

GILES CHEMICAL ~ PREMIER MAGNESIA

Company Procedure

Title: Prodigy ICP-OES Maintenance Number: L15-PR-100-066

Owner: John Safi Revision: 0

Effective Date: 7/24/2015 Page: 1 of 2



1.0 Purpose:

The purpose of this procedure is to establish a maintenance program for the Titrette bottle-top burrette used for USP analysis. This procedure will help to insure compliance with 21 CFR 211.67 'Equipment Cleaning and Maintenance'.

2.0 Scope:

This procedure applies to the Prodigy ICP-OES (S/N: 122-00152-1 Rev F) and will be performed at the intervals specified within this SOP or any time a drop in performance is noted.

3.0 Responsibility:

Quality Assurance Lab personnel or designee is responsible for performing this procedure.

4.0 Safety Considerations:

Appropriate PPE should be worn at all times including but not limited to steel-toed shoes, gloves (nitrile or latex), safety glasses, and a lab coat.

Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or community.

5.0 Materials/Equipment:

- Prodigy ICP-OES equipment and supplies
- Acetone
- Linear Lube
- DI-Water
- 400mL Beakers
- Filters
- Aqua Regia (1 HNO₃+3 HCl)

6.0 Procedure:

Daily-Check

In order to keep the Prodigy ICP-OES at peak performance, a daily maintenance check will be needed. The Prodigy ICP comes with an automated maintenance monitor. When maintenance is required, the maintenance button turns red. Clicking that button displays the status for all the maintenance procedures, with expired operations highlighted. To help guide you through required



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maintenance, each step is detailed with audio and visual support. Diagnostics provides more than 30 test points to ensure Prodigy is always running at peak performance.

The videos should be followed completely. After completing the scheduled maintenance, document name of maintenance on the *Maintenance Log (L15-FM-100-019)*.

Weekly-Torch Cleaning

- Take out two 400 mL beakers, one for Aqua regia and one for DI water.
- Submerge the torch in aqua regia for 2 hours and then place it in the DI water for 2 hours
- Inspect the torch for an cracks or damages to the quartz tip
- Let the torch completely dry before putting it back into the instrument.
- Document torch cleaning on *Maintenance Log (L15-FM-100-019)*

Monthly-Cleaning

- Wipe down the unit with a clean damp cloth or paper towel.
- Clean below the auto sampler and check for any spills or leaks.
- Document cleaning on *Maintenance Log (L15-FM-100-019)*

Annual- Maintenance

- A yearly calibration and instrument check will be performed by Teledyne Leeman support from a Teledyne Technician in person or through their remote diagnostics software.
- Document Calibration on *Maintenance Log (L15-FM-100-019)*

Notes-

- If more maintenance is required, Teledyne will provide expert service within 48 hours.
- Also Teledyne Leeman Labs offers trained specialist and chemists than can resolve most application, operation, maintenance, and trouble shooting issues over the phone.

7.0 Reference Documents:

Maintenance Log (L15-FM-100-019)

8.0 Change Information:

New Document