



TOTALFLOW

Technical Bulletin128

Testing for sample flow on a BTU 8000

Totalflow Technical Bulletin

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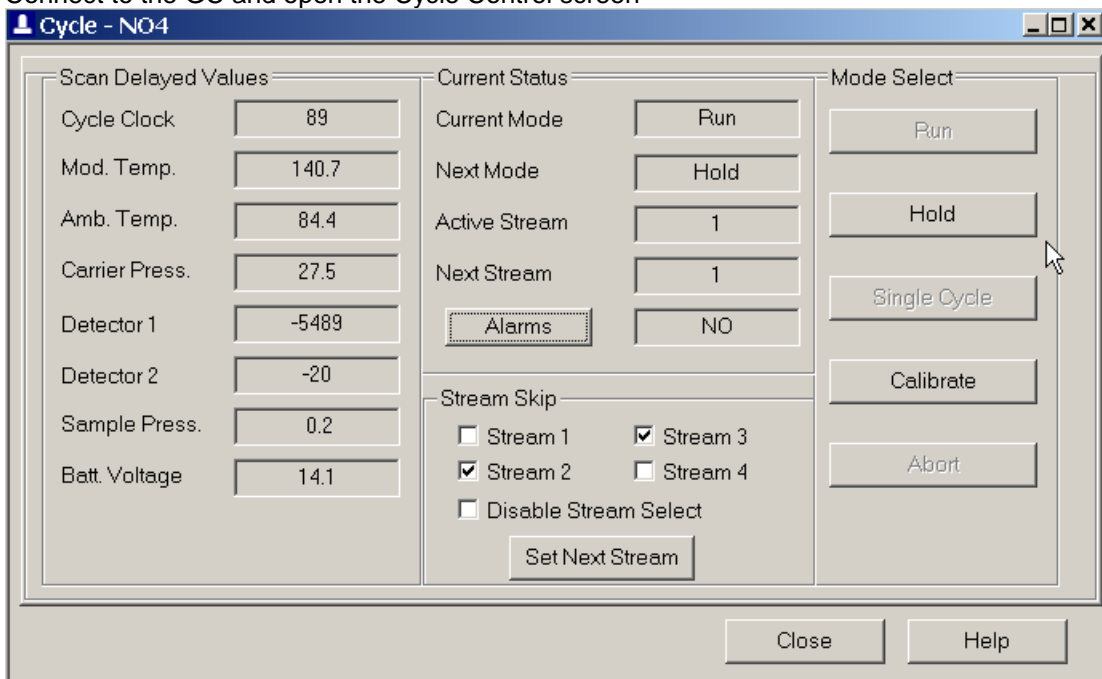
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Purpose

At times the sample vent path on the BTU 8000 may become blocked or flow through this path may become reduced. This can happen due to liquids that are not sufficiently removed from the sample stream or from sample vent lines becoming blocked. This is sometimes shown in extended cycle times or erratic un-normalized totals on all streams or an alarm of Low Sample Flow. It is at these times desirable to check the flow through the sample vent. This method shows how to use functions in the Manual operations screen to test the sample flow.

