1.86
M8FBHD		11.24	0.14	1.75	12.14	0.13	1.67
MHAUN7		11.15	0.04	0.56	12.07	0.06	0.74
MHUDVY	X	11.45	0.35	4.40	12.30	0.29	3.65
MM24Y4		11.10	0.00	-0.01	11.98	-0.03	-0.31
MRVXV7		10.99	-0.11	-1.40	11.88	-0.13	-1.61
NCKUUB		11.11	0.00	0.05	12.02	0.01	0.18
NUKGKA		11.22	0.12	1.50	12.11	0.10	1.30
NVE8P4		11.07	-0.03	-0.39	11.97	-0.04	-0.50
QLGL8U		11.10	0.00	-0.01	12.00	-0.01	-0.06
QQT7F2		11.09	-0.01	-0.14	11.98	-0.03	-0.37
QQU36Y		11.12	0.02	0.24	12.07	0.06	0.74
QWY3Z2	X	10.86	-0.25	-3.10	11.88	-0.13	-1.61
RAJZKV		11.01	-0.10	-1.21	11.90	-0.11	-1.30



Analysis 901  
Ethanol (% of volume)

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
REAE6W		11.08	-0.03	-0.33	11.98	-0.03	-0.37
RECWB9	*	10.92	-0.19	-2.34	11.79	-0.22	-2.72
RPW9KZ		11.08	-0.02	-0.26	11.97	-0.04	-0.43
TC2JYY		11.00	-0.10	-1.27	12.00	-0.01	-0.13
TU7QDZ		11.20	0.10	1.25	12.10	0.09	1.17
TVD9CW		11.13	0.03	0.37	12.02	0.01	0.18
TVJFM6		11.06	-0.04	-0.51	11.93	-0.08	-0.93
U8LBBY	*	10.92	-0.18	-2.28	11.77	-0.24	-2.97
UDCGAV		11.15	0.04	0.56	12.05	0.04	0.49
UU3JU6	X	10.77	-0.33	-4.17	11.71	-0.30	-3.65
UX2VQ6		11.14	0.04	0.49	12.08	0.07	0.93
V2TTAT		11.15	0.05	0.62	12.02	0.01	0.18
V2VBF4		11.12	0.02	0.24	12.01	0.00	0.06
W9VZNV	X	11.17	0.07	0.87	11.68	-0.33	-4.08
WPK6ZV		11.00	-0.10	-1.27	11.88	-0.13	-1.61
X7NY8V	X	11.04	-0.06	-0.77	12.10	0.09	1.11
X8ULGT		11.15	0.05	0.62	12.02	0.01	0.18
XCQ42Z		11.11	0.01	0.12	12.01	0.00	0.06
Y3G28M		11.09	-0.01	-0.14	11.98	-0.03	-0.31
Y7GC4M		11.09	-0.02	-0.20	11.98	-0.03	-0.31
Z4NXWN		11.01	-0.09	-1.14	11.94	-0.07	-0.81
ZC3J6R	X	11.30	0.20	2.51	12.05	0.04	0.55
ZHPE3P		11.11	0.00	0.05	12.01	0.00	0.06
ZMYRKN		11.17	0.06	0.81	12.07	0.06	0.80
ZVAU7P		11.09	-0.01	-0.14	12.00	-0.01	-0.13
ZVDCCZ		11.12	0.01	0.18	12.01	0.00	0.06
ZZA62P		11.10	0.00	-0.01	12.02	0.01	0.18

Grand Means		Summary Statistics	
11.101	percent	12.005	percent
Std Dev Btwn Labs		0.079	percent
0.079	percent	0.081	percent
Statistics based on 85 of 97 reporting participants			

Wines tested: SA29: Red Moscato; SA30: Sweet Red



Analysis 901  
Ethanol (% of volume)

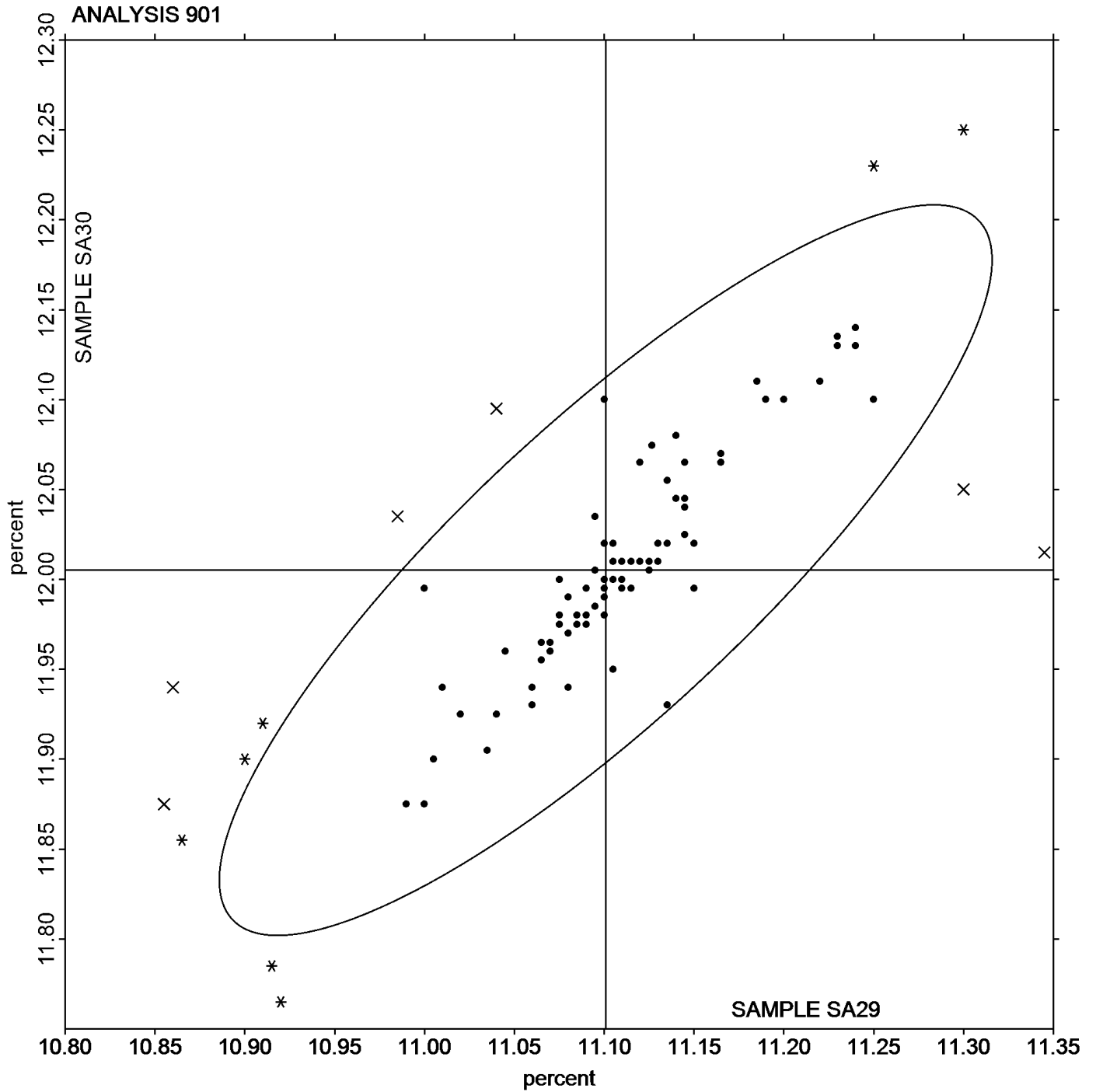
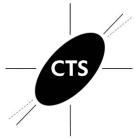
**Comments on Assigned Data Flags for Test #901**

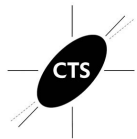
- ZC3J6R (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA30.
- X7NY8V (X) - Inconsistent in testing between samples.
- UU3JU6 (X) - Data for both samples are low. Possible Systematic Error.
- 3R8T3X (X) - Inconsistent in testing between samples.
- 9TE4DG (X) - Data for sample SA30 are low.
- DTGL3E (X) - Data for sample SA30 are high.
- F2PX9B (X) - Data for sample SA29 are low.
- W9VZNV (X) - Data for sample SA30 are low.
- QWY3Z2 (X) - Data for sample SA29 are low. Inconsistent within the determinations of both samples.
- MHUDVY (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample SA29.
- 2FV9WJ (X) - Data for sample SA29 are high. Inconsistent within the determinations of sample SA30.
- HM2AD4 (X) - Data for sample SA29 are low.

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

Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Ebulliometer Method	11.250	0.000	0.15	12.100	0.000	0.09	1/6
Gas Chromatography Method	11.123	0.033	0.02	12.024	0.044	0.02	4/5
Near Infrared Method	11.101	0.076	0.00	11.995	0.076	-0.01	63/66
Dist. / Density Method	11.124	0.092	0.02	12.055	0.100	0.05	8/9
Dichromate Method							0/1
FTIR	11.065	0.118	-0.04	12.006	0.123	0.00	6/7
Other _____	11.112	0.029	0.01	12.007	0.051	0.00	3/3







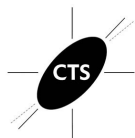
Analysis 902  
Total Sulfur Dioxide

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2DNPYM		105.50	12.53	1.74	82.55	0.42	0.06
2FV9WJ		96.00	3.03	0.42	80.50	-1.63	-0.25
2JWCQQ		94.75	1.78	0.25	81.55	-0.58	-0.09
2MVM MQ		96.75	3.78	0.53	83.40	1.27	0.19
2Y8UJQ		90.00	-2.97	-0.41	84.00	1.87	0.29
37K7BH		82.50	-10.47	-1.46	81.00	-1.13	-0.17
3MUXDM		88.50	-4.47	-0.62	82.00	-0.13	-0.02
3R8T3X		93.50	0.53	0.07	72.50	-9.63	-1.48
4JBA2U		87.00	-5.97	-0.83	78.50	-3.63	-0.56
4RZ7XN	*	75.50	-17.47	-2.43	65.00	-17.13	-2.63
4WFDLN		87.00	-5.97	-0.83	77.50	-4.63	-0.71
4ZGGFV		94.00	1.03	0.14	88.50	6.37	0.98
6WAJFM		79.93	-13.04	-1.81	67.19	-14.95	-2.29
78BBHM	X	67.00	-25.97	-3.61	58.00	-24.13	-3.70
7NYGUM		95.39	2.42	0.34	76.82	-5.32	-0.82
7PAJFL		90.00	-2.97	-0.41	80.00	-2.13	-0.33
7W3VCE		86.50	-6.47	-0.90	80.50	-1.63	-0.25
82TPLK		99.10	6.13	0.85	87.15	5.02	0.77
8ABXBG		99.00	6.03	0.84	82.00	-0.13	-0.02
8E6QQQ		90.50	-2.47	-0.34	77.50	-4.63	-0.71
938EMC	*	112.00	19.03	2.65	92.00	9.87	1.51
9TE4DG		88.50	-4.47	-0.62	81.00	-1.13	-0.17
AEG7UH	X	91.00	-1.97	-0.27	98.00	15.87	2.43
B7G7VG		85.00	-7.97	-1.11	76.00	-6.13	-0.94
BBDX4D		78.50	-14.47	-2.01	69.00	-13.13	-2.01
BFHYXF		98.50	5.53	0.77	87.00	4.87	0.75
C6ZG69	X	61.00	-31.97	-4.45	68.00	-14.13	-2.17
C9F6JE	X	67.00	-25.97	-3.61	69.50	-12.63	-1.94
DNBQJE		94.00	1.03	0.14	81.00	-1.13	-0.17
DTGL3E		96.30	3.33	0.46	78.60	-3.53	-0.54
EAKFAE		94.50	1.53	0.21	83.00	0.87	0.13
F2PX9B		91.00	-1.97	-0.27	83.00	0.87	0.13
F6P4T9		100.50	7.53	1.05	90.00	7.87	1.21
FDK2KH		83.00	-9.97	-1.39	76.50	-5.63	-0.86
FKZML9		95.00	2.03	0.28	79.00	-3.13	-0.48



Analysis 902  
Total Sulfur Dioxide

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FWEKQC		83.50	-9.47	-1.32	77.00	-5.13	-0.79
H232Y9		91.50	-1.47	-0.20	78.50	-3.63	-0.56
HDTXZ7		91.00	-1.97	-0.27	84.00	1.87	0.29
HGXLHG		91.00	-1.97	-0.27	90.50	8.37	1.28
HM2AD4		80.30	-12.67	-1.76	71.90	-10.23	-1.57
HN9PKA		83.00	-9.97	-1.39	77.50	-4.63	-0.71
HP9N4H		96.50	3.53	0.49	83.50	1.37	0.21
JLZW72		99.00	6.03	0.84	79.00	-3.13	-0.48
JNTTRA		96.25	3.28	0.46	86.35	4.22	0.65
JRR4NA	X	125.50	32.53	4.53	107.50	25.37	3.89
JYRL68		100.50	7.53	1.05	87.50	5.37	0.82
JZ3FPE		99.50	6.53	0.91	89.00	6.87	1.05
K4FKW8		97.50	4.53	0.63	95.00	12.87	1.97
KHWKM7		94.00	1.03	0.14	91.00	8.87	1.36
KUBDG8		96.00	3.03	0.42	81.50	-0.63	-0.10
L27ZG7		102.50	9.53	1.33	92.50	10.37	1.59
L7M3V4	X	73.00	-19.97	-2.78	60.00	-22.13	-3.39
LD24UD		82.00	-10.97	-1.53	72.00	-10.13	-1.55
LMBDH7		89.00	-3.97	-0.55	83.00	0.87	0.13
LUTNQZ		81.60	-11.37	-1.58	80.00	-2.13	-0.33
LWWMZ8		97.00	4.03	0.56	96.00	13.87	2.13
M4E8N6		100.00	7.03	0.98	94.00	11.87	1.82
M7GDY6		95.00	2.03	0.28	84.00	1.87	0.29
M8FBHD		91.00	-1.97	-0.27	71.00	-11.13	-1.71
MHAUN7		101.50	8.53	1.19	79.50	-2.63	-0.40
MM24Y4		85.25	-7.72	-1.07	79.30	-2.83	-0.43
NCKUUB		100.60	7.63	1.06	80.20	-1.93	-0.30
NUKGKA	*	81.00	-11.97	-1.67	85.00	2.87	0.44
NVE8P4		104.50	11.53	1.60	91.00	8.87	1.36
QLGL8U		99.00	6.03	0.84	77.50	-4.63	-0.71
QQT7F2		97.00	4.03	0.56	81.00	-1.13	-0.17
QQU36Y		97.00	4.03	0.56	85.00	2.87	0.44
QWY3Z2		82.70	-10.27	-1.43	78.35	-3.78	-0.58
RAJZKV		89.00	-3.97	-0.55	83.00	0.87	0.13
REAE6W		90.00	-2.97	-0.41	76.00	-6.13	-0.94

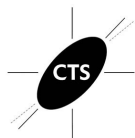


Analysis 902  
Total Sulfur Dioxide

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RECWB9		96.50	3.53	0.49	80.00	-2.13	-0.33
RPW9KZ		96.00	3.03	0.42	93.00	10.87	1.67
TC2JYY		94.50	1.53	0.21	87.00	4.87	0.75
TU7QDZ		81.20	-11.78	-1.64	75.15	-6.99	-1.07
TVD9CW		93.00	0.03	0.00	81.00	-1.13	-0.17
TVJFM6		96.00	3.03	0.42	90.00	7.87	1.21
U8LBYY		101.50	8.53	1.19	90.50	8.37	1.28
UDCGAV		98.00	5.03	0.70	83.00	0.87	0.13
UU3JU6		86.67	-6.30	-0.88	78.11	-4.02	-0.62
UX2VQ6		101.00	8.03	1.12	83.00	0.87	0.13
V2TTAT		93.00	0.03	0.00	77.50	-4.63	-0.71
V2VBF4		97.60	4.63	0.64	78.75	-3.38	-0.52
W9VZNV		92.50	-0.47	-0.07	81.00	-1.13	-0.17
WPK6ZV		108.25	15.28	2.13	87.90	5.77	0.88
X7NY8V		87.00	-5.97	-0.83	71.00	-11.13	-1.71
X8ULGT		96.00	3.03	0.42	84.00	1.87	0.29
XCQ42Z		93.00	0.03	0.00	81.50	-0.63	-0.10
Y3G28M		100.50	7.53	1.05	93.50	11.37	1.74
Z4NXWN		98.00	5.03	0.70	92.50	10.37	1.59
ZC3J6R		98.00	5.03	0.70	84.50	2.37	0.36
ZHPE3P		99.00	6.03	0.84	90.50	8.37	1.28
ZMYRKN	X	118.00	25.03	3.48	103.50	21.37	3.28
ZVAU7P		81.00	-11.97	-1.67	72.00	-10.13	-1.55
ZVDCCZ		89.50	-3.47	-0.48	78.50	-3.63	-0.56
ZZA62P		90.50	-2.47	-0.34	89.00	6.87	1.05

Grand Means		Summary Statistics	
	92.973 mg/L		82.134 mg/L
Std Dev Btwn Labs			6.520 mg/L
	7.188 mg/L	Statistics based on 88 of 95 reporting participants	

Wines tested: SA29: Red Moscato; SA30: Sweet Red



Analysis 902  
Total Sulfur Dioxide

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

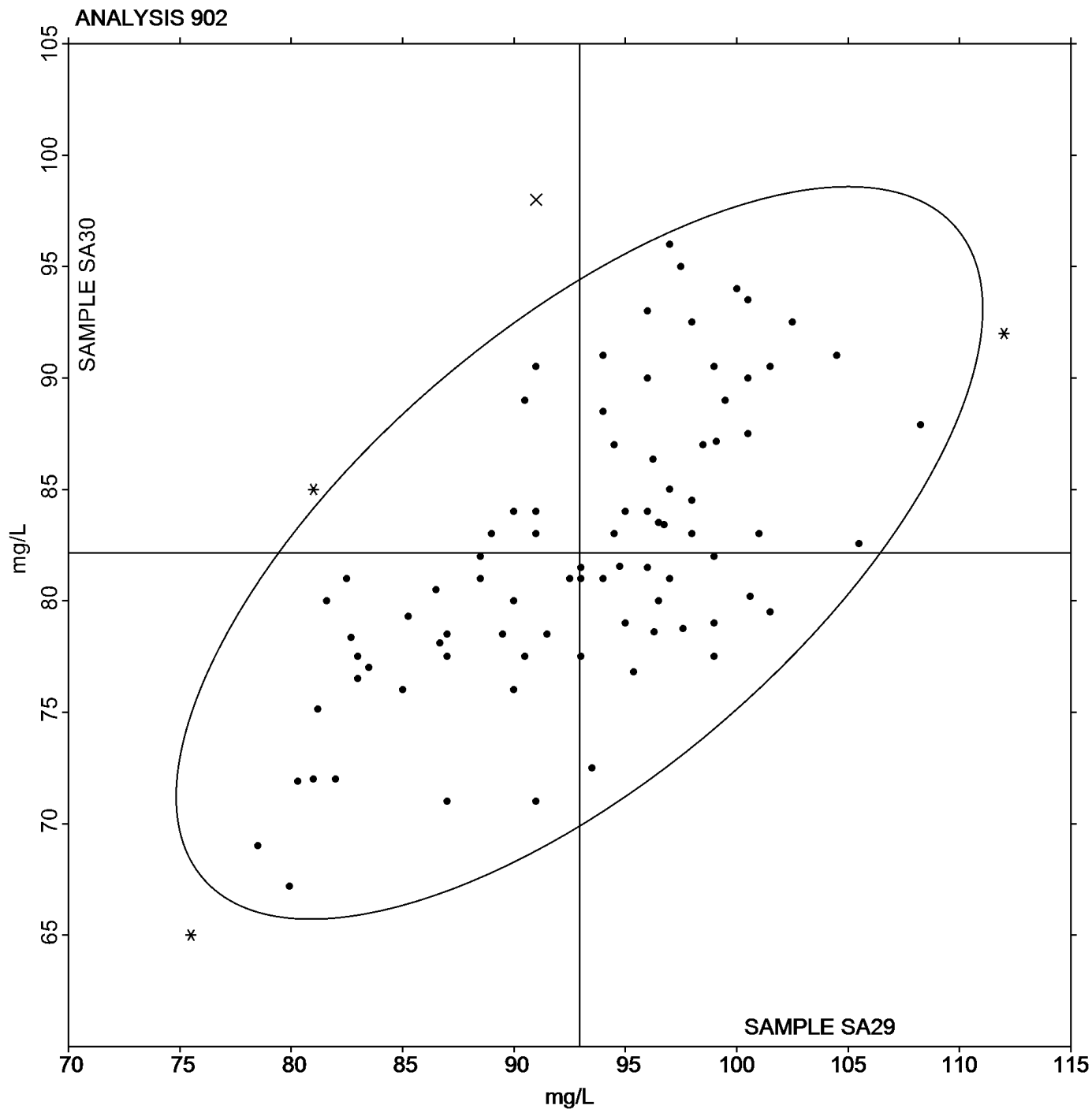
- L7M3V4 (X) - Data for both samples are low.
- AEG7UH (X) - Inconsistent in testing between samples.
- C9F6JE (X) - Data for sample SA29 are low.
- ZMYRKN (X) - Data for both samples are high.
- JRR4NA (X) - Data for both samples are high.
- 78BBHM (X) - Data for both samples are low.
- C6ZG69 (X) - Data for sample SA29 are low.

