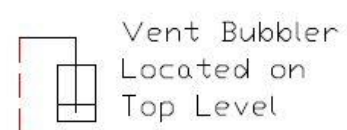


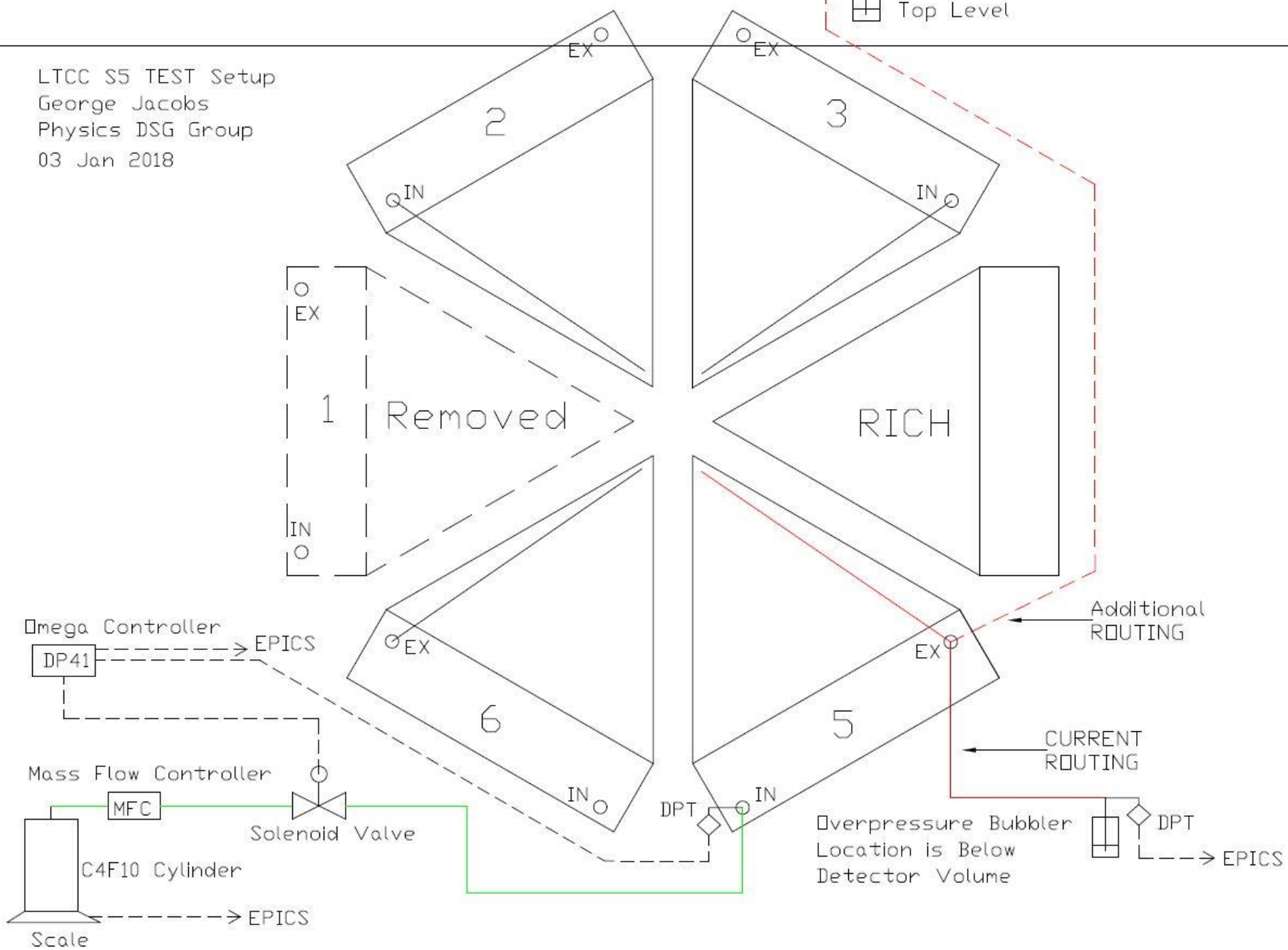
LTCC Single Sector Test Status

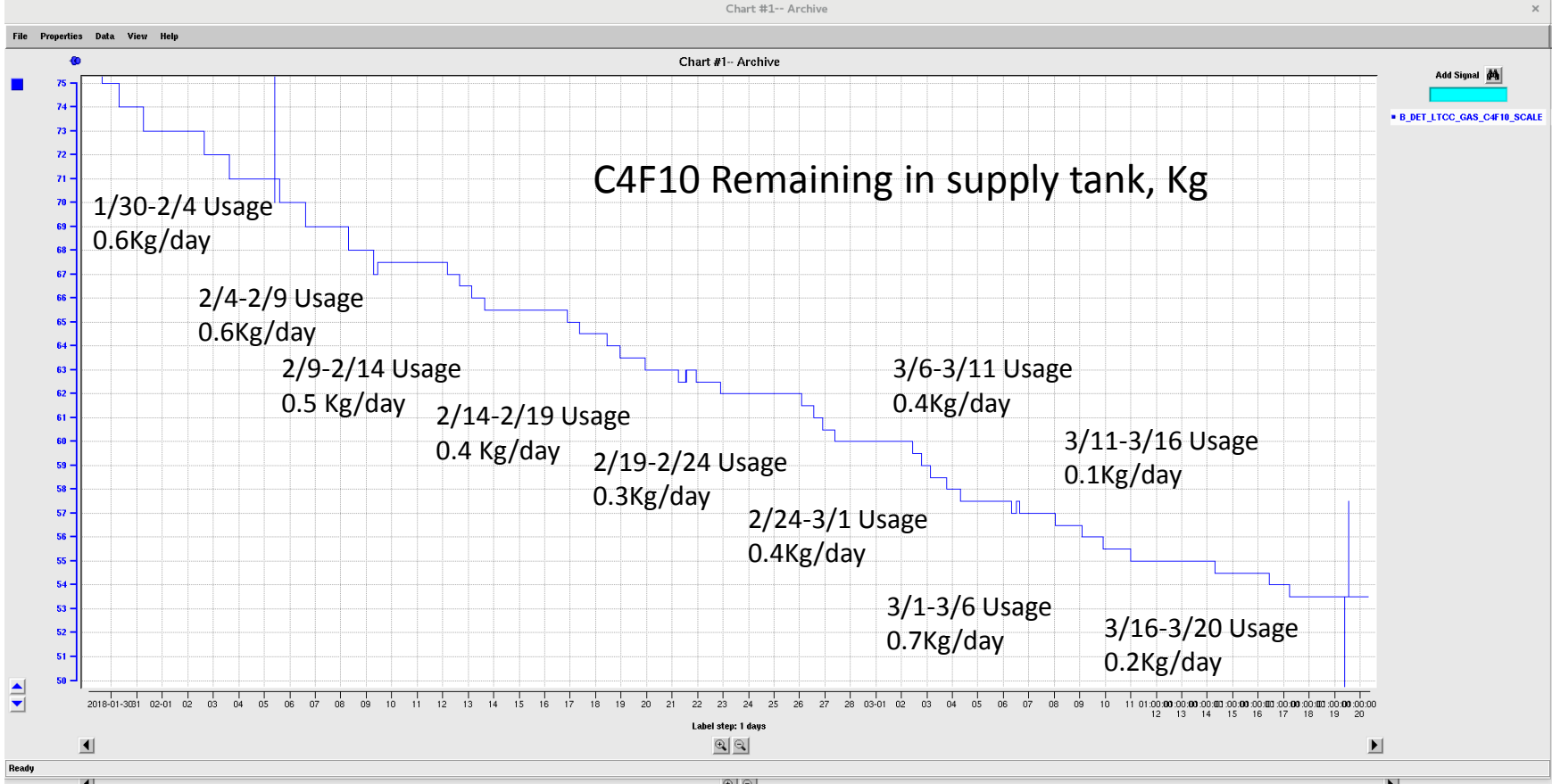
Update - 20 March 2018

LTCC Single Sector Test



LTCC S5 TEST Setup
George Jacobs
Physics DSG Group
03 Jan 2018





Current Status - The strip chart indicates that the detector has been full since 29 Jan.