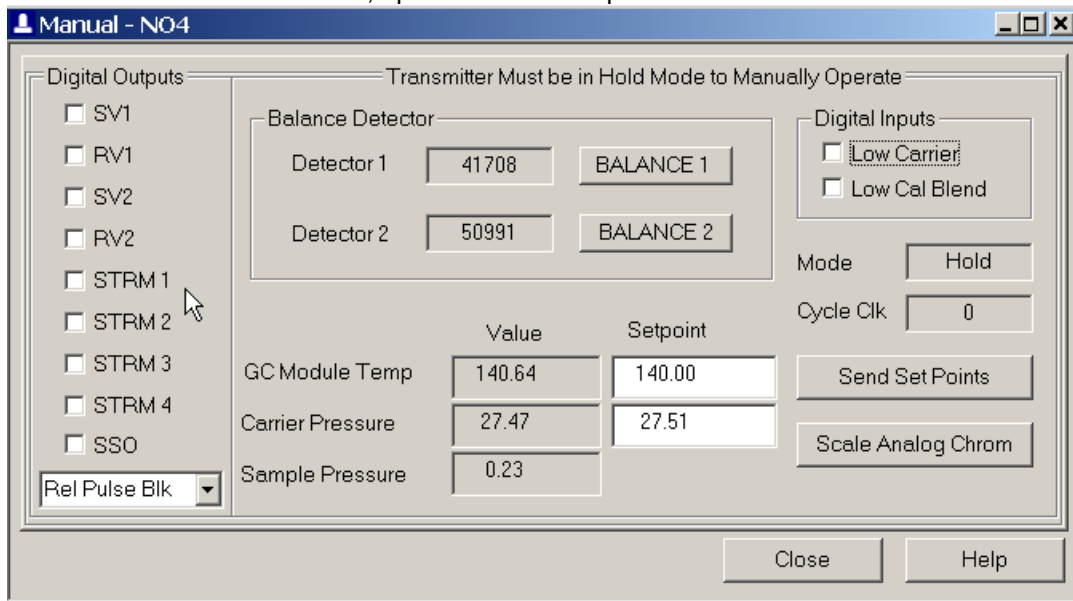
Description

1. Connect to the GC and open the Cycle Control screen

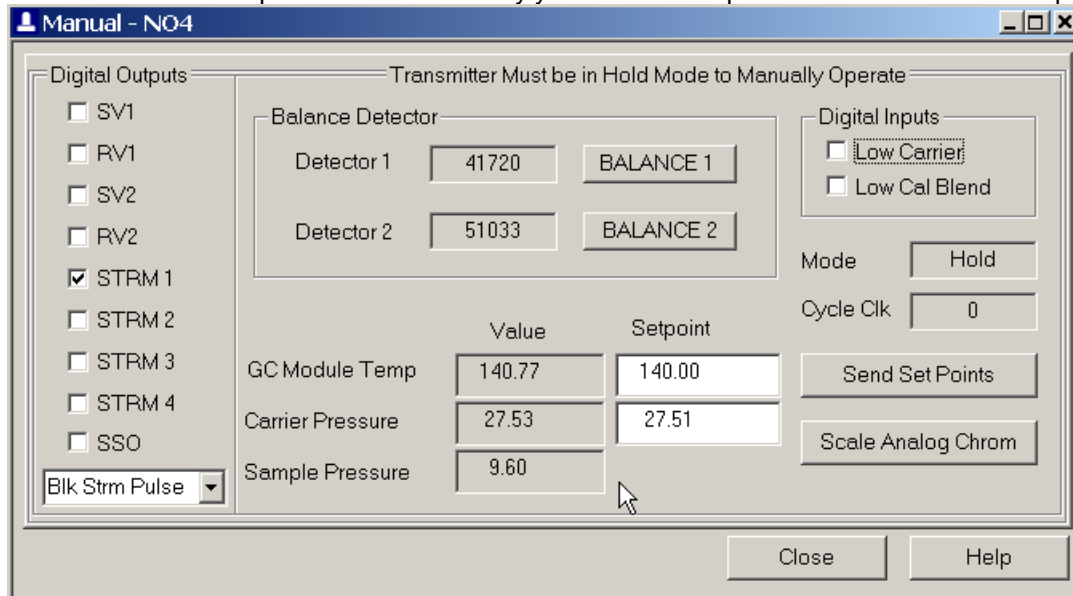


2. Place the GC in Hold mode

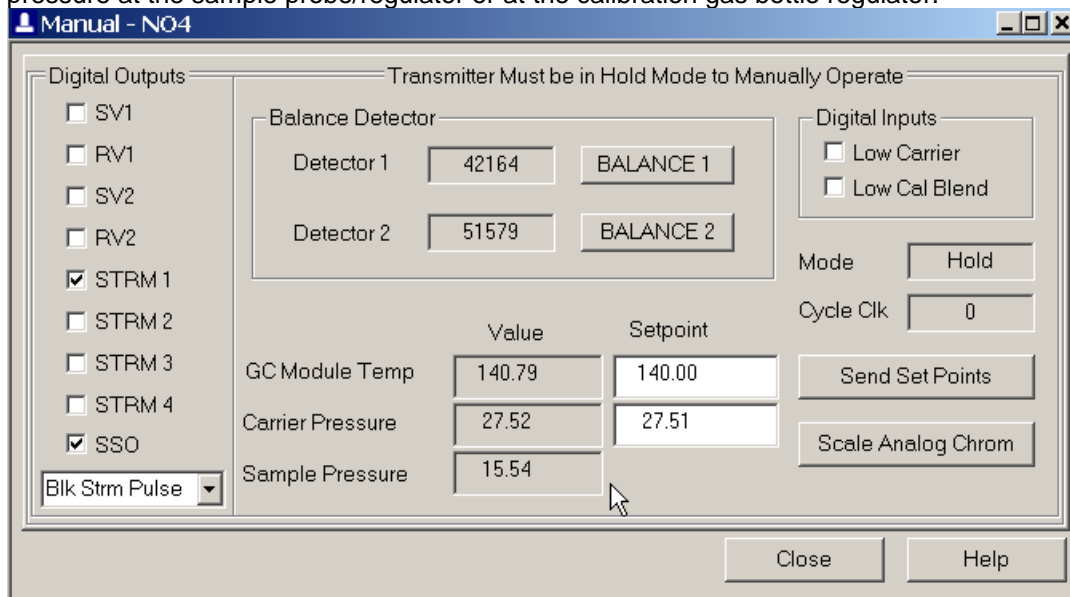
- Once the GC has entered hold, open the Manual Operations screen



