3.1 Introduction – No Activities

3.2 Orientation Activities

		Trainee Initials		Completion Date		Mentor Initials
a.	Read Forensic Alcohol Analysis SOP, TP101, 1.0 Introduction and 2.0 Operations.					

3.3 Receiving Activities

		Trainee Initials		Completion Date		Mentor Initials
a.	Read Forensic Alcohol Analysis SOP, TP101, Section 6.0 Sample Management, subsection 6.1, 6.1.2, 6.1.3 and 8.0 Procedure, subsection 8.1.1					
b.	Observe the training mentor perform the process of receiving of samples.					
c.	Receive samples under the supervision of the training mentor.					
d.	Answer the questions					

3.4 Blood Analysis Training – Sample Preparation

		Trainee Initials		Completion Date		Mentor Initials
a.	Read Forensic Alcohol Analysis SOP, TP101, Section 6.0 Sample Management, subsection 6.1.1 and 8.0 Procedure					
b.	Read Forensic Alcohol Analysis SOP, TP101, Section 13.2.1, Diluter Performance Check					
c.	Perform the Diluter Performance Check procedure outlined in Forensic Alcohol Analysis SOP, Section 13.2.1					
d.	Describe the difference between accuracy and precision.					

3.4 Blood Analysis Training – Headspace Gas Chromatography

		Trainee Initials		Completion Date		Mentor Initials
a.	Read Garriott Chapters 1, 5, 9, 10 and 11					
b.	Read Forensic Alcohol Analysis SOP, TP101, Sections 4 – 9.					
c.	Observe the mentor (or other qualified analyst) do one run of casework samples for GC analysis.					

d.	Perform the procedure in section 13.1.1.1 on both the Trace GC Ultra and Trace GC 1310. Complete an Individual Volatile Retention Time Determination form, TF201.6, for each different column and submit with supporting documentation.					
e.	Perform an accuracy and precision run on the Trace GC Ultra (see 13.1.1.2).					
f.	Perform an accuracy and precision run on each column of the Trace GC 1310 (see 13.1.1.2).					
g.	On the Trace GC Ultra, perform two (2) different valid runs of analysis using the method and procedures from the Forensic Alcohol Analysis SOP, TP101. Each run shall contain ten (10) replicates of a previously quantitated secondary alcohol standard and three replicates of a Cerilliant standard.					
h.	On the Trace GC 1310, perform two (2) valid runs, one on each column, using the method and procedures from the Forensic Alcohol Analysis SOP, TP101. Each run shall contain ten (10) replicates of a previously quantitated secondary alcohol standard and three replicates of a Cerilliant standard.					
i.	Competency test: Conduct two valid GC analysis runs. Each run shall contain one replicate of 30 previously analyzed casework samples. The mean of the trainee's analyses must agree within 0.010% (w/v) of the qualified analyst's results.					
j.	Review the operator's manuals for the current instrument software, gas chromatographs and headspace autosamplers.					
k.	Read the references (as available) and answer the questions					

Upon completion of the activities above, the Forensic Lab Manager may provide the trainee with an application to the North Carolina Department of Health and Human Services for qualification as a chemical analyst.

3.5 Reporting Activities

		Trainee Initials		Completion Date		Mentor Initials
a.	Read Garriott Chapter 12					
b.	Read Forensic Alcohol Analysis SOP, TP101, Sections 9 – 11.					
c.	Observe analysts perform the steps listed below:					
	☐ Technical review of a blood alcohol run					
	☐ Verification and analyst signature					
	☐ Entry of results into Sample Information Log					
	☐ Preparing a written report					

	☐ Technical and administrative peer review ☐ Notarizing reports ☐ Distributing reports					
d.	Prepare a written report					
e.	Complete the WPCL FAA Uncertainty of Measurement Training					
f.	Review course material from "Introduction to Measurement Uncertainty in Forensic Chemistry and Toxicology." RTI International (Online) or enroll in online course if available.					
g.	Competency Test (written): Complete the comprehensive written examination provided by the training mentor.					

3.6 Court Testimony (Analysis) Activities

		Trainee Initials		Completion Date		Mentor Initials
a.	Read the Court Testimony Training SOP, QP102.9.1, Sections 1.0 – 4.2.					
b.	Read the references (as available)					
c.	Prepare a *Curriculum Vitae* (CV) for yourself. Use other analysts' CVs as a template/guide for yours.					
d.	Answer the questions					
e.	Participate in a mock trial(s) in conjunction with your training mentor which deal with the following aspects of testimony: • *Voir dire* • Chain of custody • Forensic alcohol analysis					
f.	Participate in a mock trial(s) in conjunction which will encompass all aspects of a potential trial setting. As available, mock trials will include role players to serve as judges, attorneys, and jurors.					
g.	Observe another analyst's testimony whenever possible.					
h.	Be prepared to verbally answer the direct examination questions.					

Upon satisfactory completion of training modules 3.1 – 3.6, the forensic chemist may be authorized by the Forensic Lab Manager to testify to the accuracy and reliability of blood alcohol analysis and results.

NOTE: A forensic chemist may be required to give testimony regarding blood alcohol analysis prior to observing another forensic scientist's testimony. However, participation in a moot court exercise is required prior to real court testimony.

Revision Table

Revision #	Effective date	Revised by	Description of Revisions
Original		B. Pridgen	
#1	01/24/2012	B. Pridgen	Updated reporting activities to include check box items to be completed and adding completion of a written report as part of training.
#2	12/17/2013	B. Pridgen	Changed header and footer. Updated to comply with TP101, Section 3
#3	12/19/2014	B. Pridgen	Addition of steps in 3.4 and 3.5 to match training requirement in updated FAA SOP

Authorization

This Standard Operating Form, Revision Issue #3, has been approved and authorized by:

Bethany P. Pridgen, MFS Forensic Lab Manager	Date
Ralph M. Evangelous Chief of Police	Date