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

Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	90.250	5.303	-2.72	84.500	5.657	2.37	2/2
Ripper Method	91.847	7.079	-1.13	84.191	6.595	2.06	33/37
Aeration Oxidation (AO) Method	89.429	6.242	-3.54	77.779	4.996	-4.35	16/18
Segmented Flow Analyzer	94.575	3.836	1.60	80.200	6.036	-1.93	8/8
Enzymatic Method	96.850	7.842	3.88	82.625	4.964	0.49	6/6
Colormetric Analyzer	99.821	4.483	6.85	84.263	4.692	2.13	12/12
FTIR	96.375	6.369	3.40	85.500	6.621	3.37	4/5
Flow Injection Analysis	88.324	8.130	-4.65	77.928	8.561	-4.21	7/7



Analysis 902  
Total Sulfur Dioxide





# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

## Analysis 903 Free Sulfur Dioxide

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2DNPYM		28.50	-0.59	-0.17	22.95	-1.69	-0.66
2FV9WJ	X	20.55	-8.54	-2.51	23.50	-1.14	-0.44
2JWCQQ		31.20	2.11	0.62	25.45	0.81	0.31
2MVM MQ		29.05	-0.04	-0.01	24.40	-0.24	-0.09
2Y8UJQ		27.50	-1.59	-0.47	24.00	-0.64	-0.25
37K7BH		24.00	-5.09	-1.49	19.50	-5.14	-2.00
3MUXDM		30.00	0.91	0.27	24.00	-0.64	-0.25
3R8T3X		30.00	0.91	0.27	25.50	0.86	0.33
4JBA2U		29.50	0.41	0.12	25.50	0.86	0.33
4RZ7XN		28.50	-0.59	-0.17	24.00	-0.64	-0.25
4WFDLN		30.00	0.91	0.27	25.00	0.36	0.14
4ZGGFV		30.00	0.91	0.27	26.00	1.36	0.53
6WAJFM		23.84	-5.25	-1.54	20.02	-4.63	-1.80
78BBHM	X	20.00	-9.09	-2.67	16.00	-8.64	-3.36
7NYGUM		25.91	-3.18	-0.93	21.18	-3.46	-1.35
7PAJFL		34.50	5.41	1.59	28.00	3.36	1.31
7W3VCE	X	15.50	-13.59	-3.99	12.00	-12.64	-4.92
82TPLK		31.00	1.91	0.56	26.50	1.86	0.72
8ABXBG		29.00	-0.09	-0.03	26.00	1.36	0.53
8E6QQQ		27.50	-1.59	-0.47	23.50	-1.14	-0.44
8VQJ8H		24.00	-5.09	-1.49	22.50	-2.14	-0.83
938EMC		26.50	-2.59	-0.76	24.50	-0.14	-0.06
9TE4DG		28.00	-1.09	-0.32	23.00	-1.64	-0.64
AEG7UH		28.50	-0.59	-0.17	24.00	-0.64	-0.25
B7G7VG		30.50	1.41	0.41	25.00	0.36	0.14
BBDX4D		22.50	-6.59	-1.93	20.00	-4.64	-1.81
BFHYXF	*	36.50	7.41	2.18	27.50	2.86	1.11
C6ZG69		22.50	-6.59	-1.93	18.50	-6.14	-2.39
C9F6JE		28.50	-0.59	-0.17	26.50	1.86	0.72
DNBQJE		27.00	-2.09	-0.61	22.50	-2.14	-0.83
DTGL3E		35.50	6.41	1.88	30.40	5.76	2.24
EAKFAE		25.00	-4.09	-1.20	24.00	-0.64	-0.25
F2PX9B		36.00	6.91	2.03	28.00	3.36	1.31
F6P4T9		25.00	-4.09	-1.20	21.50	-3.14	-1.22
FDK2KH	X	27.50	-1.59	-0.47	18.50	-6.14	-2.39



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

Analysis 903  
Free Sulfur Dioxide

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FKZML9		30.00	0.91	0.27	27.00	2.36	0.92
FWEKQC		28.00	-1.09	-0.32	22.50	-2.14	-0.83
H232Y9		30.00	0.91	0.27	25.00	0.36	0.14
HDTXZ7		31.00	1.91	0.56	27.00	2.36	0.92
HGXLHG		29.00	-0.09	-0.03	28.00	3.36	1.31
HM2AD4		28.90	-0.19	-0.05	23.30	-1.34	-0.52
HN9PKA		27.00	-2.09	-0.61	23.00	-1.64	-0.64
HP9N4H		35.50	6.41	1.88	30.00	5.36	2.08
JLZW72		31.00	1.91	0.56	26.00	1.36	0.53
JNTRRA		29.40	0.31	0.09	25.05	0.41	0.16
JRR4NA	X	51.50	22.41	6.58	41.00	16.36	6.36
JYRL68		34.50	5.41	1.59	26.00	1.36	0.53
JZ3FPE		28.05	-1.04	-0.30	25.85	1.21	0.47
K4FKW8		33.00	3.91	1.15	27.50	2.86	1.11
KHWKM7		34.00	4.91	1.44	26.00	1.36	0.53
KUBDG8		29.50	0.41	0.12	25.50	0.86	0.33
L27ZG7	*	37.50	8.41	2.47	31.50	6.86	2.67
L7M3V4		30.50	1.41	0.41	25.50	0.86	0.33
LD24UD		25.50	-3.59	-1.05	20.50	-4.14	-1.61
LMBDH7		27.20	-1.89	-0.55	22.40	-2.24	-0.87
LUTNQZ	X	41.60	12.51	3.67	29.45	4.81	1.87
LWWMZ8		26.00	-3.09	-0.91	20.50	-4.14	-1.61
M4E8N6		27.00	-2.09	-0.61	26.00	1.36	0.53
M7GDY6		28.50	-0.59	-0.17	25.00	0.36	0.14
M8FBHD	*	22.00	-7.09	-2.08	17.00	-7.64	-2.97
MHAUN7	X	37.50	8.41	2.47	33.50	8.86	3.45
MHUDVY		27.04	-2.05	-0.60	22.80	-1.84	-0.72
MM24Y4		29.95	0.86	0.25	25.55	0.91	0.35
MRVXV7		28.94	-0.15	-0.04	25.12	0.48	0.19
NCKUUB		27.70	-1.39	-0.41	22.05	-2.59	-1.01
NUKGKA		30.00	0.91	0.27	26.00	1.36	0.53
NVE8P4		29.50	0.41	0.12	26.50	1.86	0.72
QLGL8U		28.00	-1.09	-0.32	23.00	-1.64	-0.64
QQT7F2		32.50	3.41	1.00	26.50	1.86	0.72
QQU36Y		31.00	1.91	0.56	27.00	2.36	0.92



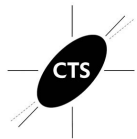


ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

Analysis 903  
Free Sulfur Dioxide

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
QWY3Z2		25.20	-3.89	-1.14	24.45	-0.19	-0.07
RAJZKV		30.00	0.91	0.27	24.00	-0.64	-0.25
REAE6W	*	26.00	-3.09	-0.91	27.00	2.36	0.92
RECWB9		32.50	3.41	1.00	26.50	1.86	0.72
RPW9KZ		33.00	3.91	1.15	26.00	1.36	0.53
TC2JYY		28.00	-1.09	-0.32	24.50	-0.14	-0.06
TU7QDZ		33.42	4.33	1.27	25.00	0.35	0.14
TVD9CW		26.00	-3.09	-0.91	21.00	-3.64	-1.42
TVJFM6		27.00	-2.09	-0.61	23.00	-1.64	-0.64
U8LBBY		33.00	3.91	1.15	26.00	1.36	0.53
UDCGAV		29.00	-0.09	-0.03	25.00	0.36	0.14
UU3JU6		33.17	4.08	1.20	29.96	5.32	2.07
UX2VQ6		23.50	-5.59	-1.64	21.00	-3.64	-1.42
V2TTAT		30.50	1.41	0.41	25.50	0.86	0.33
V2VBF4		29.45	0.36	0.11	23.60	-1.04	-0.41
W9VZNV		28.00	-1.09	-0.32	24.00	-0.64	-0.25
WPK6ZV		29.50	0.41	0.12	24.00	-0.64	-0.25
X7NY8V		30.00	0.91	0.27	26.00	1.36	0.53
X8ULGT		36.00	6.91	2.03	27.00	2.36	0.92
XCQ42Z		24.00	-5.09	-1.49	24.00	-0.64	-0.25
Y3G28M		27.50	-1.59	-0.47	24.50	-0.14	-0.06
Y7GC4M		25.00	-4.09	-1.20	25.00	0.36	0.14
Z4NXWN		27.50	-1.59	-0.47	25.00	0.36	0.14
ZC3J6R		34.00	4.91	1.44	28.50	3.86	1.50
ZHPE3P		33.00	3.91	1.15	26.00	1.36	0.53
ZMYRKN		28.00	-1.09	-0.32	23.00	-1.64	-0.64
ZVAU7P		25.50	-3.59	-1.05	23.00	-1.64	-0.64
ZVDCCZ		31.00	1.91	0.56	24.50	-0.14	-0.06
ZZA62P		23.50	-5.59	-1.64	20.00	-4.64	-1.81



Analysis 903  
Free Sulfur Dioxide

Grand Means		Summary Statistics	
	29.086 mg/L		24.642 mg/L
Std Dev Btwn Labs			2.571 mg/L
	3.407 mg/L		
<b>Statistics based on 92 of 99 reporting participants</b>			

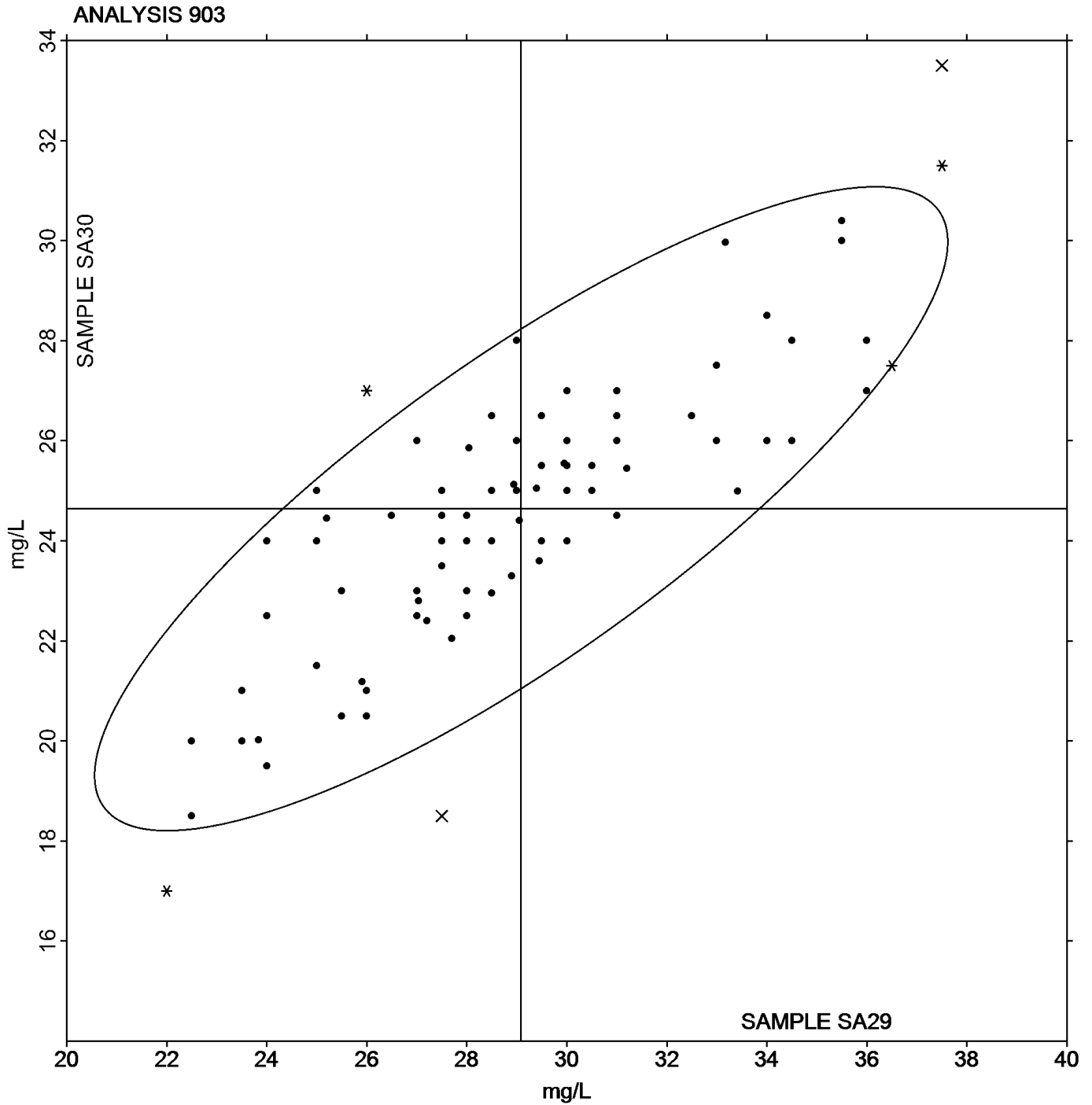
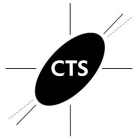
Wines tested: SA29: Red Moscato; SA30: Sweet Red

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

- FDK2KH (X) - Inconsistent in testing between samples.
- JRR4NA (X) - Data for both samples are high.
- MHAUN7 (X) - Data for sample SA30 are high.
- 78BBHM (X) - Data for sample SA30 are low.
- 7W3VCE (X) - Data for both samples are low.
- 2FV9WJ (X) - Inconsistent in testing between samples.
- LUTNQZ (X) - Data for sample SA29 are high. Inconsistent within the determinations of both samples.

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

Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used	30.000	0.000	0.91	26.000	0.000	1.36	1/2
Ripper Method	31.409	3.429	2.32	25.612	2.422	0.97	29/32
Aeration Oxidation (AO) Method	27.750	2.597	-1.34	24.292	2.422	-0.35	32/33
Segmented Flow Analyzer	29.969	3.893	0.88	25.106	3.683	0.46	8/8
Enzymatic Method	27.500	0.707	-1.59	23.250	1.061	-1.39	2/3
Colormetric Analyzer	28.244	1.847	-0.84	23.722	1.967	-0.92	9/9
Flow Injection Analysis	27.344	4.042	-1.74	23.207	3.291	-1.43	6/6
FTIR	26.810	2.570	-2.28	24.170	1.889	-0.47	5/6





ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

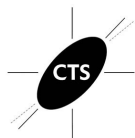
Analysis 904  
Titratable Acidity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2DNPYM		7.060	-0.109	-0.46	6.490	-0.006	-0.05
2FV9WJ		7.180	0.011	0.04	6.525	0.029	0.20
2JWCQQ		6.970	-0.199	-0.84	6.460	-0.036	-0.26
2MVM MQ		7.175	0.006	0.02	6.345	-0.151	-1.06
2Y8UJQ	X	8.250	1.081	4.54	6.900	0.404	2.84
37K7BH	X	8.750	1.581	6.64	7.050	0.554	3.89
3MUXDM		7.065	-0.104	-0.44	6.455	-0.041	-0.29
3R8T3X		7.190	0.021	0.09	6.500	0.004	0.02
4JBA2U		7.110	-0.059	-0.25	6.410	-0.086	-0.61
4RZ7XN		7.400	0.231	0.97	6.400	-0.096	-0.68
4WFDLN	X	8.100	0.931	3.91	6.665	0.169	1.18
6WAJFM	*	7.760	0.591	2.48	6.515	0.019	0.13
78BBHM	X	4.190	-2.979	-12.51	3.990	-2.506	-17.62
7NYGUM		7.320	0.151	0.63	6.390	-0.106	-0.75
7PAJFL		7.000	-0.169	-0.71	6.400	-0.096	-0.68
7W3VCE		7.310	0.141	0.59	6.650	0.154	1.08
82TPLK		7.050	-0.119	-0.50	6.550	0.054	0.38
8ABXBG		7.420	0.251	1.05	6.560	0.064	0.45
8E6QQQ		7.200	0.031	0.13	6.600	0.104	0.73
8VQJ8H		7.050	-0.119	-0.50	6.400	-0.096	-0.68
938EMC		6.900	-0.269	-1.13	6.400	-0.096	-0.68
9TE4DG		7.100	-0.069	-0.29	6.500	0.004	0.02
AEG7UH		7.260	0.091	0.38	6.660	0.164	1.15
B7G7VG		6.950	-0.219	-0.92	6.450	-0.046	-0.33
BBDX4D		7.250	0.081	0.34	6.350	-0.146	-1.03
BFHYXF		7.250	0.081	0.34	6.450	-0.046	-0.33
C6ZG69		6.950	-0.219	-0.92	6.220	-0.276	-1.94
C9F6JE	*	7.080	-0.089	-0.38	6.100	-0.396	-2.79
DNBQJE		7.250	0.081	0.34	6.650	0.154	1.08
DTGL3E	*	7.880	0.711	2.98	6.565	0.069	0.48
EAKFAE		6.900	-0.269	-1.13	6.400	-0.096	-0.68
F2PX9B		7.000	-0.169	-0.71	6.400	-0.096	-0.68
F6P4T9		7.300	0.131	0.55	6.500	0.004	0.02
FDK2KH		6.810	-0.359	-1.51	6.380	-0.116	-0.82
FKZML9		6.980	-0.189	-0.80	6.390	-0.106	-0.75



Analysis 904  
Titratable Acidity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FWEKQC		7.150	-0.019	-0.08	6.250	-0.246	-1.73
H232Y9	X	6.180	-0.989	-4.16	6.070	-0.426	-3.00
HDTXZ7		7.100	-0.069	-0.29	6.500	0.004	0.02
HGXLHG		6.610	-0.559	-2.35	6.250	-0.246	-1.73
HM2AD4		7.225	0.056	0.23	6.505	0.009	0.06
HN9PKA		7.050	-0.119	-0.50	6.400	-0.096	-0.68
HP9N4H		7.550	0.381	1.60	6.600	0.104	0.73
JLZW72		7.050	-0.119	-0.50	6.500	0.004	0.02
JNTTRA		7.497	0.328	1.38	6.469	-0.027	-0.19
JRR4NA	X	6.550	-0.619	-2.60	5.700	-0.796	-5.60
JZ3FPE		7.100	-0.069	-0.29	6.600	0.104	0.73
K4FKW8		7.230	0.061	0.25	6.425	-0.071	-0.50
KHWKM7		7.400	0.231	0.97	6.700	0.204	1.43
KUBDG8	X	8.450	1.281	5.38	6.850	0.354	2.48
L27ZG7	X	7.455	0.286	1.20	7.340	0.844	5.93
L7M3V4	X	6.770	-0.399	-1.68	6.950	0.454	3.19
LD24UD	*	6.600	-0.569	-2.39	6.100	-0.396	-2.79
LMBDH7		7.150	-0.019	-0.08	6.400	-0.096	-0.68
LUTNQZ		7.250	0.081	0.34	6.800	0.304	2.13
LWWMZ8		7.150	-0.019	-0.08	6.400	-0.096	-0.68
M4E8N6		6.950	-0.219	-0.92	6.500	0.004	0.02
M7GDY6	*	7.480	0.311	1.30	6.930	0.434	3.05
M8FBHD		6.600	-0.569	-2.39	6.300	-0.196	-1.38
MHAUN7		7.500	0.331	1.39	6.400	-0.096	-0.68
MHUDVY	X	10.200	3.031	12.73	9.450	2.954	20.76
MM24Y4		7.050	-0.119	-0.50	6.585	0.089	0.62
MRVXV7		7.700	0.531	2.23	6.580	0.084	0.59
NCKUUB		7.130	-0.039	-0.17	6.585	0.089	0.62
NUKGKA		7.500	0.331	1.39	6.500	0.004	0.02
NVE8P4		7.025	-0.144	-0.61	6.500	0.004	0.02
QLGL8U		7.050	-0.119	-0.50	6.600	0.104	0.73
QQT7F2		7.160	-0.009	-0.04	6.605	0.109	0.76
QQU36Y		7.240	0.071	0.30	6.640	0.144	1.01
QWY3Z2		7.230	0.061	0.25	6.540	0.044	0.31
RAJZKV		6.990	-0.179	-0.75	6.735	0.239	1.68



