

Perkin-Elmer 1100 Operating Procedure (Std Addition Option)

Turn ON instrument: (Green On/Off button) - wait for instrument to initialize

Press Element Select Element Z (Hg) should auto-detect with perkin-elmer lamp
Verify **Lamp Current** is set to 10 mA

Press Setup Wavelength automatically selects - verify
Energy should read between **60-80**
BG-Corr soft key should be selected - this enables the background correction option

Gain Press **Gain** button at anytime to optimize lamp electronics
Press once now to insure element and background energy are synchronized

Instrument setup:

Program Arrow down to **Replicates**, select 3, and push enter

Continuous Once this button has been selected, it is time to set the air and acetylene pressures, and light the flame.

Open **AA air valve** (should be set to **58-60 PSI**)
Open main **acetylene** tank valve (regulator should read **12-15 PSI**)

Flame On/Off Press this button and flame should light
Always aspirate millipore grade water when flame is on, and sample is not being read.

Run Select this key while continuing to aspirate blank (millipore water)
Select the **auto-zero softkey** to auto-zero the instrument with blank aspirating
Select **auto-zero softkey** again to verify it is reading zero

Read Select **Read** key while aspirating the blank and make sure it reads **zero**
Begin analyzing samples by aspirating each one for 10-20 seconds and selecting the **Read Key**
-Remember to aspirate millipore water between samples
-Record sample values - they can't be printed

When all samples have been read, aspirate with millipore water for several minutes before shutting down the instrument.

Instrument Shutdown:

Atom Contr Select this key, remove aspirating tube from water, and once all of the water has been aspirated, press the **Fame On/Off key**

Once the flame has gone out, shut off the **AA Air valve**, and close the **main valve on the acetylene tank (leave both regulators set where they are)**

Release the air and acetylene line pressure by doing the following:
Select **Check Gasses** soft key

Now select **Check F & O** (fuel and oxidant) to release pressure. You might have to push this button 2 or 3 times to release all of the pressure.

Press green On/Off button to turn instrument off!