

LIGO HANFORD VACUUM SYSTEM

Hanford Checklist - Isolatable Volume Pumpdown

TO BE PERFORMED BY QUALIFIED VACUUM PERSONNEL ONLY.

This checklist specifies the actions to be taken to safely pump down an isolatable volume. Pump cart connections shall be completed prior to start of this procedure. If pumps are connected to a new AC hookup check rotation. Note that indicator lights may not be lit if there are bad connections or failed filaments. Use gauge indications to confirm status of valves and make note of the failed indicator.

Procedure:

A. Roughing(EDP200 and EH2600):

- 1. Check pump fluids. _____
- 2. Ensure that the Large valves are closed and locked out. _____
- 3. Open the six inch rough valve (less than 10 torr delta P.) _____
- 4. Check the status of small valves and other rough valves. _____
- 5. Check the annulus system. _____
- 6. **Ensure that optics suspension power is OFF.** _____
- 7. Check all doors and ports on and torqued. _____
- 8. Warm up the EDP200 for 30 minutes. _____
- 9. Ensure that the EH2600 control is in the "HAND" position. _____
- 10. Start the EH2600. _____

B. Stop Roughing

- 1. Close the 6 inch rough valve. _____
- 2. Shut down the EH2600. _____
- 3. After a 30 minute cooldown shut off the EDP200. _____

C. Final Pump Down (STPH2000C and QDP80)

- 1. Check pump fluids. _____
- 2. Ensure that the Large valves are closed and locked out. _____
- 3. Check that the pressures allow safe turbo cart operation. _____
- 4. Ensure that the "Safety Valve" is in closed (rough if needed) position _____
- 5. Start the QDP 80. _____
- 6. Check pump pressures to confirm proper operation. _____
- 7. Move the "Safety Valve" to the "rough" position. _____
- 8. Start the turbo. Wait for the speed to reach "normal" _____
- 9. Move the "Safety Valve" to "normal". _____
- 10. Check pump pressures. (Less than 10 torr delta P across valve) _____
- 11. Open the 10" gate valve slowly. _____
- 12. Monitor pressures. _____

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