Analysis 904  
Titratable Acidity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
REAE6W		7.150	-0.019	-0.08	6.500	0.004	0.02
RECWB9		7.300	0.131	0.55	6.700	0.204	1.43
RPW9KZ		7.535	0.366	1.54	6.540	0.044	0.31
TC2JYY		7.100	-0.069	-0.29	6.600	0.104	0.73
TU7QDZ		7.488	0.319	1.34	6.646	0.150	1.05
TVD9CW		7.320	0.151	0.63	6.720	0.224	1.57
TVJFM6		7.000	-0.169	-0.71	6.500	0.004	0.02
U8LBBY	*	7.150	-0.019	-0.08	6.845	0.349	2.45
UDCGAV		6.960	-0.209	-0.88	6.425	-0.071	-0.50
UU3JU6		7.050	-0.119	-0.50	6.410	-0.086	-0.61
UX2VQ6	X	6.545	-0.624	-2.62	6.000	-0.496	-3.49
V2TTAT		6.935	-0.234	-0.98	6.405	-0.091	-0.64
V2VBF4		7.150	-0.019	-0.08	6.400	-0.096	-0.68
W9VZNV	X	7.950	0.781	3.28	6.800	0.304	2.13
WPK6ZV	X	8.905	1.736	7.29	8.025	1.529	10.74
X7NY8V		6.960	-0.209	-0.88	6.455	-0.041	-0.29
X8ULGT		7.200	0.031	0.13	6.600	0.104	0.73
XCQ42Z		7.050	-0.119	-0.50	6.600	0.104	0.73
Y3G28M		7.350	0.181	0.76	6.650	0.154	1.08
Y7GC4M		7.370	0.201	0.84	6.520	0.024	0.17
Z4NXWN		7.045	-0.124	-0.52	6.475	-0.021	-0.15
ZC3J6R	*	7.690	0.521	2.19	6.380	-0.116	-0.82
ZHPE3P		6.935	-0.234	-0.98	6.395	-0.101	-0.71
ZMYRKN		7.025	-0.144	-0.61	6.445	-0.051	-0.36
ZVAU7P		7.425	0.256	1.07	6.440	-0.056	-0.40
ZVDCCZ		6.985	-0.184	-0.77	6.475	-0.021	-0.15
ZZA62P		7.220	0.051	0.21	6.615	0.119	0.83

Grand Means		Summary Statistics	
	7.1694 g/L as tartaric acid		6.4965 g/L as tartaric acid
Stnd Dev Btwn Labs			
	0.2381 g/L as tartaric acid		0.1423 g/L as tartaric acid
<b>Statistics based on 84 of 97 reporting participants</b>			

Wines tested: SA29: Red Moscato; SA30: Sweet Red



Analysis 904  
Titratable Acidity

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

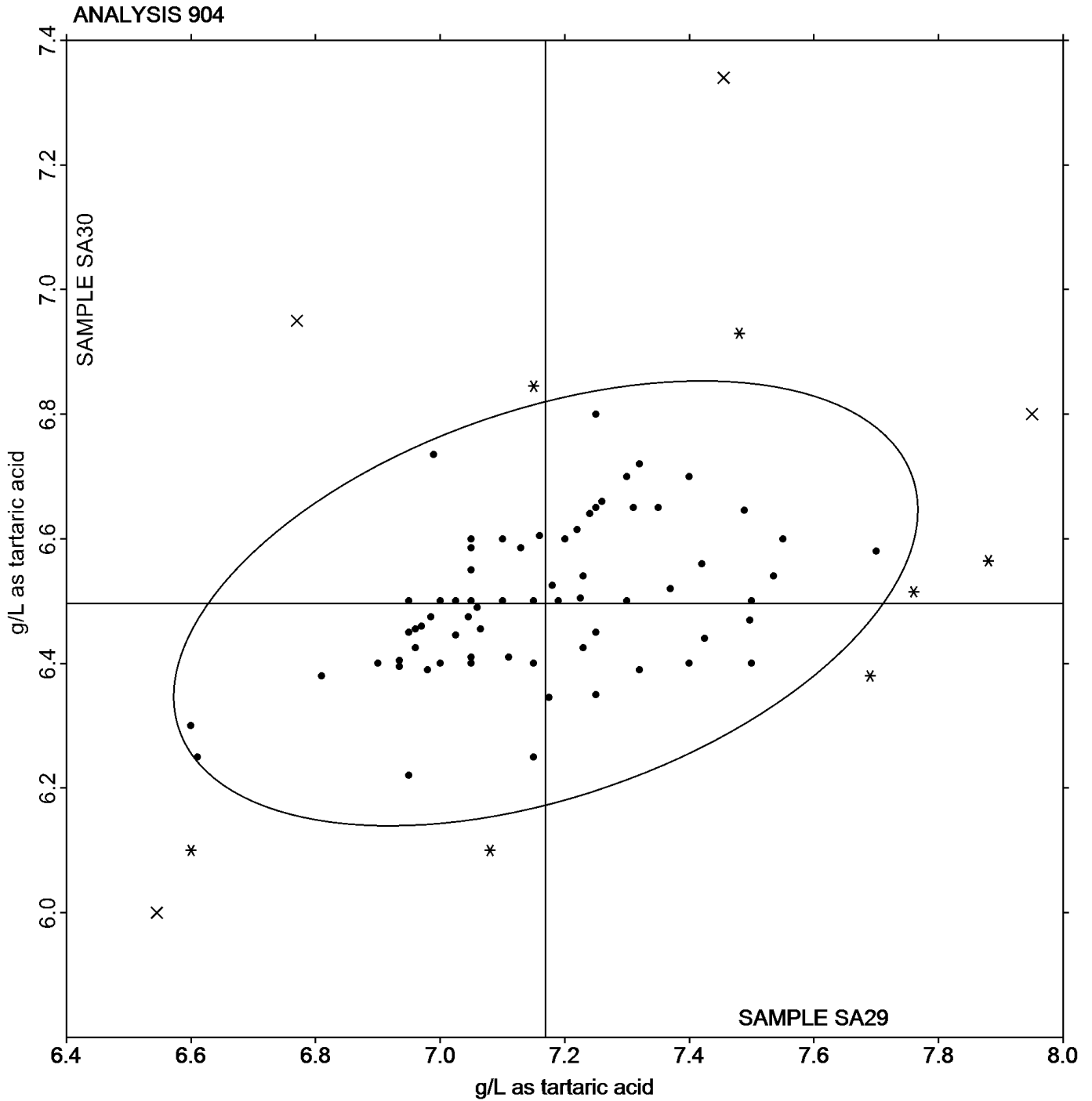
- L7M3V4 (X) - Data for sample SA30 are high.
- KUBDG8 (X) - Data for sample SA29 are high.
- WPK6ZV (X) - Data for both samples are high.
- H232Y9 (X) - Data for both samples are low.
- 4WFDLN (X) - Data for sample SA29 are high.
- UX2VQ6 (X) - Data for sample SA30 are low.
- L27ZG7 (X) - Data for sample SA30 are high.
- 2Y8UJQ (X) - Data for both samples are high.
- JRR4NA (X) - Data for sample SA30 are low. Inconsistent within the determinations of sample SA29.
- 78BBHM (X) - Data for both samples are low.
- W9VZNV (X) - Data for sample SA29 are high. Inconsistent within the determinations of sample SA29.
- MHUDVY (X) - Data for both samples are high.
- 37K7BH (X) - Data for both samples are high. Inconsistent within the determinations of both samples.

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

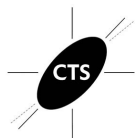
Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Autotitration	7.182	0.226	0.012	6.493	0.125	-0.003	55/62
Manual Titration	7.199	0.263	0.030	6.508	0.181	0.011	22/27
FTIR	6.948	0.183	-0.222	6.510	0.153	0.014	6/7
Segmented Flow Analyzer	7.175	0.000	0.006	6.345	0.000	-0.151	1/1



Analysis 904  
Titratable Acidity





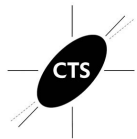


# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

## Analysis 905 Volatile Acidity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2DNPYM		0.2670	-0.0315	-0.79	0.2910	-0.0360	-0.90
2FV9WJ		0.2735	-0.0250	-0.63	0.3135	-0.0135	-0.34
2JWCQQ		0.2850	-0.0135	-0.34	0.2700	-0.0570	-1.43
2MVM MQ		0.3300	0.0315	0.79	0.3700	0.0430	1.08
2Y8UJQ		0.2750	-0.0235	-0.59	0.3150	-0.0120	-0.30
37K7BH		0.3750	0.0765	1.92	0.3550	0.0280	0.70
3MUXDM		0.2400	-0.0585	-1.47	0.2400	-0.0870	-2.18
3R8T3X	X	0.3700	0.0715	1.79	0.4650	0.1380	3.46
4JBA2U		0.3000	0.0015	0.04	0.3250	-0.0020	-0.05
4RZ7XN	X	0.4400	0.1415	3.55	0.4550	0.1280	3.21
4WFDLN		0.3150	0.0165	0.41	0.2900	-0.0370	-0.93
4ZGGFV		0.2300	-0.0685	-1.72	0.2700	-0.0570	-1.43
6WAJFM		0.3050	0.0065	0.16	0.3400	0.0130	0.33
78BBHM		0.3000	0.0015	0.04	0.3500	0.0230	0.58
7NYGUM		0.3000	0.0015	0.04	0.3300	0.0030	0.08
7PAJFL	*	0.3000	0.0015	0.04	0.4000	0.0730	1.83
7W3VCE		0.3400	0.0415	1.04	0.3750	0.0480	1.20
82TPLK		0.2800	-0.0185	-0.46	0.3500	0.0230	0.58
8ABXBG		0.2900	-0.0085	-0.21	0.3050	-0.0220	-0.55
8E6QQQ		0.3450	0.0465	1.17	0.3500	0.0230	0.58
8VQJ8H		0.2850	-0.0135	-0.34	0.3200	-0.0070	-0.18
938EMC		0.3350	0.0365	0.92	0.3600	0.0330	0.83
9TE4DG		0.3850	0.0865	2.17	0.4150	0.0880	2.21
AEG7UH		0.3275	0.0290	0.73	0.3620	0.0350	0.88
B7G7VG	*	0.3000	0.0015	0.04	0.4100	0.0830	2.08
BBDX4D		0.2800	-0.0185	-0.46	0.3100	-0.0170	-0.43
BFHYXF		0.2350	-0.0635	-1.59	0.2550	-0.0720	-1.80
C6ZG69		0.2550	-0.0435	-1.09	0.2800	-0.0470	-1.18
C9F6JE		0.3850	0.0865	2.17	0.3550	0.0280	0.70
DNBQJE		0.3050	0.0065	0.16	0.3300	0.0030	0.08
EAKFAE		0.2400	-0.0585	-1.47	0.3350	0.0080	0.20
F2PX9B		0.2800	-0.0185	-0.46	0.3200	-0.0070	-0.18
F6P4T9		0.2850	-0.0135	-0.34	0.3050	-0.0220	-0.55
FDK2KH		0.2850	-0.0135	-0.34	0.3150	-0.0120	-0.30
FKZML9		0.3150	0.0165	0.41	0.3450	0.0180	0.45

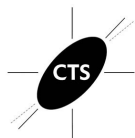


# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

## Analysis 905 Volatile Acidity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FWEKQC		0.3350	0.0365	0.92	0.3700	0.0430	1.08
H232Y9		0.3600	0.0615	1.54	0.3400	0.0130	0.33
HDTXZ7	*	0.3400	0.0415	1.04	0.4300	0.1030	2.58
HGXLHG		0.3600	0.0615	1.54	0.3550	0.0280	0.70
HM2AD4		0.2300	-0.0685	-1.72	0.2600	-0.0670	-1.68
HN9PKA		0.2950	-0.0035	-0.09	0.3100	-0.0170	-0.43
HP9N4H		0.3050	0.0065	0.16	0.3500	0.0230	0.58
JLZW72		0.3000	0.0015	0.04	0.3300	0.0030	0.08
JNTRA		0.2600	-0.0385	-0.97	0.3100	-0.0170	-0.43
JRR4NA		0.2450	-0.0535	-1.34	0.3160	-0.0110	-0.28
JYRL68	X	0.0600	-0.2385	-5.98	0.0550	-0.2720	-6.82
JZ3FPE	*	0.2550	-0.0435	-1.09	0.3650	0.0380	0.95
K4FKW8		0.3100	0.0115	0.29	0.3450	0.0180	0.45
KHWKM7		0.2600	-0.0385	-0.97	0.2900	-0.0370	-0.93
KUBDG8		0.3050	0.0065	0.16	0.3200	-0.0070	-0.18
L27ZG7	*	0.2900	-0.0085	-0.21	0.2450	-0.0820	-2.06
L7M3V4		0.2100	-0.0885	-2.22	0.2450	-0.0820	-2.06
LD24UD		0.2350	-0.0635	-1.59	0.2500	-0.0770	-1.93
LMBDH7		0.2750	-0.0235	-0.59	0.2950	-0.0320	-0.80
LWWMZ8		0.3100	0.0115	0.29	0.3450	0.0180	0.45
M4E8N6	X	0.4600	0.1615	4.05	0.4500	0.1230	3.08
M7GDY6		0.3450	0.0465	1.17	0.3800	0.0530	1.33
M8FBHD		0.3500	0.0515	1.29	0.4200	0.0930	2.33
MHAUN7		0.2640	-0.0345	-0.87	0.2940	-0.0330	-0.83
MM24Y4		0.2750	-0.0235	-0.59	0.2850	-0.0420	-1.05
MRVXV7		0.2600	-0.0385	-0.97	0.3100	-0.0170	-0.43
NCKUUB		0.2960	-0.0025	-0.06	0.3300	0.0030	0.08
NUKGKA		0.3600	0.0615	1.54	0.3400	0.0130	0.33
NVE8P4		0.2950	-0.0035	-0.09	0.3300	0.0030	0.08
QLGL8U		0.2900	-0.0085	-0.21	0.3400	0.0130	0.33
QQT7F2		0.2750	-0.0235	-0.59	0.2950	-0.0320	-0.80
QQU36Y		0.3300	0.0315	0.79	0.3550	0.0280	0.70
QWY3Z2	*	0.4050	0.1065	2.67	0.3850	0.0580	1.45
RAJZKV		0.3150	0.0165	0.41	0.3050	-0.0220	-0.55
REAE6W		0.3000	0.0015	0.04	0.3100	-0.0170	-0.43



Analysis 905  
Volatile Acidity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RECWB9		0.2950	-0.0035	-0.09	0.3200	-0.0070	-0.18
RPW9KZ		0.3000	0.0015	0.04	0.3200	-0.0070	-0.18
TC2JYY		0.3500	0.0515	1.29	0.3050	-0.0220	-0.55
TU7QDZ	X	0.2400	-0.0585	-1.47	0.4050	0.0780	1.95
TVD9CW		0.2500	-0.0485	-1.22	0.2900	-0.0370	-0.93
TVJFM6		0.2800	-0.0185	-0.46	0.3300	0.0030	0.08
U8LBBY		0.2600	-0.0385	-0.97	0.2800	-0.0470	-1.18
UDCGAV		0.2950	-0.0035	-0.09	0.3400	0.0130	0.33
UU3JU6		0.3240	0.0255	0.64	0.3600	0.0330	0.83
UX2VQ6		0.2900	-0.0085	-0.21	0.3400	0.0130	0.33
V2TTAT		0.2900	-0.0085	-0.21	0.3250	-0.0020	-0.05
V2VBF4		0.2650	-0.0335	-0.84	0.3050	-0.0220	-0.55
W9VZNV		0.3200	0.0215	0.54	0.3500	0.0230	0.58
WPK6ZV		0.3335	0.0350	0.88	0.3290	0.0020	0.05
X7NY8V		0.2500	-0.0485	-1.22	0.3400	0.0130	0.33
X8ULGT		0.2500	-0.0485	-1.22	0.2800	-0.0470	-1.18
XCQ42Z	*	0.4200	0.1215	3.05	0.4200	0.0930	2.33
Y3G28M		0.2800	-0.0185	-0.46	0.2950	-0.0320	-0.80
Y7GC4M		0.3050	0.0065	0.16	0.3200	-0.0070	-0.18
Z4NXWN		0.3000	0.0015	0.04	0.3700	0.0430	1.08
ZC3J6R	X	0.4200	0.1215	3.05	0.3600	0.0330	0.83
ZHPE3P		0.3050	0.0065	0.16	0.3150	-0.0120	-0.30
ZMYRKN		0.3100	0.0115	0.29	0.3400	0.0130	0.33
ZVAU7P		0.3000	0.0015	0.04	0.3000	-0.0270	-0.68
ZVDCCZ		0.3050	0.0065	0.16	0.3250	-0.0020	-0.05
ZZA62P		0.3000	0.0015	0.04	0.3250	-0.0020	-0.05

Grand Means		Summary Statistics	
	0.29851 g/L as acetic acid		0.32701 g/L as acetic acid
Std Dev Btwn Labs			0.03990 g/L as acetic acid
	0.03987 g/L as acetic acid	Statistics based on 90 of 96 reporting participants	

Wines tested: SA29: Red Moscato; SA30: Sweet Red



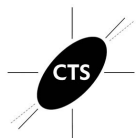
Analysis 905  
Volatile Acidity

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

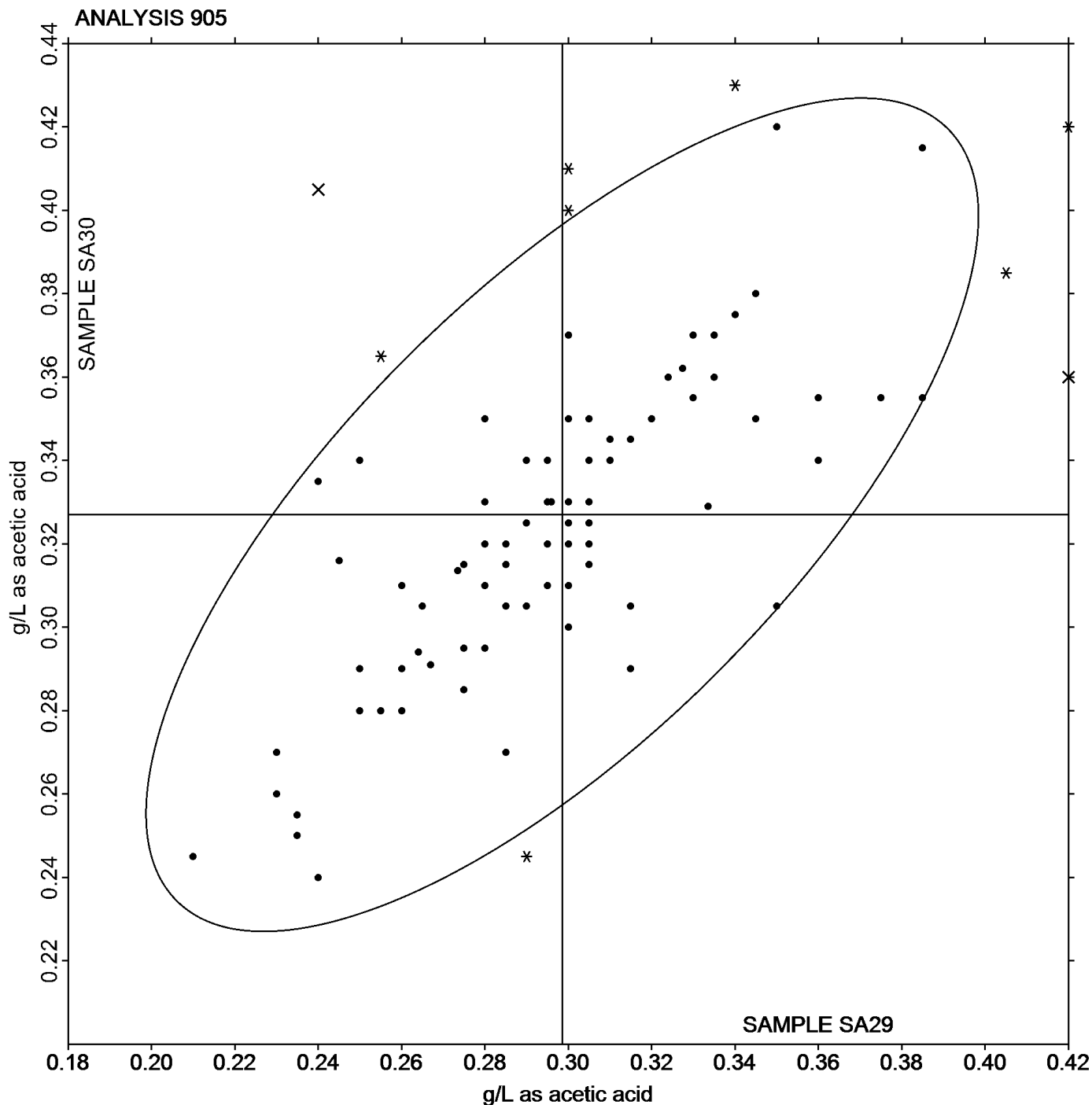
- M4E8N6 (X) - Data for both samples are high.
- ZC3J6R (X) - Data for sample SA29 are high.
- 4RZ7XN (X) - Data for both samples are high.
- JYRL68 (X) - Data for both samples are low.
- 3R8T3X (X) - Data for sample SA30 are high.
- TU7QDZ (X) - Inconsistent in testing between samples.

