

**Section 1 - Personnel capability checklist for laboratory procedures****QUARTZ PURITY TESTING  
High Level Lab**

During training, each person who will be working in the lab needs to complete this list with initials as they master skills and gain knowledge. Only after this list is complete, can a new user work alone in the lab.

NAME: \_\_\_\_\_

	<b>Item</b>	<b>Date</b>	<b>Personnel initial</b>	<b>Trainer initial</b>
<b>SAFETY PROCEDURES INFORMATION</b>	Understand the primary hazards associated with exposure to concentrated HF and have read the MSDS.			
	Understand the proper personal protective gear to wear for each step in the laboratory.			
	When do you need to wear goggles?			
	Understand the meaning and importance of the blue, yellow and green sections of the lab.			
	Where is the first aid kit?			
	Where is the safety shower?			
	Where is the eyewash?			
	Know the meaning of red and yellow alarms.			
	Understand why we always use spill trays when pouring any chemicals.			
	Understand why any and all acid use must be done in a hood.			
	Know the safe working area of the hood deck.			
	Understand why the hoods and lab counters must be kept free of clutter.			
	Understand why unattended operation labels on the hoods and the vestibule are critical for safety			
	Where do you find hot plate temperatures?			
	Where do you find cleaning instructions for lab ware?			
	Know the 4 important things to do that preserve the Eppendorf repipettors (never leave in the hood, store vertically in open air, and push tabs before inserting tips)			
	Understand how to make up the mixed HF/H <sub>2</sub> SO <sub>4</sub>			
	When and where do you wash your hands after working in the lab?			
	When do you change the sticky matts?			

<b>QUARTZ TESTING</b>	Understand the importance of quartz testing and the general principle behind the method			
	Know to save after every mass entry into the spreadsheet			
	Know what equipment to use and where it is stored			
	Know how to set up batch sheet for quartz testing including getting samples in EXCEL order			
	Know how to weigh out samples and how to keep the balance clean			
	Know the importance of keeping beakers in order in the heating trays			
	Know how to operate the hot plate safely and what temperatures to use during different parts of the method			
	Know how to add HF and start a dissolution			
	Know how to remove the watch glasses safely and begin the evaporation stage			
	Know how to label tubes			
	Know how to add MilliQ water, vortex samples, and transfer samples into tubes			
	Understand the principle behind ICP-AES analysis			
	Understand the flow of samples through the lab and know what to do with samples after quartz testing			
	Know why using two hands with the repipettor is important			
	Know why releasing acid slowly from the repipettor is important			
	Know how to clean up after completing different parts of the method including how to clean the repipettor tip.			