Verification of Quantitative Methods

Purpose	**To show the instrument is fit for use after completion of annual preventative maintenance and replacing both columns**
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	**Kayla M. Baylor**
Reviewer	**Melissa Henry**
Start Date	**February 25, 2026**
Completion Date	**February 25, 2026**
Instrument	**BAC -1**
Method	**BAC.M**

Verification Approval

Analyst: Kayla M. Baylor Digitally signed by Kayla M. Baylor Date: 2026.03.04 14:34:16 -06'00' 03/04/2026
Date

Reviewer: Melissa Henry Digitally signed by Melissa Henry Date: 2026.03.04 15:51:52 -06'00' 03/04/2026
Date

Verification Study — BIAS AND PRECISION

Analyte: **Ethanol**
Units: **g/100 mL**
Instrument: **BAC-1** **FID1**

Analyst: **Kayla M. Baylor**
Study Dates: **2/25/2026 to 2/25/2026**
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_20260225_KB	1	0.0782	0.0774	0.1849	0.4040
	2	0.0790	0.0772	0.1831	0.3966
	3	0.0798	0.0757	0.1866	0.4049
Within Run	**Mean**	**0.0790**	**0.0768**	**0.1849**	**0.4018**
	SD	**0.0008**	**0.0009**	**0.0018**	**0.0046**
	%CV	**1.01%**	**1.21%**	**0.95%**	**1.13%**
	% Bias	**-1.25%**	**-3.32%**	**-3.56%**	**0.46%**

Comments: N/A

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-1** **FID2**

Analyst: **Kayla M. Baylor**
Study Dates: **2/25/2026 to 2/25/2026**
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_20260225_KB	1	0.0789	0.0775	0.1854	0.4029
	2	0.0795	0.0773	0.1837	0.3965
	3	0.0803	0.0759	0.1869	0.4047
Within Run	**Mean**	**0.0796**	**0.0769**	**0.1853**	**0.4014**
	SD	**0.0007**	**0.0009**	**0.0016**	**0.0043**
	%CV	**0.88%**	**1.13%**	**0.86%**	**1.07%**
	% Bias	**-0.54%**	**-3.15%**	**-3.32%**	**0.34%**

Comments: N/A

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-1**

Analyst: **Kayla M. Baylor**
Study Dates: **2/25/2026 to 2/25/2026**
Matrix: **Blood**

Failed Runs (include dates/reasons):

Date	Reason
N/A	N/A

Deviations from SOP: N/A

Notes: N/A

Conclusion: **BAC-1 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	