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

Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method	0.313	0.053	0.0140	0.295	0.014	-0.0320	2/2
Cash Still method	0.351	0.041	0.0520	0.362	0.031	0.0351	10/14
Enzymatic method	0.293	0.032	-0.0053	0.321	0.038	-0.0065	61/63
HPLC	0.265	0.049	-0.0335	0.293	0.046	-0.0345	2/2
GC	0.250	0.000	-0.0485	0.340	0.000	0.0130	1/1
Colorimetric Analysis	0.285	0.000	-0.0135	0.305	0.000	-0.0220	1/1
Seg. Flow / Colorimetric Analyzer	0.310	0.018	0.0115	0.347	0.025	0.0197	3/3
FTIR	0.286	0.049	-0.0130	0.340	0.046	0.0126	10/10



Analysis 905  
Volatile Acidity





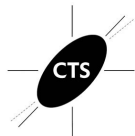
Analysis 906  
Specific Gravity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2DNPYM		1.020	0.000	0.18	1.017	0.000	0.17
2FV9WJ		1.020	0.000	0.08	1.017	0.000	0.33
2JWCQQ		1.020	0.000	0.43	1.017	0.001	0.54
2MVM MQ		1.020	0.000	0.20	1.017	0.000	0.13
2Y8UJQ		1.019	-0.001	-1.01	1.016	-0.001	-1.10
37K7BH		1.020	0.000	0.18	1.017	0.000	0.06
3MUXDM		1.019	0.000	-0.21	1.016	0.000	-0.09
4JBA2U		1.020	0.000	0.11	1.017	0.000	0.16
4RZ7XN		1.020	0.000	0.15	1.017	0.000	0.13
4WFDLN	X	1.016	-0.003	-3.23	1.013	-0.003	-3.64
4ZGGFV		1.020	0.000	0.21	1.017	0.000	0.15
6WAJFM		1.018	-0.002	-1.55	1.015	-0.002	-1.66
78BBHM		1.018	-0.002	-1.49	1.015	-0.001	-1.50
7PAJFL		1.020	0.000	0.19	1.017	0.000	0.23
7W3VCE		1.017	-0.002	-2.09	1.015	-0.002	-1.89
82TPLK	*	1.022	0.003	2.76	1.019	0.003	2.77
8ABXBG		1.020	0.000	0.18	1.017	0.000	0.17
8E6QQQ		1.017	-0.002	-2.09	1.015	-0.002	-1.95
938EMC	X	1.021	0.001	1.27	1.016	-0.001	-0.73
9TE4DG		1.020	0.000	0.28	1.017	0.000	0.33
AEG7UH		1.020	0.000	0.14	1.017	0.000	0.04
B7G7VG		1.020	0.000	0.20	1.017	0.000	0.19
BBDX4D		1.020	0.000	0.23	1.017	0.000	0.14
BFHYXF	X	1.018	-0.002	-1.67	1.017	0.000	0.23
C6ZG69		1.019	0.000	-0.36	1.016	-0.001	-0.62
C9F6JE		1.018	-0.001	-1.10	1.016	0.000	-0.31
DNBQJE		1.020	0.000	0.08	1.017	0.000	0.17
DTGL3E		1.022	0.002	2.27	1.019	0.002	2.40
F2PX9B		1.020	0.001	0.54	1.017	0.000	0.17
F6P4T9	X	1.036	0.017	16.70	1.034	0.017	18.37
FKZML9		1.018	-0.002	-1.75	1.015	-0.001	-1.58
FWEKQC		1.020	0.001	0.88	1.017	0.001	0.92
H232Y9		1.019	-0.001	-0.51	1.016	-0.001	-0.57
HDTXZ7		1.020	0.000	0.13	1.017	0.000	0.15
HM2AD4		1.021	0.001	1.32	1.018	0.001	1.23



Analysis 906  
Specific Gravity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
HN9PKA		1.020	0.000	0.18	1.017	0.000	0.17
HP9N4H	X	1.015	-0.005	-4.91	1.017	0.000	0.22
JLZW72		1.019	-0.001	-0.51	1.016	-0.001	-0.57
JNTTRA		1.020	0.000	0.17	1.017	0.000	0.12
JRR4NA		1.018	-0.002	-1.74	1.015	-0.002	-1.70
JYRL68		1.017	-0.002	-2.09	1.015	-0.002	-1.84
JZ3FPE	X	1.014	-0.006	-5.48	1.017	0.000	0.13
K4FKW8		1.020	0.000	0.13	1.017	0.000	0.06
KHWKM7		1.020	0.000	0.33	1.017	0.000	0.16
L27ZG7		1.020	0.000	-0.02	1.017	0.000	0.06
L7M3V4	X	1.017	-0.003	-2.83	1.018	0.002	1.74
LD24UD	*	1.017	-0.003	-2.49	1.014	-0.003	-2.69
LUTNQZ	X	1.021	0.001	1.28	1.015	-0.002	-1.84
LWWMZ8		1.021	0.001	1.28	1.017	0.001	0.81
M4E8N6		1.021	0.001	1.27	1.018	0.001	1.07
M7GDY6		1.018	-0.002	-1.72	1.015	-0.001	-1.35
M8FBHD		1.020	0.000	0.12	1.017	0.000	0.19
MHAUN7		1.022	0.002	2.42	1.019	0.002	2.44
MHUDVY	X	1.029	0.009	8.90	1.026	0.009	10.03
MRVXV7		1.021	0.001	1.47	1.018	0.001	1.55
NCKUUB		1.020	0.000	0.23	1.017	0.000	0.22
NUKGKA		1.021	0.001	1.48	1.018	0.001	1.55
NVE8P4		1.020	0.000	-0.02	1.017	0.000	0.01
QLGL8U		1.020	0.000	0.18	1.018	0.001	1.02
QQT7F2		1.020	0.000	0.13	1.017	0.000	0.17
QQU36Y	X	1.023	0.003	2.95	1.020	0.004	4.09
QWY3Z2		1.019	0.000	-0.21	1.016	0.000	-0.15
RAJZKV		1.020	0.000	0.28	1.017	0.001	0.80
REAE6W		1.019	0.000	-0.21	1.016	0.000	-0.46
RECWB9		1.020	0.000	0.23	1.017	0.000	0.38
TC2JYY		1.020	0.000	0.18	1.017	0.000	0.17
TU7QDZ	X	1.015	-0.004	-4.07	1.016	0.000	-0.18
TVJFM6		1.019	0.000	-0.26	1.016	-0.001	-0.68
U8LBBY		1.019	0.000	-0.14	1.017	0.000	0.46
UDCGAV		1.020	0.000	0.08	1.017	0.000	0.17



Analysis 906  
Specific Gravity

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
UU3JU6		1.019	-0.001	-0.51	1.016	-0.001	-0.57
UX2VQ6		1.020	0.000	0.03	1.017	0.000	0.01
V2TTAT		1.020	0.000	0.12	1.017	0.000	0.11
V2VBF4		1.020	0.000	0.18	1.017	0.000	0.14
WPK6ZV		1.020	0.000	0.24	1.017	0.000	0.21
X7NY8V	X	1.057	0.037	36.93	1.017	0.000	0.22
X8ULGT		1.020	0.000	0.22	1.017	0.000	0.14
XCQ42Z		1.021	0.001	1.28	1.018	0.001	1.34
Y3G28M		1.020	0.000	0.48	1.017	0.000	-0.04
Y7GC4M		1.020	0.000	0.48	1.017	0.000	0.49
ZHPE3P		1.019	0.000	-0.36	1.016	0.000	-0.47
ZVAU7P	*	1.020	0.000	-0.02	1.016	-0.001	-1.10
ZVDCCZ		1.020	0.000	0.33	1.017	0.000	0.28
ZZA62P		1.018	-0.001	-1.40	1.015	-0.001	-1.52

Grand Means		Summary Statistics	
1.0195	sp gr 20/20 C	1.0165	sp gr 20/20 C
Std Dev Btwn Labs			
0.0010	sp gr 20/20 C	0.0009	sp gr 20/20 C
<b>Statistics based on 72 of 84 reporting participants</b>			

Wines tested: SA29: Red Moscato; SA30: Sweet Red



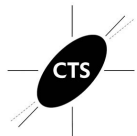


Analysis 906  
Specific Gravity

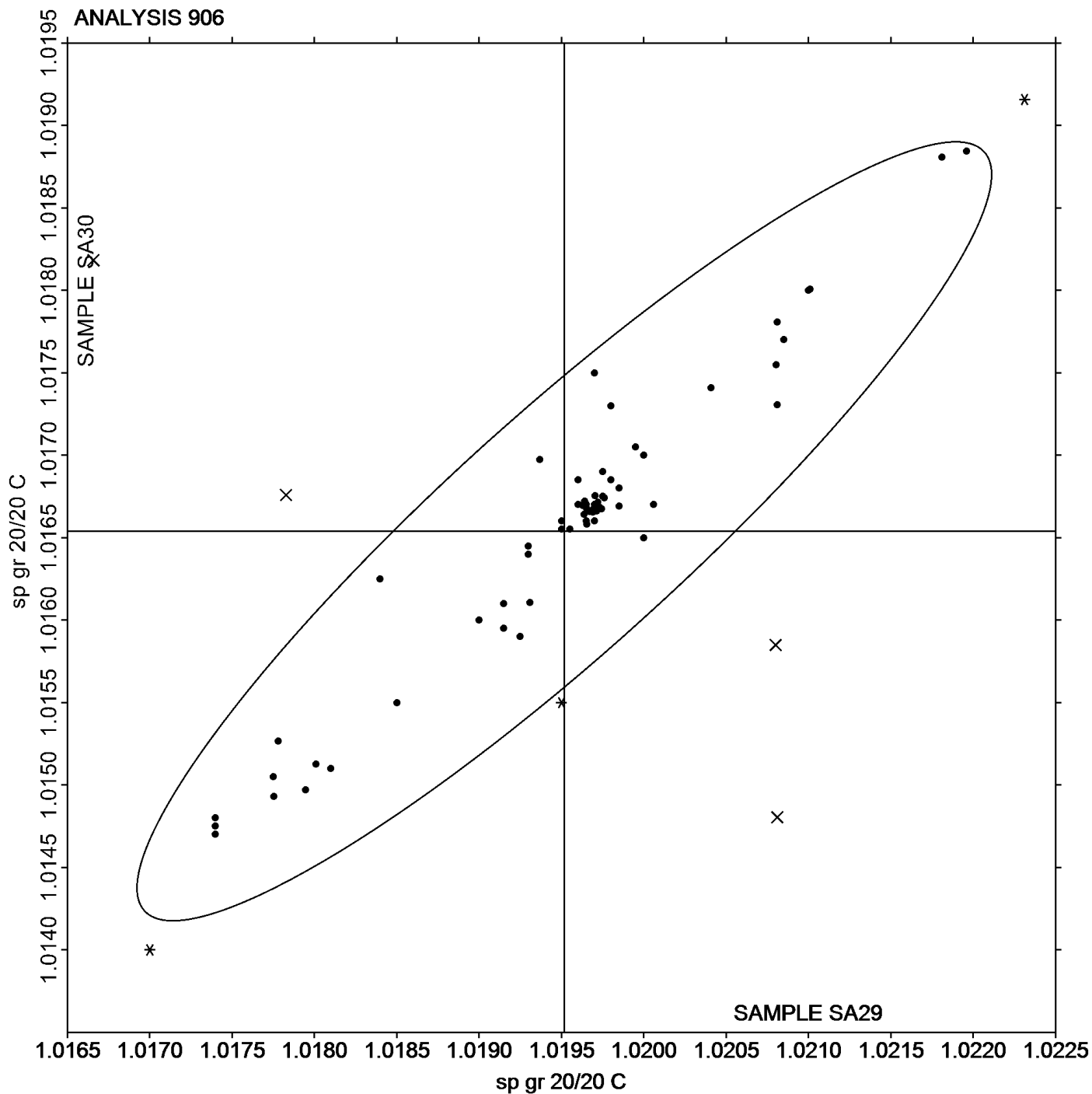
---

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

- F6P4T9 (X) - Data for both samples are high. Possible Systematic Error.
- L7M3V4 (X) - Data for sample SA29 are low. Inconsistent within the determinations of sample SA30.
- QQU36Y (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample SA29.
- X7NY8V (X) - Data for sample SA29 are high.
- 4WFDLN (X) - Data for both samples are low. Possible Systematic Error.
- HP9N4H (X) - Data for sample SA29 are low.
- JZ3FPE (X) - Data for sample SA29 are low.
- TU7QDZ (X) - Data for sample SA29 are low. Inconsistent within the determinations of sample SA29.
- BFHYXF (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA29.
- MHUDVY (X) - Data for both samples are high. Possible Systematic Error.
- 938EMC (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.
- LUTNQZ (X) - Inconsistent in testing between samples.



Analysis 906  
Specific Gravity





# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

## Analysis 907

pH

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
244LQN		3.225	0.006	0.21	3.350	-0.005	-0.20
2DNPYM		3.218	-0.001	-0.04	3.345	-0.011	-0.41
2FV9WJ		3.230	0.011	0.39	3.350	-0.005	-0.20
2JWCQQ		3.240	0.021	0.73	3.370	0.015	0.56
2Y8UJQ	X	3.270	0.051	1.77	3.430	0.075	2.86
37K7BH		3.240	0.021	0.73	3.390	0.035	1.33
3MUXDM		3.240	0.021	0.73	3.370	0.015	0.56
3R8T3X		3.195	-0.024	-0.82	3.335	-0.020	-0.78
4JBA2U	X	3.275	0.056	1.94	3.365	0.010	0.37
4RZ7XN		3.240	0.021	0.73	3.375	0.020	0.76
4WFDLN		3.190	-0.029	-0.99	3.350	-0.005	-0.20
4ZGGFV		3.215	-0.004	-0.13	3.345	-0.010	-0.39
6WAJFM		3.227	0.008	0.27	3.367	0.012	0.45
78BBHM		3.147	-0.072	-2.50	3.296	-0.059	-2.27
7NYGUM		3.256	0.037	1.27	3.383	0.027	1.04
7PAJFL		3.220	0.001	0.04	3.350	-0.005	-0.20
7W3VCE		3.225	0.006	0.21	3.370	0.015	0.56
82TPLK	X	3.265	0.046	1.60	3.440	0.085	3.25
8ABXBG		3.200	-0.019	-0.65	3.350	-0.005	-0.20
8E6QQQ		3.200	-0.019	-0.65	3.335	-0.020	-0.78
8VQJ8H		3.240	0.021	0.73	3.370	0.015	0.56
938EMC		3.215	-0.004	-0.13	3.345	-0.010	-0.39
9TE4DG		3.185	-0.034	-1.17	3.310	-0.045	-1.74
AEG7UH		3.200	-0.019	-0.65	3.330	-0.025	-0.97
B7G7VG		3.230	0.011	0.39	3.360	0.005	0.18
BBDX4D		3.230	0.011	0.39	3.370	0.015	0.56
BFHYXF		3.245	0.026	0.91	3.390	0.035	1.33
C6ZG69		3.220	0.001	0.04	3.360	0.005	0.18
C9F6JE		3.255	0.036	1.25	3.375	0.020	0.76
DNBQJE		3.240	0.021	0.73	3.375	0.020	0.76
DTGL3E		3.260	0.041	1.42	3.380	0.025	0.95
EAKFAE		3.200	-0.019	-0.65	3.340	-0.015	-0.59
F2PX9B		3.200	-0.019	-0.65	3.340	-0.015	-0.59
F6P4T9		3.175	-0.044	-1.51	3.320	-0.035	-1.35
FDK2KH	X	3.175	-0.044	-1.51	3.360	0.005	0.18



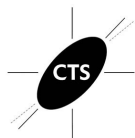
# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

## Analysis 907

pH

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
FKZML9	*	3.155	-0.064	-2.20	3.320	-0.035	-1.35
FWEKQC		3.235	0.016	0.56	3.370	0.015	0.56
H232Y9	X	3.370	0.151	5.22	3.460	0.105	4.02
HDTXZ7		3.225	0.006	0.21	3.360	0.005	0.18
HGXLHG		3.195	-0.024	-0.82	3.335	-0.020	-0.78
HM2AD4		3.170	-0.049	-1.68	3.320	-0.035	-1.35
HN9PKA		3.240	0.021	0.73	3.370	0.015	0.56
HP9N4H		3.230	0.011	0.39	3.360	0.005	0.18
JLZW72		3.225	0.006	0.21	3.365	0.010	0.37
JNTRRA		3.209	-0.010	-0.34	3.350	-0.005	-0.20
JRR4NA		3.230	0.011	0.39	3.375	0.020	0.76
JZ3FPE	X	3.290	0.071	2.46	3.440	0.085	3.25
K4FKW8		3.220	0.001	0.04	3.345	-0.010	-0.39
KHWKM7		3.220	0.001	0.04	3.360	0.005	0.18
KUBDG8		3.215	-0.004	-0.13	3.335	-0.020	-0.78
L27ZG7	X	3.250	0.031	1.08	3.315	-0.040	-1.55
L7M3V4		3.245	0.026	0.91	3.360	0.005	0.18
LD24UD		3.165	-0.054	-1.86	3.300	-0.055	-2.12
LMBDH7		3.260	0.041	1.42	3.380	0.025	0.95
LUTNQZ	X	3.110	-0.109	-3.76	3.290	-0.065	-2.50
LWWMZ8		3.230	0.011	0.39	3.360	0.005	0.18
M4E8N6		3.215	-0.004	-0.13	3.345	-0.010	-0.39
M7GDY6	X	3.220	0.001	0.04	3.390	0.035	1.33
M8FBHD		3.190	-0.029	-0.99	3.320	-0.035	-1.35
MHAUN7		3.170	-0.049	-1.68	3.315	-0.040	-1.55
MHUDVY		3.225	0.006	0.21	3.375	0.020	0.76
MM24Y4		3.200	-0.019	-0.65	3.360	0.005	0.18
MRVXV7	X	3.316	0.097	3.34	3.431	0.076	2.90
NCKUUB		3.225	0.006	0.20	3.355	-0.001	-0.03
NUKGKA		3.240	0.021	0.73	3.380	0.025	0.95
NVE8P4		3.215	-0.004	-0.13	3.345	-0.010	-0.39
QLGL8U		3.190	-0.029	-0.99	3.345	-0.010	-0.39
QQT7F2		3.195	-0.024	-0.82	3.335	-0.020	-0.78
QQU36Y	X	3.075	-0.144	-4.96	3.225	-0.130	-5.00
QWY3Z2	*	3.280	0.061	2.11	3.420	0.065	2.48



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

Analysis 907

pH

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RAJZKV		3.215	-0.004	-0.13	3.340	-0.015	-0.59
REAE6W		3.230	0.011	0.39	3.380	0.025	0.95
RECWB9		3.280	0.061	2.11	3.405	0.050	1.91
RPW9KZ		3.230	0.011	0.39	3.360	0.005	0.18
TC2JYY		3.160	-0.059	-2.03	3.310	-0.045	-1.74
TU7QDZ		3.185	-0.034	-1.17	3.325	-0.030	-1.16
TVD9CW		3.270	0.051	1.77	3.400	0.045	1.71
TVJFM6		3.240	0.021	0.73	3.380	0.025	0.95
U8LBBY		3.225	0.006	0.21	3.375	0.020	0.76
UDCGAV		3.230	0.011	0.39	3.360	0.005	0.18
UU3JU6		3.210	-0.009	-0.30	3.350	-0.005	-0.20
UX2VQ6	*	3.130	-0.089	-3.07	3.280	-0.075	-2.89
V2TTAT		3.240	0.021	0.73	3.375	0.020	0.76
V2VBF4		3.230	0.011	0.39	3.360	0.005	0.18
W9VZNV		3.210	-0.009	-0.30	3.340	-0.015	-0.59
WPK6ZV	*	3.260	0.041	1.42	3.410	0.055	2.10
X7NY8V		3.195	-0.024	-0.82	3.335	-0.020	-0.78
X8ULGT		3.230	0.011	0.39	3.360	0.005	0.18
XCQ42Z		3.220	0.001	0.04	3.355	0.000	-0.01
Y3G28M		3.195	-0.024	-0.82	3.325	-0.030	-1.16
Y7GC4M	X	3.115	-0.104	-3.58	3.230	-0.125	-4.80
Z4NXWN	X	3.200	-0.019	-0.65	3.380	0.025	0.95
ZC3J6R		3.260	0.041	1.42	3.405	0.050	1.91
ZHPE3P		3.230	0.011	0.39	3.360	0.005	0.18
ZMYRKN		3.220	0.001	0.04	3.360	0.005	0.18
ZVAU7P	X	3.160	-0.059	-2.03	3.375	0.020	0.76
ZVDCCZ	X	3.265	0.046	1.60	3.365	0.010	0.37
ZZA62P		3.250	0.031	1.08	3.385	0.030	1.14



Analysis 907  
pH

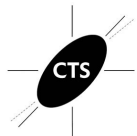
Grand Means		Summary Statistics	
	3.2188 pH		3.3553 pH
Std Dev Btwn Labs			
	0.0290 pH		0.0261 pH

