Verification of Quantitative Methods

Purpose	**To show that the instrument is fit for use after completion of annual preventative maintenance.**
Analyte	**Ethanol**
Unit of Measure	**g/100 mL**
Lowest Calibrator Concentration	**0.010 g/100mL**
Highest Calibrator Concentration	**0.500 g/100 mL**
Primary Matrix	**Blood**
Secondary Matrices	**Alcoholic Beverages and Other Liquid Specimens**
Analyst Performing Verification Study	**Melissa Henry**
Reviewer	**Kayla M. Baylor**
Start Date	**February 20, 2026**
Completion Date	**February 20, 2026**
Instrument	**BAC-2**
Method	**BAC.M**

Verification Approval

Analyst: Melissa Henry Digitally signed by Melissa Henry Date: 2026.03.04 15:50:18 -06'00' 03/04/2026
Date

Reviewer: Kayla M. Baylor Digitally signed by Kayla M. Baylor Date: 2026.03.04 14:44:20 -06'00' 03/04/2026
Date

Verification Study — BIAS AND PRECISION

Analyte: **Ethanol**
Units: **g/100 mL**
Instrument: **BAC-2** **FID1**

Analyst: **Melissa Henry**
Study Dates: **2/20/2026 to 2/20/2026**
Matrix: **Blood**

Batch Name	Run Order	Low QC	Blood QC A	Blood QC B	High QC
	Target Concentration (g/100mL):	*0.0800*	*0.0794*	*0.1917*	*0.4000*
BAC_20260220_MH	1	0.0782	0.0802	0.1864	0.3979
	2	0.0782	0.0772	0.1894	0.3981
	3	0.0784	0.0760	0.1889	0.4004
Within Run	**Mean**	**0.0783**	**0.0778**	**0.1882**	**0.3988**
	SD	**0.0001**	**0.0022**	**0.0016**	**0.0014**
	%CV	**0.15%**	**2.78%**	**0.85%**	**0.35%**
	% Bias	**-2.17%**	**-2.02%**	**-1.81%**	**-0.30%**

Comments:

Acceptance Criteria: **%Bias: ≤5% if target concentraton is > 0.05 g/100mL**
≤10% if target concentraton is ≤ 0.05 g/100mL
Within-Run %CV ≤10%

Verification Study — BIAS AND PRECISION

Analyte: **Ethanol**
Units: **g/100 mL**
Instrument: **BAC-2** **FID2**

Analyst: **Melissa Henry**
Study Dates: **2/20/2026 to 2/20/2026**
Matrix: **Blood**

Batch Name	Run Order	Low QC	Blood QC A	Blood QC B	High QC
	Target Concentration (g/100mL):	*0.0800*	*0.0794*	*0.1917*	*0.4000*
BAC_20260220_MH	1	0.0793	0.0814	0.1860	0.3984
	2	0.0795	0.0768	0.1886	0.3983
	3	0.0779	0.0755	0.1885	0.4026
Within Run	**Mean**	**0.0789**	**0.0779**	**0.1877**	**0.3998**
	SD	**0.0009**	**0.0031**	**0.0015**	**0.0025**
	%CV	**1.10%**	**3.98%**	**0.78%**	**0.61%**
	% Bias	**-1.38%**	**-1.89%**	**-2.09%**	**-0.06%**

Comments:

Acceptance Criteria: **%Bias: ≤5% if target concentraton is > 0.05 g/100mL**
≤10% if target concentraton is ≤ 0.05 g/100mL
Within-Run %CV ≤10%

SUMMARY OF VERIFICATION PERFORMANCE

Analyte: **Ethanol**
Units: **g/100 mL**
Instrument: **BAC-2**

Analyst: **Melissa Henry**
Study Dates: **2/20/2026 to 2/20/2026**
Matrix: **Blood**

Failed Runs (include dates/reasons):

Date	Reason
N/A	N/A

Deviations from SOP: N/A

Notes: N/A

Conclusion: **BAC-2 is fit for analysis of ethanol casework.**

Date	Section	Previous	Changed to	Reason	By whom
8/24/2027	Cover Pages (B18,C18)	Validation Approval	Verification Approval	Corrected to match form	KB/DS
	Performance Summary (Row 2)	Summary of Validation Performance	Summary of Verification Performance	Corrected to match form	