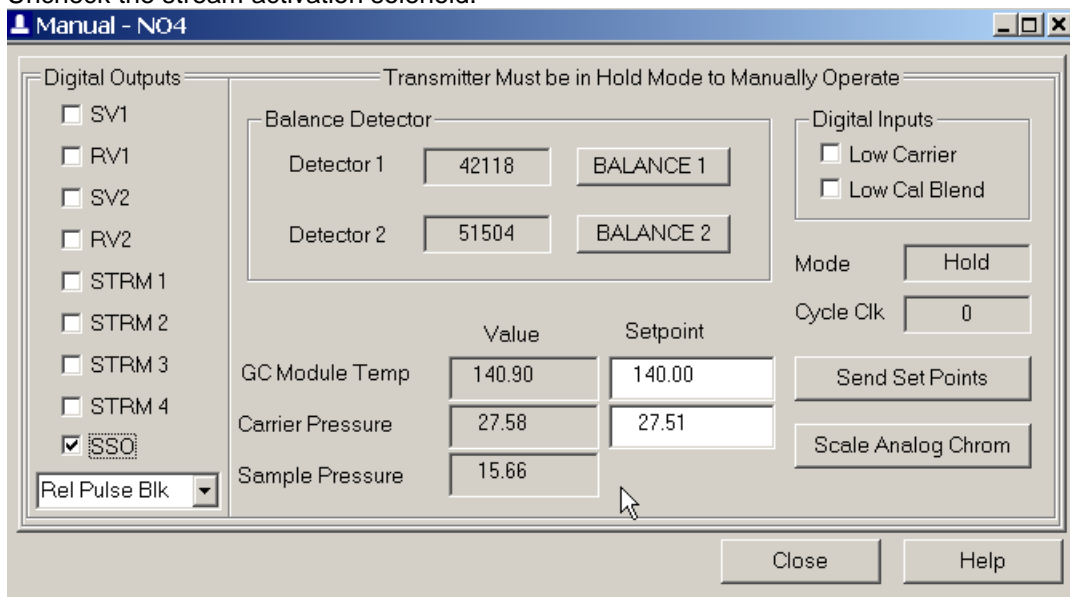
- To test a streams flowing pressure, check digital output that controls the Stream. (i.e Stream 1) and observe the Sample Pressure. Normally you will see this pressure between 9 and 12 psig.