**Statistics based on 83 of 98 reporting participants**

Wines tested: SA29: Red Moscato; SA30: Sweet Red

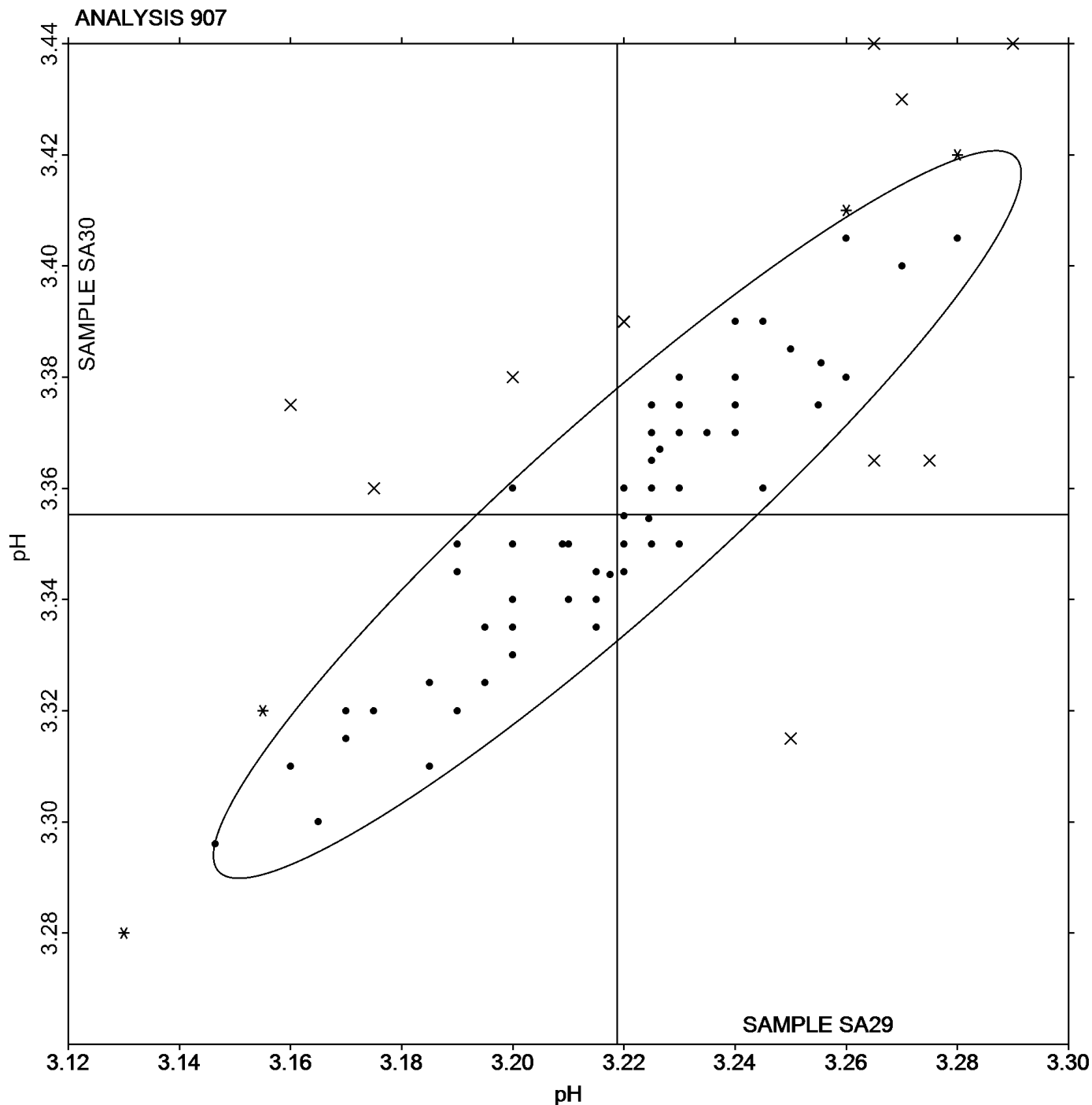
**Comments on Assigned Data Flags for Test #907**

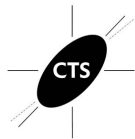
- Z4NXWN (X) - Inconsistent in testing between samples.
- QQU36Y (X) - Data for both samples are low. Possible Systematic Error.
- H232Y9 (X) - Data for both samples are high. Possible Systematic Error.
- ZVDCCZ (X) - Inconsistent in testing between samples.
- JZ3FPE (X) - Data for sample SA30 are high.
- 4JBA2U (X) - Inconsistent in testing between samples.
- FDK2KH (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA30.
- ZVAU7P (X) - Inconsistent in testing between samples.
- L27ZG7 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA30.
- MRVXV7 (X) - Data for both samples are high. Possible Systematic Error.
- 82TPLK (X) - Data for sample SA30 are high.
- 2Y8UJQ (X) - Data for sample SA30 are high. Inconsistent within the determinations of sample SA29.
- M7GDY6 (X) - Inconsistent in testing between samples.
- LUTNQZ (X) - Data for sample SA29 are low.
- Y7GC4M (X) - Data for both samples are low. Possible Systematic Error.



Analysis 907

pH





Analysis 908  
Residual Sugar

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2FV9WJ		55.58	-5.49	-0.81	51.50	-3.01	-0.60
2MVMMQ	*	39.79	-21.28	-3.13	39.53	-14.98	-2.98
3R8T3X		58.91	-2.17	-0.32	51.65	-2.86	-0.57
4JBA2U		65.10	4.02	0.59	59.32	4.81	0.96
4ZGGFV		65.00	3.93	0.58	58.00	3.49	0.69
78BBHM		61.20	0.13	0.02	54.50	-0.01	0.00
82TPLK		61.98	0.91	0.13	54.21	-0.30	-0.06
B7G7VG		65.60	4.53	0.67	58.10	3.59	0.71
FDK2KH		55.49	-5.58	-0.82	48.37	-6.14	-1.22
H232Y9		60.74	-0.33	-0.05	52.97	-1.54	-0.31
HGXLHG		56.96	-4.12	-0.61	51.83	-2.68	-0.53
HM2AD4		63.85	2.78	0.41	55.55	1.04	0.21
JRR4NA	X	11.07	-50.01	-7.36	11.12	-43.39	-8.62
KHWKM7		60.40	-0.67	-0.10	53.70	-0.81	-0.16
M7GDY6		71.00	9.93	1.46	62.00	7.49	1.49
M8FBHD		66.70	5.63	0.83	59.80	5.29	1.05
MM24Y4		60.50	-0.57	-0.08	55.50	0.99	0.20
MRVXV7		72.80	11.73	1.73	63.20	8.69	1.73
RECWB9		54.65	-6.42	-0.95	48.35	-6.16	-1.22
TC2JYY	*	68.00	6.93	1.02	52.00	-2.51	-0.50
UU3JU6		58.20	-2.87	-0.42	55.80	1.29	0.26
UX2VQ6		64.59	3.52	0.52	56.77	2.26	0.45
XCQ42Z	*	55.00	-6.07	-0.89	57.00	2.49	0.50
ZVAU7P		62.60	1.53	0.23	54.03	-0.48	-0.09

Grand Means		Summary Statistics	
	61.071 g/L		54.507 g/L
Std Dev Btwn Labs			
	6.790 g/L		5.032 g/L
Statistics based on 23 of 24 reporting participants			

Wines tested: SA29: Red Moscato; SA30: Sweet Red

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

JRR4NA (X) - Data for both samples are low.

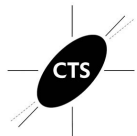




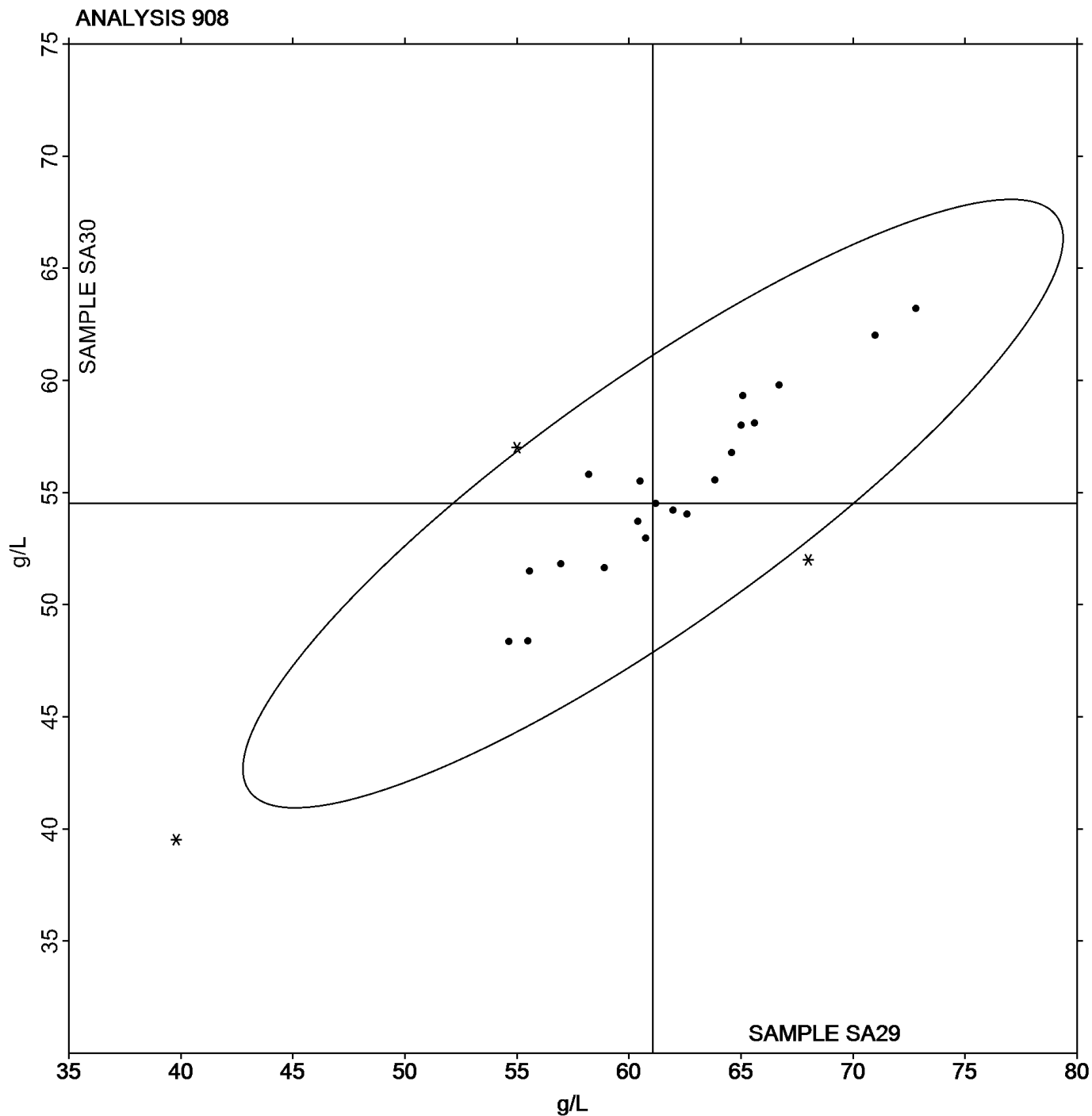
Analysis 908  
Residual Sugar

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

Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Cu Reduction Method	63.144	5.328	2.07	55.448	4.031	0.94	7/8
Segmented Flow	39.790	0.000	-21.28	39.525	0.000	-14.98	1/1
FTIR	61.821	4.227	0.75	55.872	2.720	1.36	9/9
Other _____	61.073	6.528	0.00	53.858	5.486	-0.65	6/6



Analysis 908  
Residual Sugar



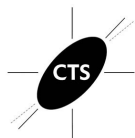


ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

Analysis 909  
L-Malic Acid

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2DNPYM		1.895	-0.061	-0.53	1.035	-0.050	-0.67
2FV9WJ		1.875	-0.080	-0.70	1.140	0.055	0.72
2JWCQQ		1.945	-0.011	-0.10	1.091	0.006	0.07
2Y8UJQ		2.005	0.050	0.43	1.140	0.055	0.72
3MUXDM	*	1.740	-0.215	-1.88	0.890	-0.195	-2.59
4JBA2U	X	1.150	-0.805	-7.03	0.815	-0.270	-3.58
4RZ7XN	*	1.825	-0.130	-1.14	0.905	-0.180	-2.39
4WFDLN		1.795	-0.160	-1.40	0.980	-0.105	-1.39
4ZGGFV		1.865	-0.090	-0.79	0.990	-0.095	-1.26
6WAJFM		2.062	0.106	0.93	1.165	0.079	1.05
78BBHM	X	1.870	-0.085	-0.75	0.800	-0.285	-3.78
7PAJFL		1.805	-0.151	-1.32	0.986	-0.099	-1.32
7W3VCE		2.075	0.120	1.04	1.135	0.050	0.66
82TPLK	*	2.227	0.272	2.37	1.149	0.064	0.84
8ABXBG		2.030	0.075	0.65	1.095	0.010	0.13
8E6QQQ		2.040	0.085	0.74	1.110	0.025	0.33
8VQJ8H		1.910	-0.045	-0.40	1.070	-0.015	-0.20
938EMC		1.825	-0.130	-1.14	1.055	-0.030	-0.40
9TE4DG		1.785	-0.170	-1.49	1.005	-0.080	-1.06
AEG7UH		1.982	0.027	0.23	1.006	-0.080	-1.06
B7G7VG		2.020	0.065	0.56	1.035	-0.050	-0.67
BBDX4D		2.049	0.094	0.82	1.141	0.056	0.74
C6ZG69		1.820	-0.135	-1.18	1.020	-0.065	-0.87
C9F6JE	X	1.825	-0.130	-1.14	0.810	-0.275	-3.64
DNBQJE		1.920	-0.035	-0.31	1.092	0.007	0.09
EAKFAE	X	2.430	0.475	4.14	0.980	-0.105	-1.39
F2PX9B		2.000	0.045	0.39	1.160	0.075	0.99
F6P4T9		1.896	-0.059	-0.52	1.048	-0.037	-0.49
FDK2KH		2.008	0.053	0.46	1.088	0.003	0.03
FWEKQC		2.110	0.155	1.35	1.215	0.130	1.71
HDTXZ7		1.807	-0.148	-1.30	1.005	-0.080	-1.06
HM2AD4		1.900	-0.055	-0.48	1.060	-0.025	-0.34
HN9PKA		2.020	0.065	0.56	1.105	0.020	0.26
HP9N4H		2.032	0.077	0.67	1.125	0.040	0.52
JLZW72		2.120	0.165	1.44	1.195	0.110	1.45



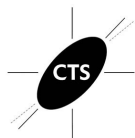
# ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

## Analysis 909

### L-Malic Acid

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
JNTTRA		1.985	0.030	0.26	1.095	0.010	0.13
JRR4NA	X	2.265	0.310	2.70	1.095	0.010	0.13
JYRL68	X	0.446	-1.509	-13.18	0.293	-0.793	-10.49
K4FKW8		2.001	0.045	0.39	1.119	0.033	0.44
KUBDG8		2.032	0.076	0.66	1.126	0.040	0.53
L27ZG7		2.007	0.051	0.45	1.107	0.021	0.28
L7M3V4	X	1.625	-0.330	-2.88	1.025	-0.060	-0.80
LD24UD		2.030	0.075	0.65	1.150	0.065	0.85
LMBDH7		1.875	-0.080	-0.70	1.020	-0.065	-0.87
LWWMZ8		2.085	0.130	1.13	1.180	0.095	1.25
M4E8N6		2.005	0.050	0.43	1.144	0.058	0.77
M7GDY6	X	1.520	-0.435	-3.80	0.945	-0.140	-1.86
M8FBHD	X	1.620	-0.335	-2.93	1.240	0.155	2.05
MRVXV7		1.980	0.025	0.21	1.130	0.045	0.59
NCKUUB		2.023	0.067	0.59	1.161	0.075	0.99
NUKGKA		1.986	0.031	0.27	1.110	0.025	0.33
NVE8P4		1.945	-0.011	-0.10	1.095	0.010	0.13
QLGL8U	*	1.625	-0.330	-2.88	0.955	-0.130	-1.73
QQT7F2		1.940	-0.015	-0.13	1.050	-0.035	-0.47
QQU36Y		1.865	-0.090	-0.79	0.995	-0.090	-1.20
QWY3Z2		1.780	-0.175	-1.53	1.010	-0.075	-1.00
RAJZKV		1.975	0.020	0.17	1.095	0.010	0.13
REAE6W		2.020	0.065	0.56	1.190	0.105	1.38
RECWB9		1.960	0.005	0.04	1.110	0.025	0.33
RPW9KZ		2.009	0.054	0.47	1.143	0.058	0.76
TC2JYY	X	2.030	0.075	0.65	2.040	0.955	12.63
TVD9CW	X	1.580	-0.375	-3.28	1.020	-0.065	-0.87
TVJFM6	X	1.620	-0.335	-2.93	1.100	0.015	0.19
U8LBBY		1.745	-0.210	-1.84	1.000	-0.085	-1.13
UDCGAV		1.920	-0.035	-0.31	0.965	-0.120	-1.59
UU3JU6	X	1.545	-0.411	-3.59	1.128	0.043	0.57
UX2VQ6		1.870	-0.085	-0.75	1.110	0.025	0.33
V2TTAT		2.195	0.240	2.09	1.205	0.120	1.58
V2VBF4		1.985	0.030	0.26	1.085	0.000	-0.01
W9VZNV		2.115	0.160	1.39	1.190	0.105	1.38



Analysis 909

L-Malic Acid

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
WPK6ZV		1.810	-0.145	-1.27	1.105	0.020	0.26
X7NY8V		2.040	0.085	0.74	1.045	-0.040	-0.53
X8ULGT		2.050	0.095	0.83	1.040	-0.045	-0.60
XCQ42Z		1.750	-0.205	-1.79	0.920	-0.165	-2.19
Y3G28M		2.110	0.155	1.35	1.145	0.060	0.79
Y7GC4M		1.955	0.000	0.00	1.130	0.045	0.59
Z4NXWN	X	2.075	0.120	1.04	0.965	-0.120	-1.59
ZHPE3P		1.945	-0.010	-0.09	1.065	-0.020	-0.27
ZMYRKN		2.065	0.109	0.95	1.230	0.144	1.91
ZVAU7P		2.000	0.045	0.39	1.150	0.065	0.85
ZVDCCZ		1.945	-0.010	-0.09	1.125	0.040	0.52
ZZA62P		1.960	0.005	0.04	1.080	-0.005	-0.07

Grand Means		Summary Statistics	
	1.9555 g/L		1.0854 g/L
Std Dev Btwn Labs			0.0756 g/L
	0.1146 g/L		
Statistics based on 68 of 82 reporting participants			

Wines tested: SA29: Red Moscato; SA30: Sweet Red



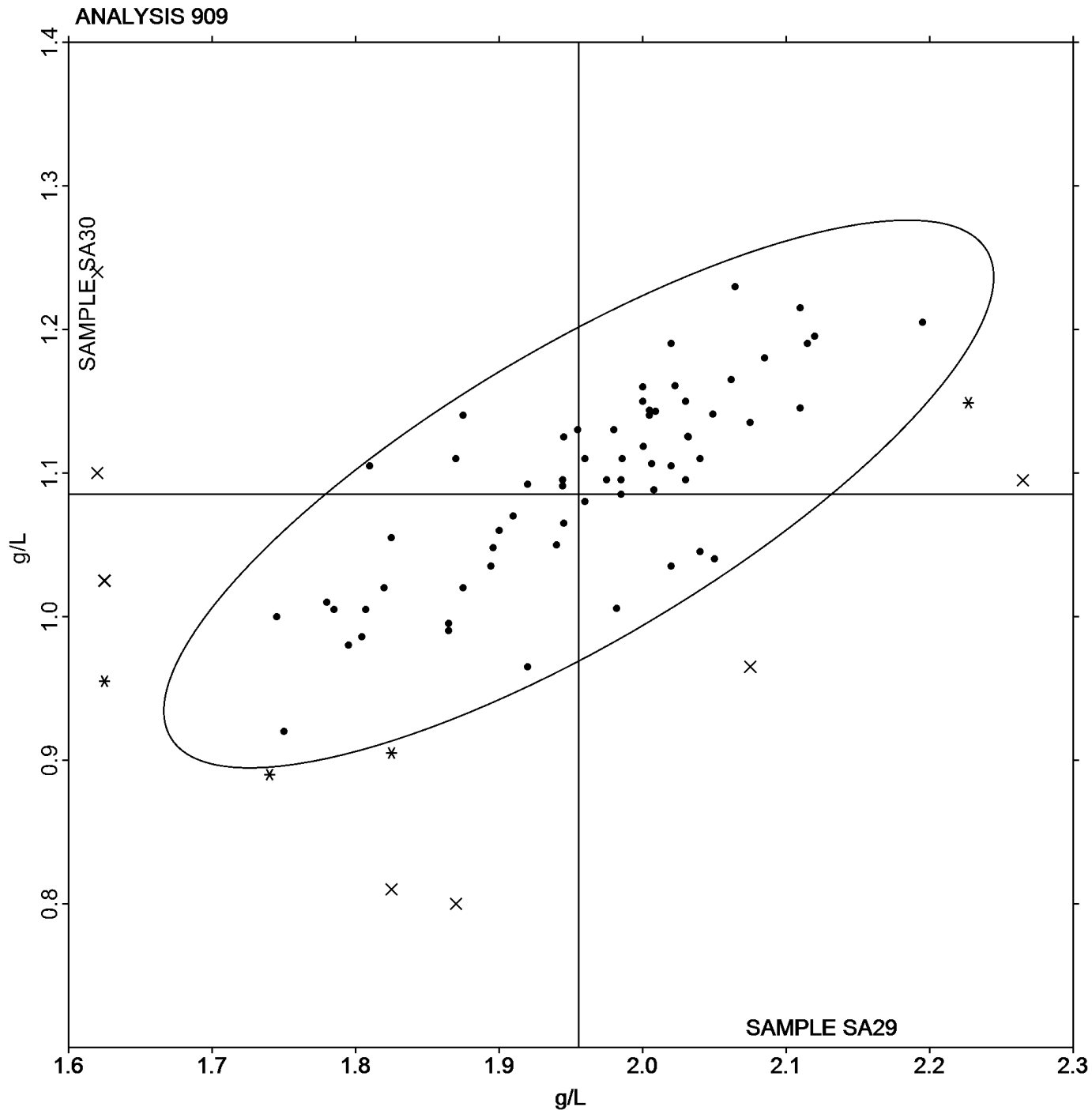
---

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

- L7M3V4 (X) - Data for sample SA29 are low.
- Z4NXWN (X) - Inconsistent in testing between samples.
- C9F6JE (X) - Data for sample SA30 are low. Inconsistent within the determinations of both samples.
- JYRL68 (X) - Data for both samples are low.
- UU3JU6 (X) - Data for sample SA29 are low.
- M8FBHD (X) - Data for sample SA29 are low.
- 4JBA2U (X) - Data for both samples are low.
- TVJFM6 (X) - Data for sample SA29 are low.
- TVD9CW (X) - Data for sample SA29 are low.
- JRR4NA (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample SA30.
- EAKFAE (X) - Data for sample SA29 are high.
- TC2JYY (X) - Data for sample SA30 are high.
- 78BBHM (X) - Data for sample SA30 are low.
- M7GDY6 (X) - Data for sample SA29 are low.



