

Thermo ICP-OES Protocol

Start Up:

Open valve on Argon tank. Pressure should read 90psi.
Allow instrument to purge for 10 minutes.
After purge, turn on chiller. Temperature should read 18.
Position pump tubing and set clamps on instrument.
Set clamp on autosampler rinse tubing.
Place sipper into manual rinse container.
Open iTeva software.
Open operating parameters by clicking on “torch” icon (lower right).
Click on “Instrument Status”.
Set pump rate to 50rpm and set nebulizer to “on”. Click “apply”.
Confirm that rinse water is pumping through tubing and that drain is properly working.
Ignite plasma. Allow instrument to stabilize (15 minutes).

Software:

Open “Analyst”

Select method from list or create a new method.

If using autosampler:

Turn on autosampler.

Select sequence tab.

Click on computer icon to connect.

Right click on “rinse” and select “go to rinse”.

Connect sample pump tube to autosampler aspirator.

Open “new” autosampler session.

From pull down menu, select sequence -> add.

Confirm correct rack is selected. Click ok.

Type in number of samples. Click ok.

Right click on autosampler session name, and select “auto locate all”.

Positions for standards and samples will be highlighted.

Click on start button to begin auto session.

Shutdown:

Turn off plasma by clicking on “torch” icon.
Connect sample pump tubing to manual rinse.
Start sample pump to flush tubing.
Remove sipper from rinse and allow to pump dry.
Set pump speed to zero.
Release tubing from pump.
Turn off chiller.
Release tubing from autosampler.
Allow a few minutes for Argon to purge, and then shut valve on tank.
Leave instrument ON.