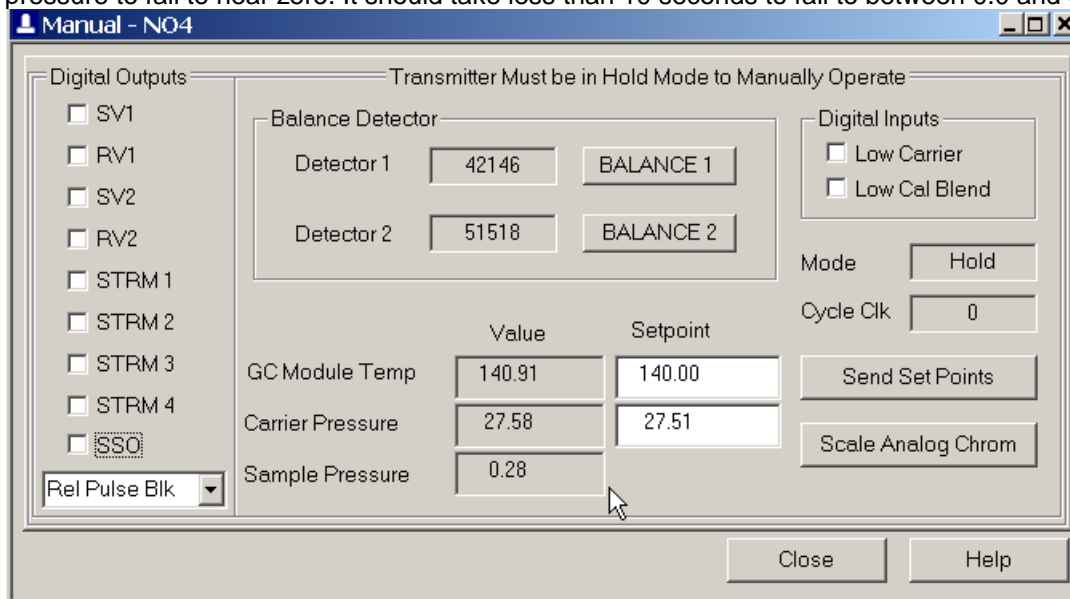
- To test a streams' blocked in pressure; select the SSO check box. You will observe that the stream pressure will jump up. This is the pressure that should be set to about 15psig. Adjust this pressure at the sample probe/regulator or at the calibration gas bottle regulator.



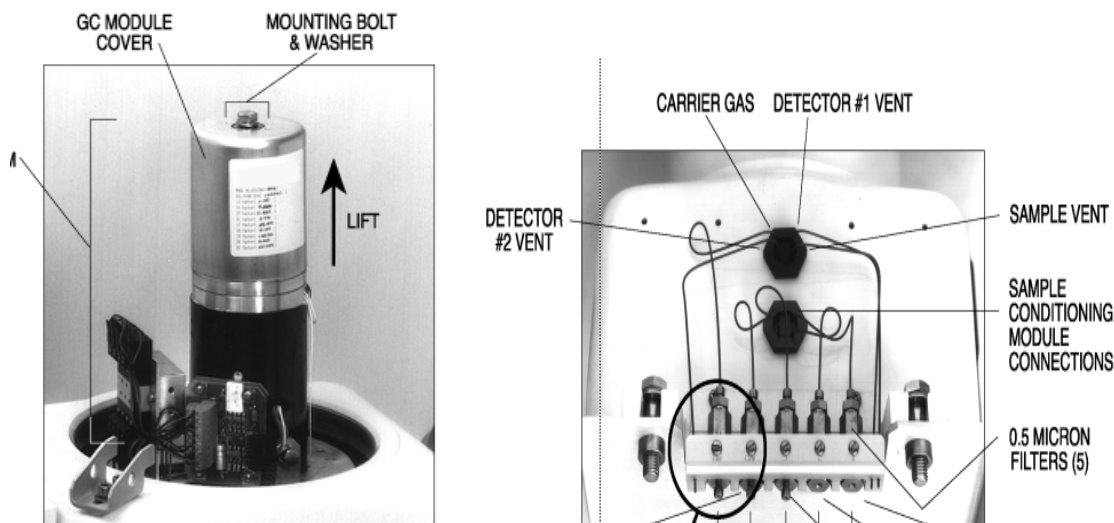
- Uncheck the stream activation solenoid.



- Uncheck the SSO to let the gas vent to atmosphere. Note how long it takes for the sample pressure to fall to near zero. It should take less than 10 seconds to fall to between 0.0 and 0.3.



- If it takes longer than 10 seconds to vent, you will need to check the sample vent line on the outside of the BTU transmitter for obstructions. You may need to remove the GC module from inside the BTU transmitter and blow out the sample vent line from the outside using helium or nitrogen. High pressure is not required for this operation. Use small piece of plastic tubing to slip over the outside of the sample vent line and apply no more than 25 psig.



- When you are finished blowing out the vent line make sure that all O-Rings are in place on the GC Module platform and replace the GC module. **DO NOT BLOW OUT THE VENT LINE WITH THE GC MODULE INSTALLED AS DAMAGE COULD OCCUR.**
- It is possible that the blockage could be in the GC module itself. In this case the GC Module will need to be replaced, as there are no user serviceable parts in the GC Module.
- When finished, uncheck any checked digital outputs and place the GC back into run mode.