Analysis 909  
L-Malic Acid





Analysis 910  
Glucose + Fructose

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2DNPYM		60.70	-2.90	-0.87	53.60	-1.95	-0.67
2FV9WJ	*	66.60	3.00	0.89	61.50	5.95	2.03
2JWCQQ	X	67.70	4.10	1.22	54.30	-1.25	-0.43
2MVM MQ		59.86	-3.75	-1.12	52.55	-3.00	-1.02
2Y8UJQ		64.20	0.60	0.18	58.70	3.15	1.07
3MUXDM		63.63	0.03	0.01	55.10	-0.46	-0.16
4JBA2U		63.70	0.09	0.03	54.55	-1.00	-0.34
4RZ7XN		63.70	0.09	0.03	56.04	0.49	0.17
4WFDLN		59.20	-4.40	-1.31	52.60	-2.95	-1.01
4ZGGFV		67.75	4.15	1.24	58.05	2.50	0.85
6WAJFM		69.15	5.55	1.66	58.25	2.70	0.92
78BBHM		62.60	-1.00	-0.30	55.00	-0.55	-0.19
7NYGUM		69.05	5.45	1.63	59.15	3.60	1.23
7PAJFL		58.70	-4.90	-1.46	51.25	-4.30	-1.47
7W3VCE		57.33	-6.27	-1.87	51.30	-4.26	-1.45
82TPLK		64.45	0.85	0.25	57.03	1.48	0.50
8ABXBG	X	51.50	-12.10	-3.61	43.50	-12.05	-4.11
8E6QQQ		62.98	-0.62	-0.19	52.13	-3.43	-1.17
8VQJ8H		63.36	-0.25	-0.07	56.00	0.45	0.15
938EMC		65.80	2.20	0.66	56.05	0.50	0.17
9TE4DG		61.05	-2.55	-0.76	56.05	0.50	0.17
AEG7UH		62.22	-1.39	-0.41	53.30	-2.26	-0.77
B7G7VG		65.79	2.18	0.65	56.57	1.01	0.35
BBDX4D		68.20	4.60	1.37	58.25	2.70	0.92
BFHYXF	X	70.00	6.40	1.91	38.50	-17.05	-5.82
C6ZG69		63.05	-0.55	-0.16	53.25	-2.30	-0.79
C9F6JE	X	50.31	-13.29	-3.97	48.41	-7.15	-2.44
DNBQJE		60.85	-2.75	-0.82	51.20	-4.35	-1.49
EAKFAE		61.55	-2.05	-0.61	53.35	-2.20	-0.75
F2PX9B		63.07	-0.53	-0.16	52.30	-3.25	-1.11
F6P4T9		63.90	0.30	0.09	55.30	-0.25	-0.09
FKZML9		61.84	-1.76	-0.53	54.05	-1.50	-0.51
FWEKQC		59.21	-4.40	-1.31	52.26	-3.30	-1.13
H232Y9		64.57	0.97	0.29	55.96	0.41	0.14
HDTXZ7		62.90	-0.70	-0.21	55.20	-0.35	-0.12



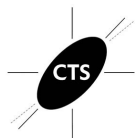


ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

Analysis 910  
Glucose + Fructose

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
HM2AD4		58.05	-5.55	-1.66	48.90	-6.65	-2.27
HN9PKA	X	47.50	-16.10	-4.80	54.70	-0.85	-0.29
HP9N4H		66.45	2.85	0.85	58.45	2.90	0.99
JLZW72		61.85	-1.75	-0.52	53.90	-1.65	-0.56
JNTRRA	X	46.00	-17.60	-5.25	40.30	-15.25	-5.20
JYRL68		60.00	-3.60	-1.07	55.00	-0.55	-0.19
JZ3FPE		62.15	-1.45	-0.43	57.15	1.60	0.54
K4FKW8		66.25	2.65	0.79	57.70	2.15	0.73
KUBDG8		67.05	3.45	1.03	57.70	2.15	0.73
L27ZG7		66.20	2.60	0.78	57.15	1.60	0.54
L7M3V4		60.50	-3.10	-0.93	51.25	-4.30	-1.47
LD24UD		63.00	-0.60	-0.18	56.00	0.45	0.15
LMBDH7		60.50	-3.10	-0.93	53.00	-2.55	-0.87
LWWMZ8		62.85	-0.75	-0.22	54.60	-0.95	-0.33
M4E8N6		63.95	0.35	0.10	55.40	-0.15	-0.05
M7GDY6		63.58	-0.03	-0.01	58.09	2.53	0.86
M8FBHD		59.30	-4.30	-1.28	51.70	-3.85	-1.31
MHAUN7	X	7.19	-56.41	-16.83	7.05	-48.50	-16.55
MRVXV7	*	72.90	9.30	2.77	63.10	7.55	2.57
NCKUUB		65.22	1.61	0.48	56.13	0.58	0.20
NUKGKA		66.30	2.70	0.81	57.90	2.35	0.80
NVE8P4		61.30	-2.30	-0.69	54.80	-0.75	-0.26
QLGL8U		64.54	0.93	0.28	56.32	0.77	0.26
QQT7F2		64.71	1.10	0.33	57.51	1.95	0.67
QQU36Y		63.50	-0.10	-0.03	54.50	-1.05	-0.36
QWY3Z2		63.10	-0.50	-0.15	52.30	-3.25	-1.11
RAJZKV		61.52	-2.08	-0.62	53.22	-2.33	-0.80
REAE6W		58.85	-4.75	-1.42	53.95	-1.60	-0.55
RECWB9	*	54.65	-8.95	-2.67	48.35	-7.20	-2.46
RPW9KZ		66.70	3.10	0.92	58.50	2.95	1.01
TC2JYY	X	54.00	-9.60	-2.86	53.00	-2.55	-0.87
TU7QDZ		70.23	6.62	1.98	61.63	6.07	2.07
TVD9CW		70.60	7.00	2.09	60.60	5.05	1.72
TVJFM6		60.20	-3.40	-1.01	52.56	-2.99	-1.02
U8LBBY	*	60.50	-3.10	-0.93	56.40	0.85	0.29



Analysis 910  
Glucose + Fructose

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
UDCGAV		65.35	1.75	0.52	57.20	1.65	0.56
UX2VQ6		63.00	-0.60	-0.18	55.00	-0.55	-0.19
V2TTAT		70.40	6.80	2.03	61.81	6.25	2.13
V2VBF4		63.28	-0.32	-0.10	55.18	-0.38	-0.13
W9VZNV		63.18	-0.43	-0.13	55.73	0.17	0.06
WPK6ZV		59.14	-4.47	-1.33	51.27	-4.29	-1.46
X7NY8V		67.41	3.80	1.14	58.25	2.69	0.92
X8ULGT		62.60	-1.00	-0.30	56.50	0.95	0.32
XCQ42Z	X	50.00	-13.60	-4.06	43.00	-12.55	-4.28
Y3G28M		65.70	2.10	0.63	58.15	2.60	0.89
Y7GC4M	X	11.67	-51.93	-15.49	10.08	-45.47	-15.52
Z4NXWN		63.20	-0.40	-0.12	55.30	-0.25	-0.09
ZHPE3P		67.10	3.50	1.04	58.15	2.60	0.89
ZMYRKN		68.00	4.40	1.31	59.60	4.05	1.38
ZVAU7P		62.60	-1.00	-0.30	54.58	-0.98	-0.33
ZVDCCZ		65.80	2.20	0.66	56.85	1.30	0.44
ZZA62P		63.10	-0.50	-0.15	54.50	-1.05	-0.36

Grand Means		Summary Statistics	
	63.601 g/L		55.554 g/L
Std Dev Btwn Labs			2.931 g/L
	3.352 g/L		
<b>Statistics based on 77 of 87 reporting participants</b>			

Wines tested: SA29: Red Moscato; SA30: Sweet Red



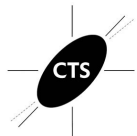
Analysis 910  
Glucose + Fructose

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

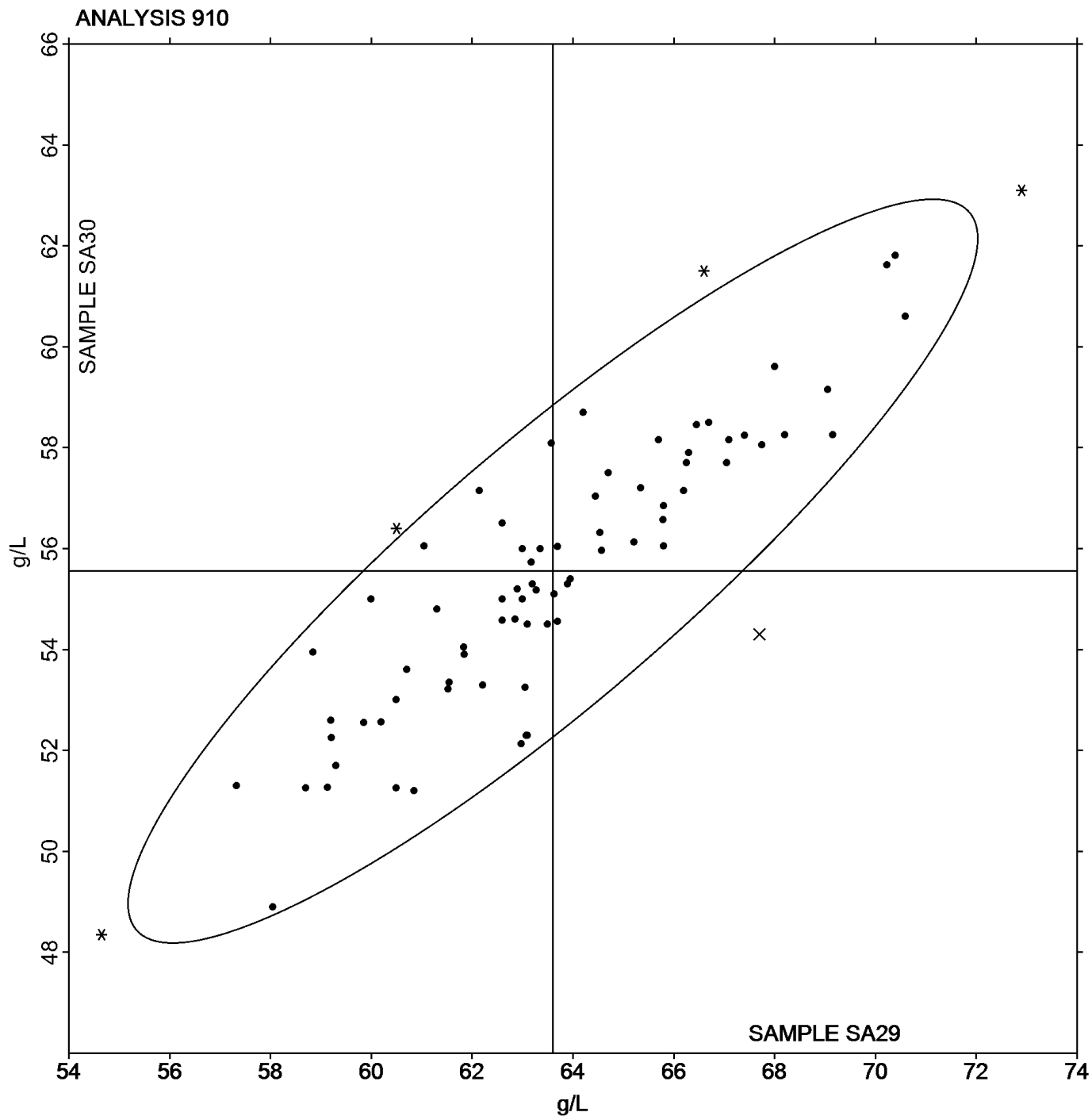
- 2JWCQQ (X) - Inconsistent in testing between samples.
- C9F6JE (X) - Data for sample SA29 are low.
- XCQ42Z (X) - Data for both samples are low. Possible Systematic Error.
- 8ABXBG (X) - Data for both samples are low. Possible Systematic Error.
- JNTTRA (X) - Data for both samples are low. Possible Systematic Error.
- MHAUN7 (X) - Extreme data.
- BFHYXF (X) - Data for sample SA30 are low. Inconsistent within the determinations of both samples.
- TC2JYY (X) - Data for sample SA29 are low.
- HN9PKA (X) - Data for sample SA29 are low. Inconsistent within the determinations of sample SA29.
- Y7GC4M (X) - Extreme data.

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

Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
HPLC	62.050	3.840	-1.55	54.375	5.295	-1.18	4/4
Enzymatic/Spectrophotometric	63.848	3.463	0.25	55.727	2.896	0.17	65/74
FTIR	62.223	1.769	-1.38	54.722	1.961	-0.83	6/7
Other _____	62.801	0.281	-0.80	54.788	0.301	-0.77	2/2



Analysis 910  
Glucose + Fructose





Analysis 911  
Copper Content

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2MVMMQ		0.0500	-0.0094	-0.28	0.0600	-0.0021	-0.07
4JBA2U		0.0450	-0.0144	-0.43	0.0530	-0.0091	-0.29
4ZGGFV		0.0400	-0.0194	-0.57	0.0500	-0.0121	-0.39
6WAJFM		0.0950	0.0356	1.06	0.0850	0.0229	0.74
78BBHM		0.0724	0.0130	0.39	0.0818	0.0197	0.64
7NYGUM		0.0550	-0.0044	-0.13	0.0700	0.0079	0.26
8E6QQQ	M	0.2000	0.1406	4.17	No data reported for this sample		
AEG7UH		0.0100	-0.0494	-1.47	0.0100	-0.0521	-1.69
BBDX4D		0.1000	0.0406	1.21	0.1000	0.0379	1.23
H232Y9		0.0060	-0.0534	-1.58	0.0040	-0.0581	-1.88
HDTXZ7		0.0550	-0.0044	-0.13	0.0650	0.0029	0.09
K4FKW8		0.1020	0.0426	1.27	0.0905	0.0284	0.92
M7GDY6	*	0.1500	0.0906	2.69	0.1400	0.0779	2.52
M8FBHD		0.0400	-0.0194	-0.57	0.0500	-0.0121	-0.39
RAJZKV		0.0517	-0.0077	-0.23	0.0623	0.0002	0.01
RECWB9		0.0490	-0.0104	-0.31	0.0520	-0.0101	-0.33
TC2JYY		0.0500	-0.0094	-0.28	0.0600	-0.0021	-0.07
UDCGAV		0.0300	-0.0294	-0.87	0.0300	-0.0321	-1.04
UX2VQ6		0.0600	0.0006	0.02	0.0525	-0.0096	-0.31
V2TTAT		0.1000	0.0406	1.21	0.1050	0.0429	1.39
X7NY8V		0.0645	0.0051	0.15	0.0665	0.0044	0.14
X8ULGT		0.0200	-0.0394	-1.17	0.0300	-0.0321	-1.04
ZVDCCZ		0.0605	0.0011	0.03	0.0485	-0.0136	-0.44

Grand Means		Summary Statistics	
	0.05937 mg/L		0.06210 mg/L
Stnd Dev Btwn Labs			0.03091 mg/L
	0.03369 mg/L		
Statistics based on 22 of 23 reporting participants			

Wines tested: SA29: Red Moscato; SA30: Sweet Red

**Comments on Assigned Data Flags for Test #911**

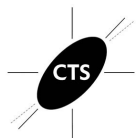
8E6QQQ (M) - Participant did not submit data for sample SA30.



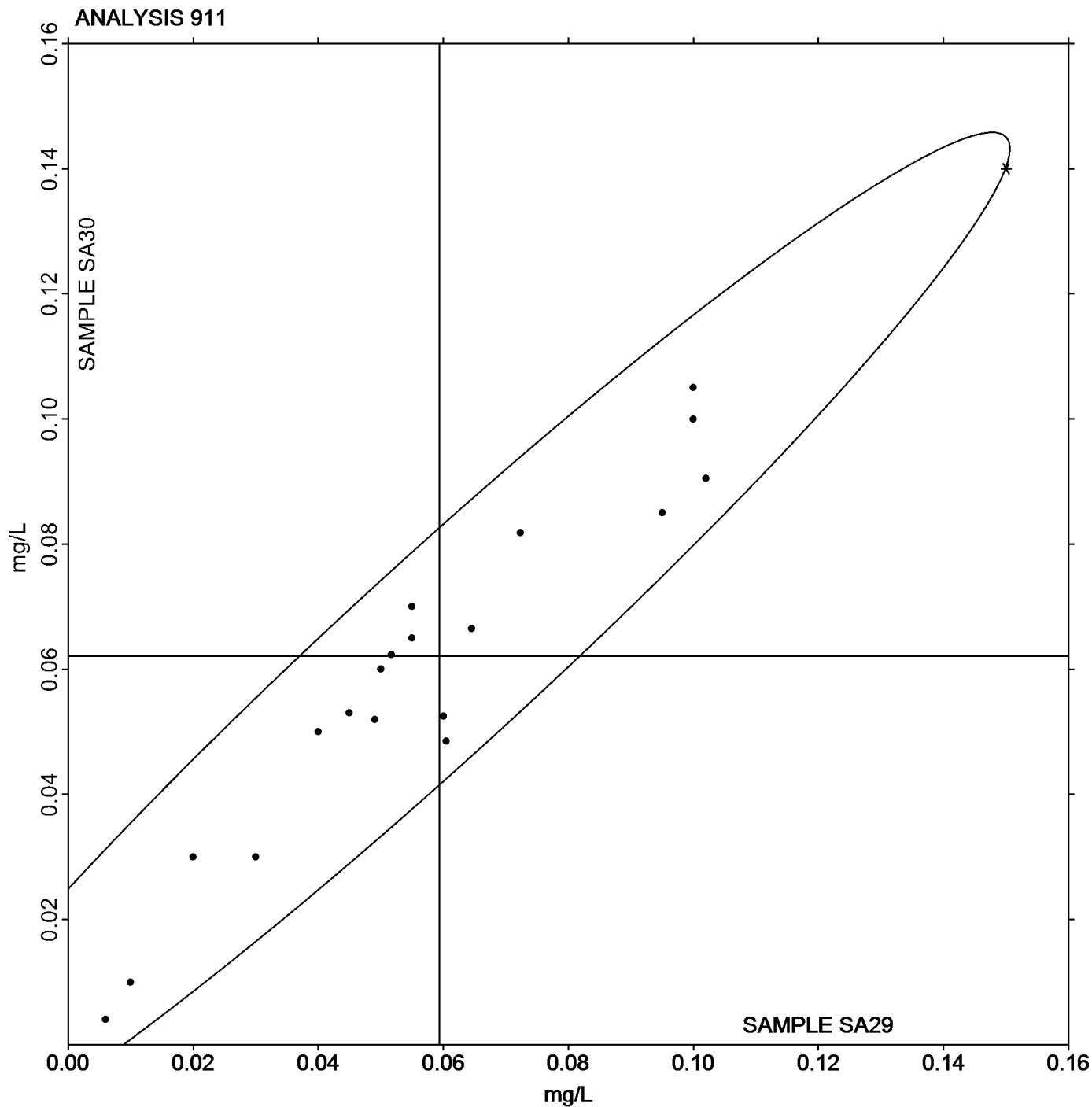
Analysis 911  
Copper Content

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

Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Please specify method used							0/1
Atomic Absorption Spectroscopy	0.052	0.035	-0.0073	0.055	0.033	-0.0075	11/11
ICP	0.058	0.017	-0.0010	0.063	0.016	0.0004	10/10
FTIR	0.150	0.000	0.0906	0.140	0.000	0.0779	1/1



