

# TRIUMF



TO: ISAC Operations

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FILE:

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CC: KJ

RE: MCIS Vacuum System

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We are presently using the Supernanogan ion source at OLIS, and expect it to stay online through the next series of runs. There is a known bug that causes all PLC data at MCIS to zero momentarily. This in turn causes the pump valve MCIS:PV1 and other vacuum devices to close. Reopening them is straightforward, with a couple of notes.

First, the InterMediate section between MCIS and IOS is roughed by the backing line and pumped by the adjacent volumes. To offset the virtual leak caused by the long roughing line, we have a hand valve installed close to the IM body and between it and CG0. Until we re-plumb this area, temporary measures are required, including a defeat. If the "PV1" trip occurs and good vacuum and operation were in place prior, then vacuum in the IM section will remain good for some time, notwithstanding the reading on IOS:CG0. **Provided that not a lot of time has passed, it is perfectly safe to reopen the gate valves on either side of the IM section once everything else is up.**

Second, it matters in which order those two gate valves are opened. **IOS:IV0 should be opened first.** MCIS:IV1 should be opened only when IOS:IG1 is acceptably low, usually in the lower 10-7 Torr range.

Thank you for all your help.