


Ion-pump hi-potting in CEBAF

Arne Freyberger

Operations Dept.
Accelerator Division

JLAB

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Accelerator Operations Department

1 Hi-potting in CEBAF

Not sure an official memorandum was ever transmitted. If it was, it stated:

Hi-potting Memorandum

The practice of hi-potting ion pumps in the CEBAF *cold regions* is terminated indefinitely. The CEBAF *cold regions* are defined as the beam vacuum space between the differential pump stations at the start and end of SRF sections. There are **four** cold regions in CEBAF; 0L02, 0L03-0L04, North Linac and South Linac.

The path forward for maintaining and monitoring the vacuum in the *cold region* include:

- Independent vacuum monitoring, use ion-pumps as pumps not gauges.
- Develop and demonstrate a procedure to re-establish vacuum gauging capability of ion-pumps that is particulate free and acceptable to SRF.
- Upgrade of the pumping systems that are compatible with the SRF particulate requirements and OPS monitoring needs.

Hi-potting elog entries since 2015-08

Date	elog #	Ion Pump	Comment
2016-08-22	3418662	0L03	Warm region between 0L02 and 0L03
2016-08-12		VIP1L1020	Waveguide
2016-07-21		VIP2L0850	Waveguide
2016-04-27		VIP3A17	Warm region, Arc3
2016-04-27		VIP3A16	Warm Region, Arc3
2016-04-27		VIP3A18	Warm Region, Arc3
2016-05-16		*VIP2L01*	Erratic readings, returned to "normal" on its own. DP station ion pump.
2016-03-16		VIP1L0840	Waveguide
2016-02-05	3375647	VIP2L24A/B	Hi-pot failed, damaged power supply
2015-10-21		VIP3D01	Warm region, Mott line
2015-08-12	3348260	North Linac	"hi potted various Ion Pumps"

DP Stations

What is the right procedure for the DP stations? Has the DP activation procedure been reviewed by SRF?