Analysis 911  
Copper Content





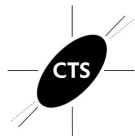
Analysis 912  
Potassium (K) Content

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2JWCQQ		668.5	86.1	0.78	1,123.0	236.0	1.62
2MVMMQ		480.0	-102.4	-0.93	729.0	-158.0	-1.09
4JBA2U		509.8	-72.6	-0.66	840.7	-46.3	-0.32
4ZGGFV		519.0	-63.4	-0.57	802.5	-84.5	-0.58
78BBHM		550.1	-32.4	-0.29	852.9	-34.1	-0.23
7PAJFL		634.0	51.6	0.47	926.5	39.5	0.27
AEG7UH		497.0	-85.4	-0.77	820.0	-67.0	-0.46
B7G7VG	*	295.0	-287.4	-2.61	467.0	-420.0	-2.89
BBDX4D		545.5	-36.9	-0.33	826.5	-60.5	-0.42
HDTXZ7		557.5	-24.9	-0.23	854.5	-32.5	-0.22
HM2AD4		581.5	-0.9	-0.01	956.0	69.0	0.47
M8FBHD		617.0	34.6	0.31	888.0	1.0	0.01
RAJZKV		737.4	154.9	1.40	1,076.6	189.6	1.30
RECWB9		659.0	76.6	0.69	981.0	94.0	0.65
TC2JYY		592.0	9.6	0.09	863.0	-24.0	-0.16
UX2VQ6		705.0	122.6	1.11	945.0	58.0	0.40
V2TTAT		670.9	88.5	0.80	1,008.1	121.1	0.83
X7NY8V		763.0	180.6	1.64	1,063.0	176.0	1.21
ZVDCCZ		484.0	-98.4	-0.89	829.5	-57.5	-0.40

Grand Means		Summary Statistics	
	582.43 mg/L		886.99 mg/L
Std Dev Btwn Labs			145.43 mg/L
	110.33 mg/L		
Statistics based on 19 of 19 reporting participants			

Wines tested: SA29: Red Moscato; SA30: Sweet Red

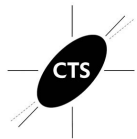




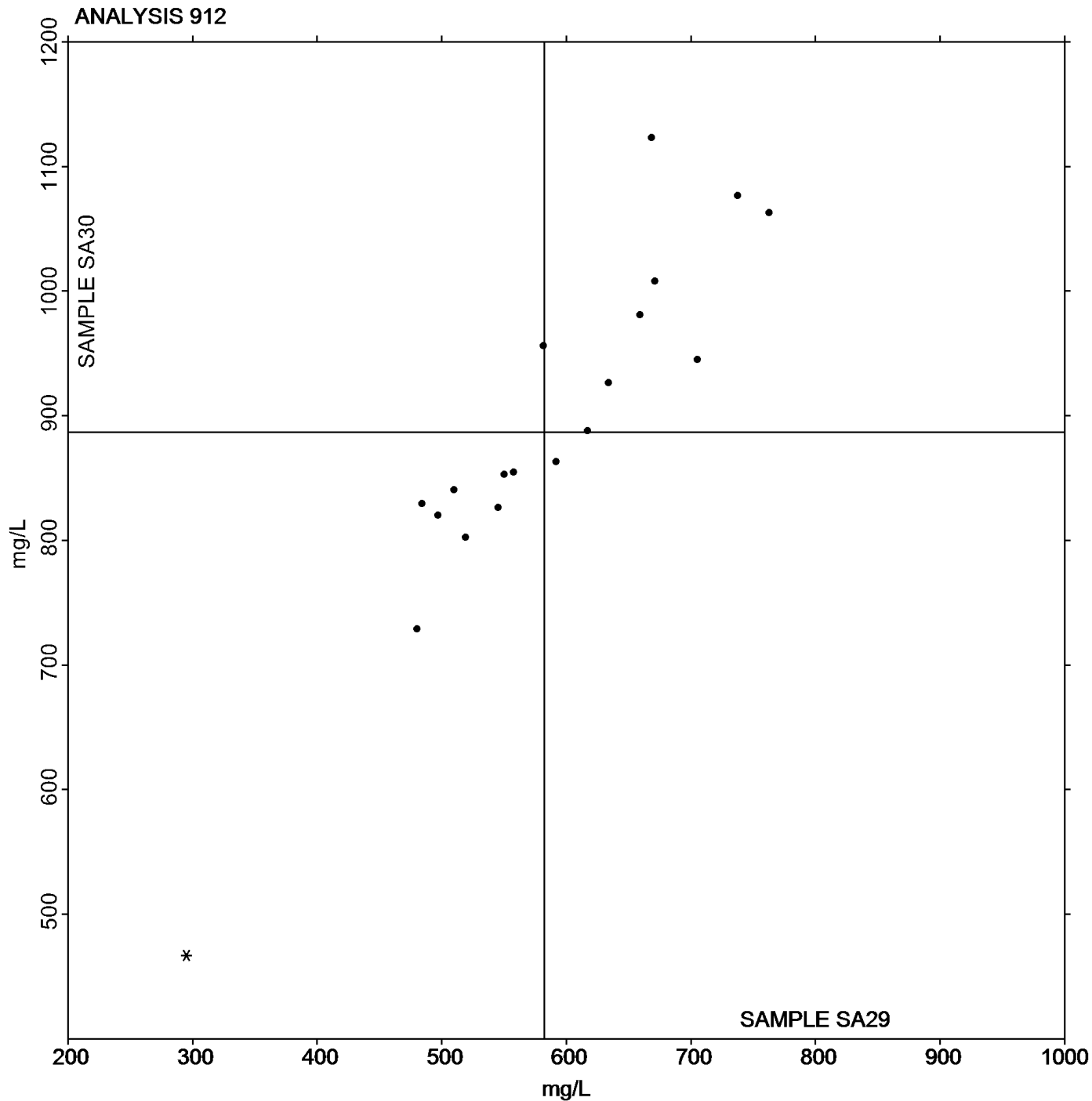
Analysis 912  
Potassium (K) Content

Results by Methodology (as reported by laboratory)

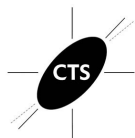
Test Methodology	Sample SA29 <i>Red Moscato</i>			Sample SA30 <i>Sweet Red</i>			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Atomic Absorption Spectroscopy	631.387	98.112	49.0	936.116	100.249	49.1	5/5
ICP	547.904	81.927	-34.5	851.533	99.515	-35.5	8/8
FTIR	705.000	0.000	122.6	945.000	0.000	58.0	1/1
Other _____	511.833	191.740	-70.6	801.333	289.811	-85.7	3/3
Colorimetric Analysis	642.750	36.416	60.3	1,005.500	166.170	118.5	2/2



Analysis 912  
Potassium (K) Content



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



ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

Analysis 915  
A420nm (1cm path)

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2JWCQQ		0.8525	0.0975	2.30	1.856	0.117	2.30
3R8T3X		0.7330	-0.0220	-0.52	1.700	-0.039	-0.77
4JBA2U		0.7433	-0.0118	-0.28	1.740	0.002	0.03
4RZ7XN		0.7390	-0.0160	-0.38	1.727	-0.012	-0.24
78BBHM		0.7155	-0.0395	-0.93	1.696	-0.043	-0.83
7NYGUM		0.7336	-0.0214	-0.50	1.717	-0.022	-0.43
7PAJFL		0.7475	-0.0075	-0.18	1.718	-0.021	-0.40
82TPLK	*	0.8650	0.1100	2.59	1.835	0.096	1.89
8E6QQQ		0.7240	-0.0310	-0.73	1.744	0.005	0.10
9TE4DG		0.7280	-0.0270	-0.64	1.681	-0.058	-1.14
AEG7UH		0.7300	-0.0250	-0.59	1.715	-0.024	-0.46
BBDX4D		0.7425	-0.0125	-0.30	1.727	-0.012	-0.23
BFHYXF		0.7275	-0.0275	-0.65	1.696	-0.043	-0.84
C6ZG69	X	0.0750	-0.6800	-16.03	0.175	-1.564	-30.67
C9F6JE		0.7725	0.0175	0.41	1.755	0.016	0.32
DTGL3E		0.7450	-0.0100	-0.24	1.727	-0.012	-0.23
F2PX9B		0.7670	0.0120	0.28	1.808	0.069	1.36
H232Y9		0.7940	0.0390	0.92	1.813	0.074	1.46
HN9PKA		0.7230	-0.0320	-0.75	1.663	-0.076	-1.48
HP9N4H		0.7850	0.0300	0.71	1.715	-0.024	-0.46
JNTRA		0.7495	-0.0055	-0.13	1.703	-0.036	-0.70
JRR4NA	X	0.2250	-0.5300	-12.49	0.435	-1.304	-25.57
L7M3V4		0.7935	0.0385	0.91	1.805	0.066	1.30
LMBDH7		0.6650	-0.0900	-2.12	1.675	-0.064	-1.25
LUTNQZ		0.7935	0.0385	0.91	1.768	0.029	0.58
M4E8N6		0.7150	-0.0400	-0.94	1.740	0.001	0.03
M7GDY6		0.7545	-0.0005	-0.01	1.754	0.015	0.30
M8FBHD	X	0.8980	0.1430	3.37	1.940	0.201	3.95
MHAUN7		0.7410	-0.0140	-0.33	1.736	-0.003	-0.05
MM24Y4		0.8285	0.0735	1.73	1.795	0.056	1.11
NVE8P4		0.7515	-0.0035	-0.08	1.719	-0.020	-0.39
QQT7F2		0.7600	0.0050	0.12	1.710	-0.029	-0.56
QWY3Z2		0.8095	0.0545	1.28	1.756	0.017	0.34
RAJZKV		0.7180	-0.0370	-0.87	1.704	-0.035	-0.68
REAE6W	X	0.2050	-0.5500	-12.96	0.450	-1.289	-25.27



Analysis 915  
A420nm (1cm path)

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RECWB9	X	0.9500	0.1950	4.60	2.079	0.340	6.68
TC2JYY		0.7360	-0.0190	-0.45	1.760	0.021	0.42
TVD9CW		0.7200	-0.0350	-0.83	1.710	-0.029	-0.56
U8LBBY		0.7550	0.0000	0.00	1.774	0.035	0.69
UDCGAV		0.7390	-0.0160	-0.38	1.750	0.011	0.22
UU3JU6	X	0.8750	0.1200	2.83	1.968	0.229	4.50
UX2VQ6		0.7685	0.0135	0.32	1.795	0.056	1.11
V2TTAT		0.8400	0.0850	2.00	1.820	0.081	1.60
WPK6ZV		0.6960	-0.0590	-1.39	1.658	-0.081	-1.58
X8ULGT	*	0.7400	-0.0150	-0.35	1.648	-0.091	-1.78
XCQ42Z	X	0.0490	-0.7060	-16.64	0.069	-1.670	-32.74
Y3G28M		0.8050	0.0500	1.18	1.805	0.066	1.30
ZVDCCZ		0.7090	-0.0460	-1.08	1.667	-0.072	-1.41

Grand Means		Summary Statistics	
0.75502	Absorbance Units	1.7386	Absorbance Units
Stnd Dev Btwn Labs		0.0510	Absorbance Units
0.04243	Absorbance Units		

**Statistics based on 41 of 48 reporting participants**

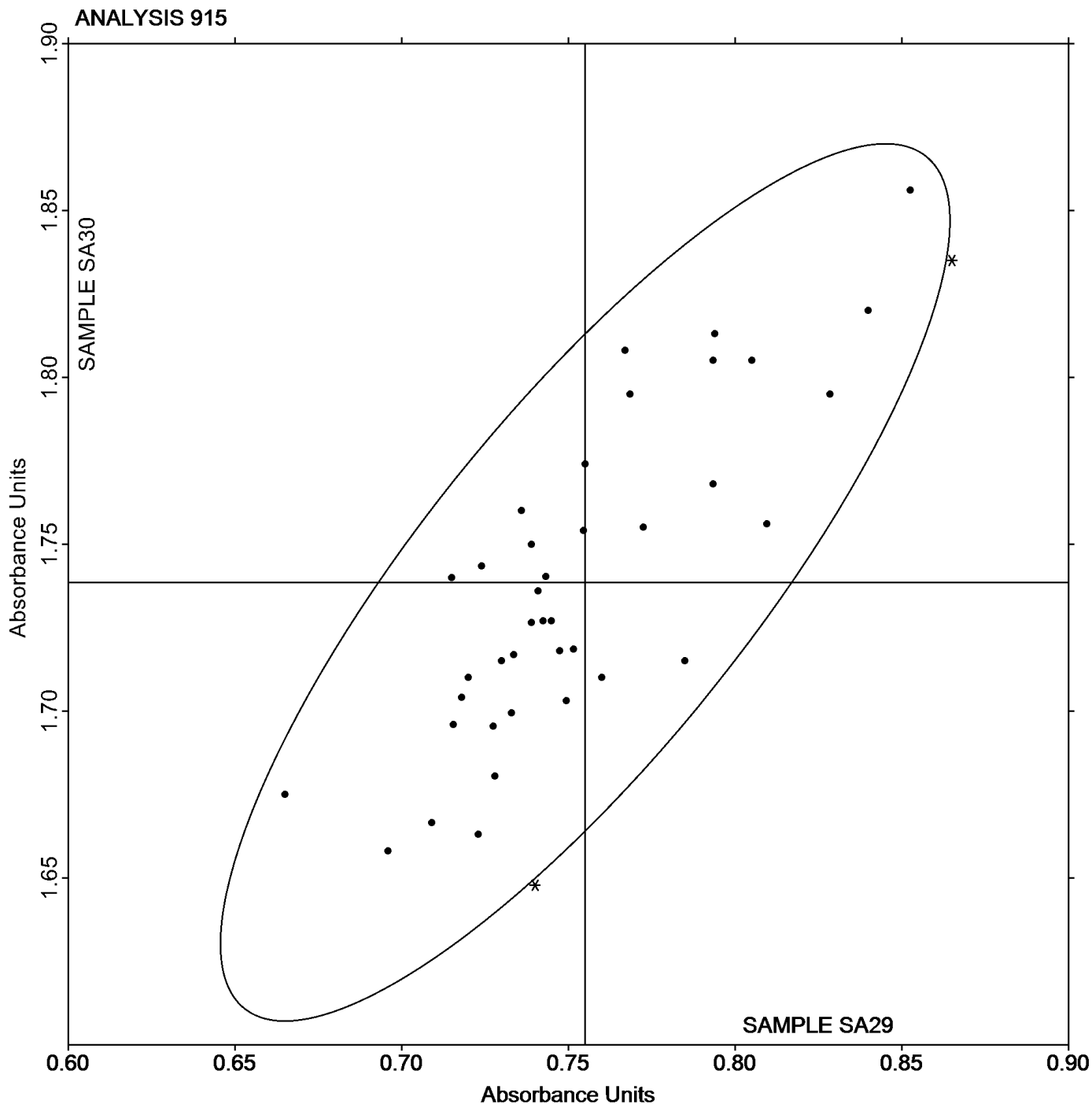
Wines tested: SA29: Red Moscato; SA30: Sweet Red

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

- UU3JU6 (X) - Data for both samples are high.
- RECWB9 (X) - Data for both samples are high.
- M8FBHD (X) - Data for both samples are high.
- XCQ42Z (X) - Extreme data.
- REAE6W (X) - Data for both samples are low.
- JRR4NA (X) - Data for both samples are low.
- C6ZG69 (X) - Data for both samples are low.



Analysis 915  
A420nm (1cm path)



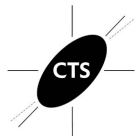


ASEV-CTS Wine Industry Interlaboratory Testing Program

Report #065  
Summer 2020

Analysis 916  
A520nm (1cm path)

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2JWCQQ	*	1.166	0.155	2.67	2.440	0.177	2.60
3R8T3X		0.977	-0.035	-0.60	2.206	-0.057	-0.85
4JBA2U		0.995	-0.016	-0.28	2.269	0.006	0.08
4RZ7XN		0.980	-0.032	-0.55	2.255	-0.008	-0.12
78BBHM		0.955	-0.056	-0.97	2.197	-0.067	-0.99
7NYGUM		0.952	-0.059	-1.02	2.191	-0.073	-1.07
7PAJFL		0.997	-0.015	-0.25	2.257	-0.006	-0.09
82TPLK		1.005	-0.006	-0.11	2.210	-0.053	-0.79
8E6QQQ		0.966	-0.045	-0.78	2.294	0.031	0.45
9TE4DG		0.988	-0.023	-0.40	2.221	-0.043	-0.63
AEG7UH		0.975	-0.036	-0.62	2.242	-0.022	-0.32
BBDX4D		1.023	0.011	0.20	2.285	0.022	0.32
BFHYXF		0.976	-0.035	-0.61	2.226	-0.037	-0.55
C6ZG69	X	0.105	-0.906	-15.62	0.235	-2.028	-29.88
C9F6JE	X	1.743	0.731	12.61	1.760	-0.503	-7.42
DTGL3E		0.987	-0.024	-0.42	2.291	0.028	0.41
F2PX9B		1.033	0.022	0.38	2.351	0.088	1.29
H232Y9		1.026	0.015	0.26	2.285	0.022	0.32
HN9PKA		0.956	-0.056	-0.96	2.171	-0.092	-1.36
HP9N4H	X	1.180	0.169	2.91	2.280	0.017	0.24
JNTTRA		0.990	-0.022	-0.37	2.173	-0.090	-1.33
JRR4NA	X	0.345	-0.666	-11.48	0.635	-1.628	-23.99
L7M3V4		1.135	0.124	2.13	2.423	0.159	2.34
LMBDH7		1.005	-0.006	-0.11	2.275	0.012	0.17
LUTNQZ		1.058	0.047	0.81	2.240	-0.023	-0.35
M4E8N6		0.970	-0.041	-0.71	2.260	-0.003	-0.05
M7GDY6		1.016	0.005	0.08	2.330	0.066	0.97
M8FBHD	X	1.239	0.228	3.93	2.600	0.337	4.96
MHAUN7		0.985	-0.027	-0.46	2.250	-0.014	-0.21
MM24Y4		1.064	0.053	0.91	2.321	0.058	0.85
NVE8P4		1.009	-0.003	-0.05	2.263	0.000	-0.01
QQT7F2		1.045	0.034	0.58	2.245	-0.018	-0.27
QWY3Z2		1.081	0.069	1.20	2.257	-0.006	-0.09
RAJZKV		0.959	-0.053	-0.91	2.227	-0.036	-0.54
REAE6W	X	0.285	-0.726	-12.51	0.575	-1.688	-24.87



Analysis 916  
A520nm (1cm path)

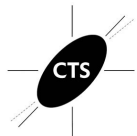
WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
RECWB9	X	1.260	0.249	4.29	2.738	0.475	6.99
TVD9CW		0.980	-0.031	-0.54	2.210	-0.053	-0.79
U8LBBY	X	0.023	-0.988	-17.03	1.343	-0.920	-13.56
UDCGAV		0.983	-0.029	-0.49	2.295	0.032	0.46
UU3JU6	X	1.218	0.207	3.57	2.662	0.399	5.87
UX2VQ6		1.040	0.029	0.50	2.355	0.092	1.35
V2TTAT		1.095	0.084	1.45	2.290	0.027	0.39
WPK6ZV		0.957	-0.055	-0.94	2.204	-0.059	-0.88
X8ULGT		0.978	-0.033	-0.57	2.170	-0.094	-1.38
XCQ42Z	X	0.053	-0.958	-16.51	0.079	-2.184	-32.18
Y3G28M	*	1.175	0.164	2.82	2.400	0.137	2.01
ZVDCCZ		0.936	-0.075	-1.29	2.172	-0.092	-1.35

Grand Means		Summary Statistics	
	1.0111 Absorbance Units		2.2634 Absorbance Units
Std Dev Btwn Labs			0.0679 Absorbance Units
	0.0580 Absorbance Units		
<b>Statistics based on 37 of 47 reporting participants</b>			

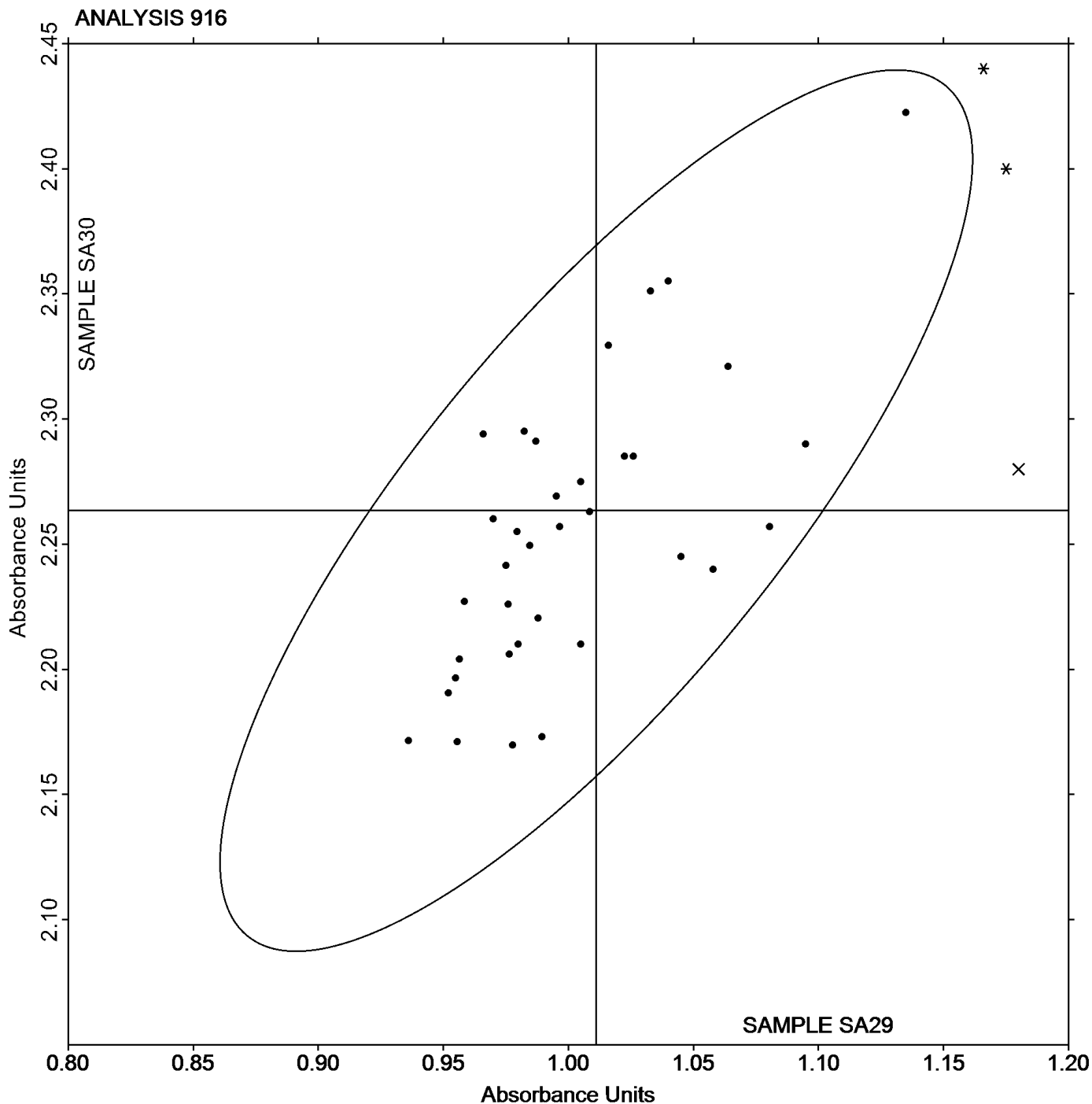
Wines tested: SA29: Red Moscato; SA30: Sweet Red

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

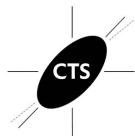
- C9F6JE (X) - Data for sample SA29 are high and data for sample SA30 are low.
- UU3JU6 (X) - Data for both samples are high.
- RECWB9 (X) - Data for both samples are high.
- M8FBHD (X) - Data for both samples are high.
- HP9N4H (X) - Data for sample SA29 are high.
- XCQ42Z (X) - Extreme data.
- REAE6W (X) - Data for both samples are low.
- JRR4NA (X) - Data for both samples are low.
- U8LBBY (X) - Extreme data.
- C6ZG69 (X) - Data for both samples are low.



Analysis 916  
A520nm (1cm path)







**ASEV-CTS Wine Industry Interlaboratory Testing Program**  
**Research Property 950**  
**Research Property - L-Lactic Acid**

**Report #065**  
**Summer 2020**

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
2FV9WJ		0.4200	0.1044	0.61	0.8900	0.2035	1.14
4JBA2U	*	0.3450	0.0294	0.17	1.0850	0.3985	2.23
4ZGGFV		0.2700	-0.0456	-0.27	0.6650	-0.0215	-0.12
6WAJFM		0.2680	-0.0476	-0.28	0.6205	-0.0660	-0.37
AEG7UH		0.2540	-0.0616	-0.36	0.6345	-0.0520	-0.29
BBDX4D		0.2645	-0.0511	-0.30	0.6175	-0.0690	-0.39
HM2AD4	*	0.9150	0.5994	3.51	1.0550	0.3685	2.06
HN9PKA		0.2300	-0.0856	-0.50	0.5650	-0.1215	-0.68
K4FKW8		0.2795	-0.0361	-0.21	0.5725	-0.1140	-0.64
M8FBHD	M	No data reported for this sample			0.3900	-0.2965	-1.66
NVE8P4		0.2380	-0.0776	-0.45	0.5390	-0.1475	-0.82
QWY3Z2		0.2600	-0.0556	-0.33	0.6600	-0.0265	-0.15
RAJZKV		0.2300	-0.0856	-0.50	0.5700	-0.1165	-0.65
RECWB9		0.3950	0.0794	0.47	0.8250	0.1385	0.77
TC2JYY	M	No data reported for this sample			0.3000	-0.3865	-2.16
UX2VQ6		0.2200	-0.0956	-0.56	0.5400	-0.1465	-0.82
V2TTAT		0.2250	-0.0906	-0.53	0.5500	-0.1365	-0.76
ZVDCCZ		0.2350	-0.0806	-0.47	0.5950	-0.0915	-0.51

**Research Property Consensus Value**

Consensus Average

0.31556 g/L

0.68650 g/L

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

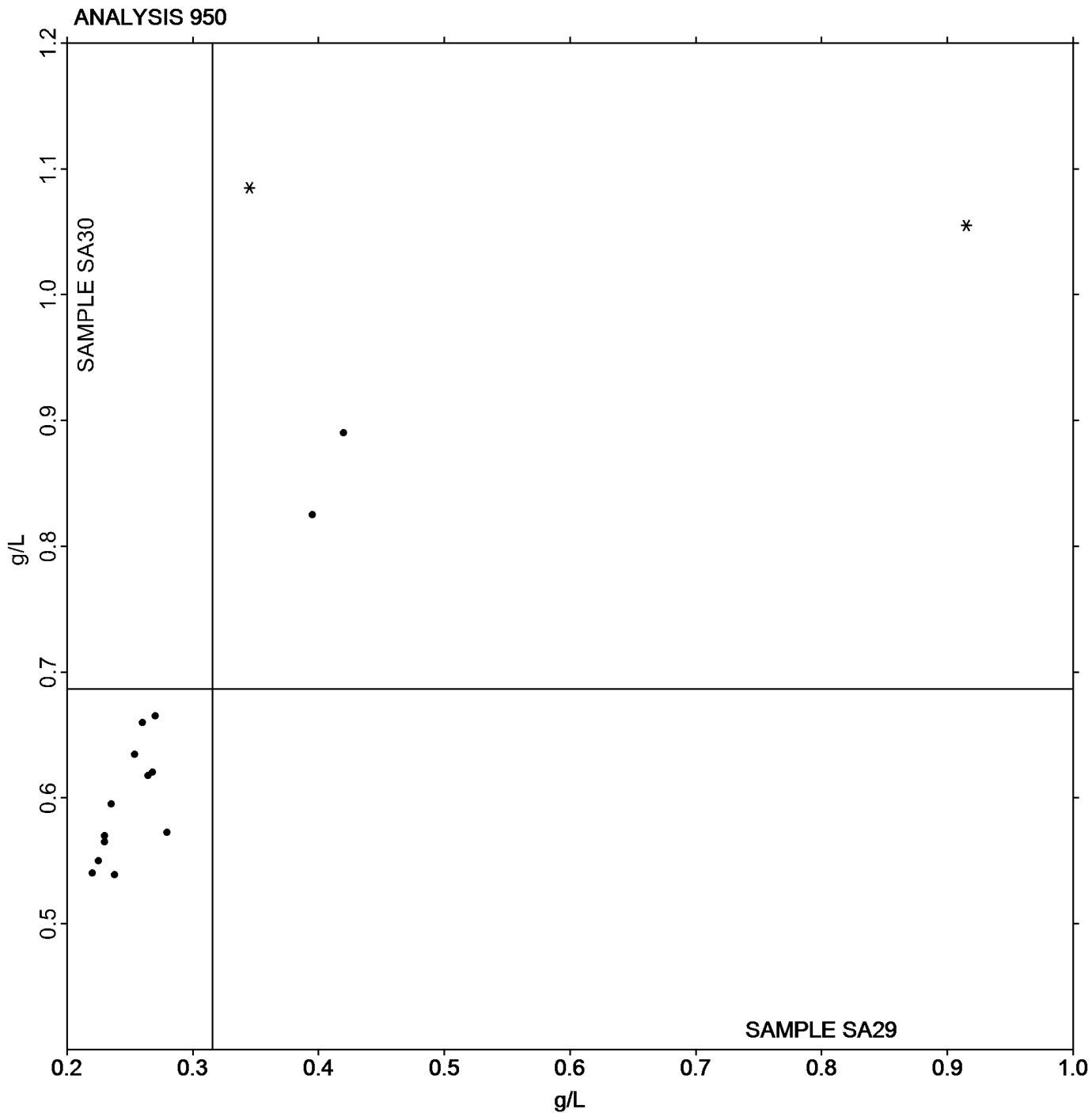
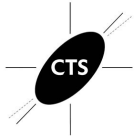
*This consensus average is based on 16 reporting participants.*

**Wines tested:** SA29: Red Moscato; SA30: Sweet Red

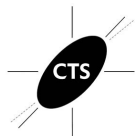
**Comments on Assigned Data Flags for Test #950**

M8FBHD (M) - Participant did not submit data for sample SA29.

TC2JYY (M) - Participant did not submit data for sample SA29.



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: Conductivity at 20C**

**Report #065**  
**Summer 2020**

WebCode	Data Flag	Sample SA29			Sample SA30		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
37K7BH		1,948.5	209.4	1.00	2,094.5	200.1	0.89
3MUXDM		1,730.0	-9.1	-0.04	1,861.0	-33.4	-0.15
4JBA2U		1,575.5	-163.6	-0.78	1,700.0	-194.4	-0.87
6WAJFM		1,918.5	179.4	0.86	2,079.5	185.1	0.83
78BBHM		2,000.0	260.9	1.25	2,185.0	290.6	1.30
BBDX4D		1,900.0	160.9	0.77	2,070.0	175.6	0.78
BFHYXF		1,493.8	-245.3	-1.17	1,632.1	-262.4	-1.17
FWEKQC		1,900.0	160.9	0.77	2,068.0	173.6	0.77
HM2AD4		1,778.0	38.9	0.19	1,945.5	51.1	0.23
JRR4NA	X	1,505.5	-233.6	-1.12	1,075.5	-818.9	-3.65
JZ3FPE	X	2.2	-1,736.9	-8.30	4.8	-1,889.6	-8.43
M4E8N6		1,249.5	-489.6	-2.34	1,360.0	-534.4	-2.38
M8FBHD		1,557.5	-181.6	-0.87	1,685.5	-208.9	-0.93
NVE8P4		1,684.0	-55.1	-0.26	1,837.0	-57.4	-0.26
TVD9CW		1,879.0	139.9	0.67	2,033.0	138.6	0.62
UDCGAV		1,921.5	182.4	0.87	2,090.5	196.1	0.87
V2TTAT		1,568.9	-170.3	-0.81	1,712.8	-181.6	-0.81
WPK6ZV		1,900.5	161.4	0.77	2,081.0	186.6	0.83
XCQ42Z	*	1,560.0	-179.1	-0.86	1,770.0	-124.4	-0.56

**Research Property Consensus Value**

Consensus Average                      1,739.13 uS/cm    1,894.43 uS/cm

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

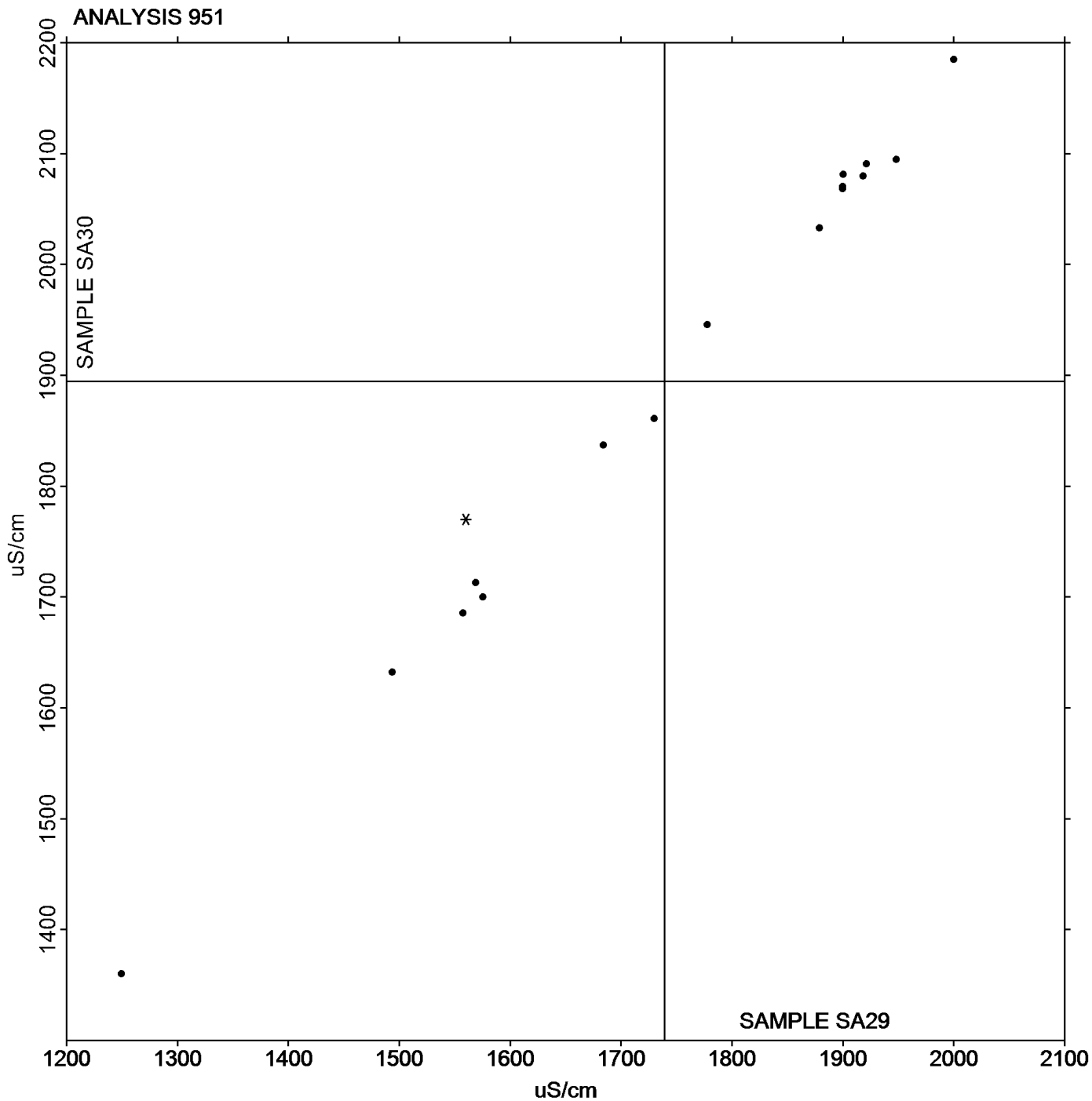
*This consensus average is based on 17 reporting participants.*

**Wines tested:** SA29: Red Moscato; SA30: Sweet Red

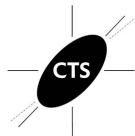
**Comments on Assigned Data Flags for Test #951**

JZ3FPE (X) - Extreme data.

JRR4NA (X) - Data for sample SA30 are low. Inconsistent within the determinations of both samples.



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 SA29			Sample SA30		
		Lab Mean	Diff from Target Value	% Diff from Target Value	Lab Mean	Diff from Target Value	% Diff from Target Value
2MVMMQ		105.0	-10.9	-0.83	141.0	-22.7	-1.26
4JBA2U		105.8	-10.0	-0.77	158.0	-5.6	-0.31
4ZGGFV		120.0	4.1	0.32	164.0	0.3	0.02
BBDX4D		106.0	-9.9	-0.75	152.5	-11.2	-0.62
F2PX9B		138.0	22.1	1.69	186.0	22.3	1.24
HM2AD4	X	231.0	115.1	8.79	164.0	0.3	0.02
M8FBHD	X	0.1	-115.8	-8.84	0.1	-163.6	-9.12
RAJZKV		108.5	-7.4	-0.56	156.5	-7.2	-0.40
RECWB9		133.0	17.1	1.31	195.0	31.3	1.74
ZVDCCZ		110.5	-5.4	-0.41	156.5	-7.2	-0.40

Research Property Consensus Value

Consensus Average

115.85 mg/L

163.69 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 8 reporting participants.*

**Wines tested:** SA29: Red Moscato; SA30: Sweet Red

**Comments on Assigned Data Flags for Test #952**

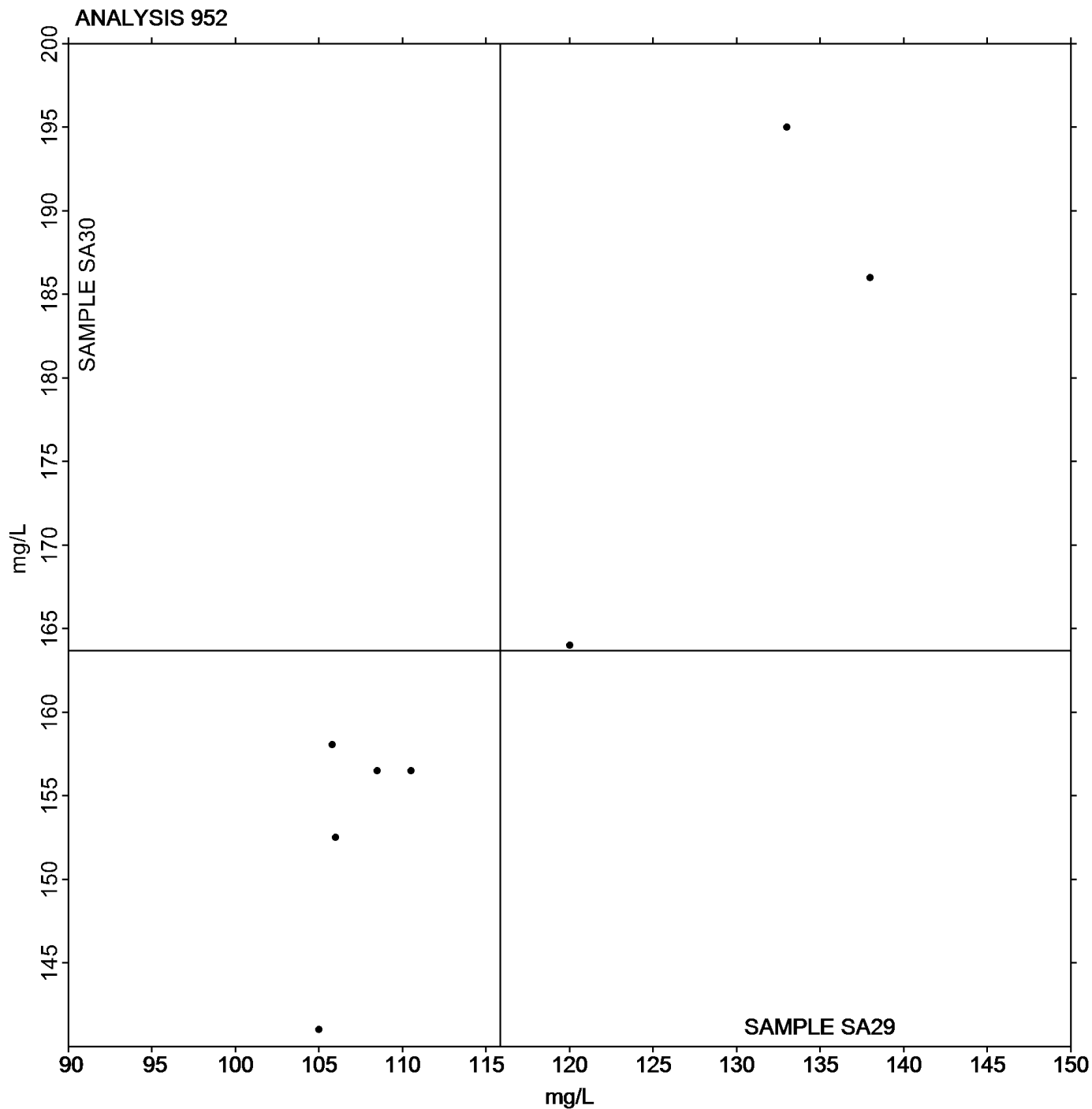
M8FBHD (X) - Extreme data.

HM2AD4 (X) - Extreme data for Sample SA29.



Analysis 952

Research Property: Methanol Content



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-