22 Jan - gas flow started @ 0.5 slm

29 Jan - Detector volume indicates it is FULL

31 Jan - Gas supply programmed to shut off when pressure reaches 2.02"wc and turn back on when it falls to 1.97"wc

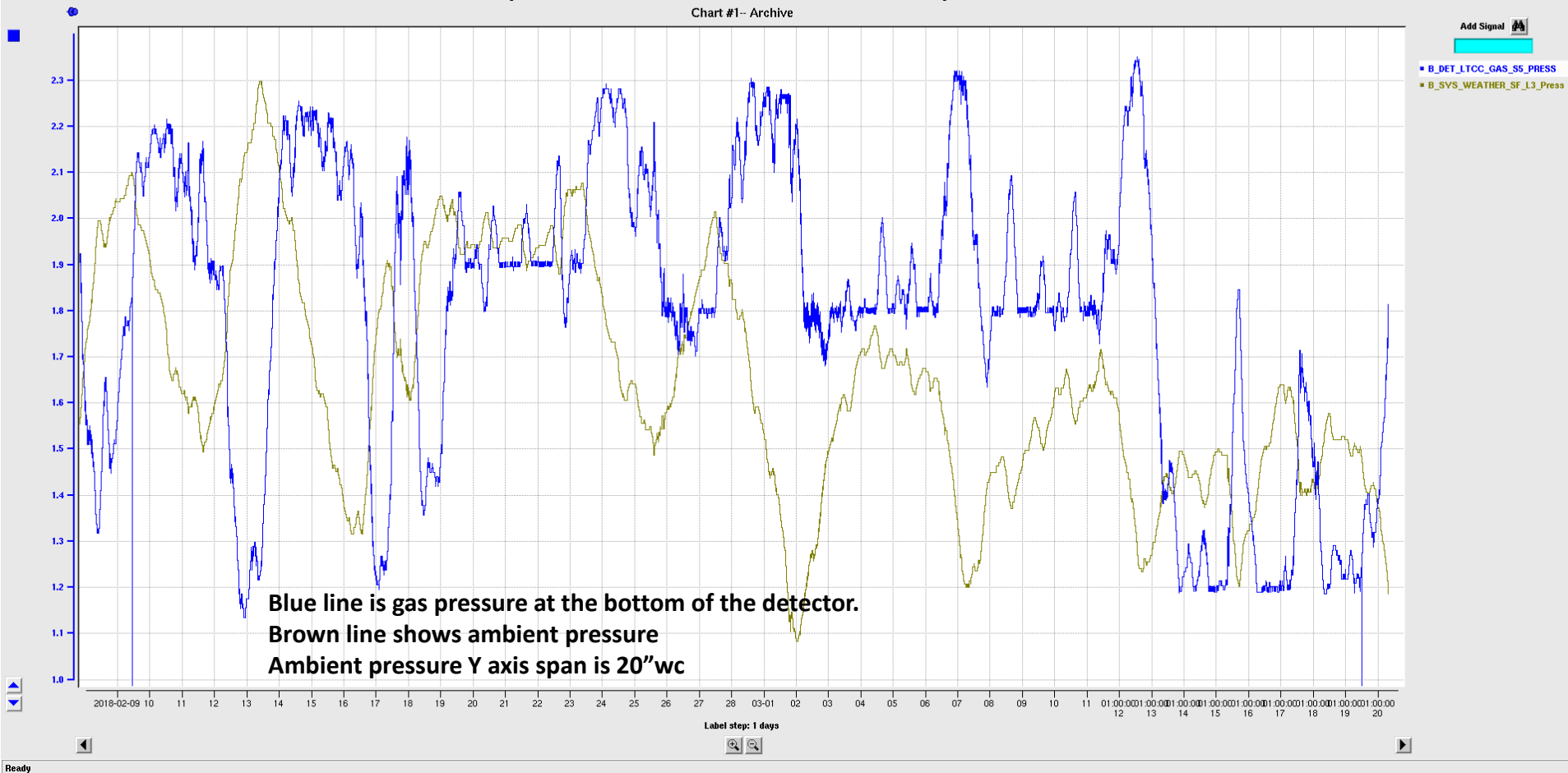
09 Feb -Gas supply reprogrammed to shut off when pressure reaches 1.97"wc and turn back on when it falls to 1.92"wc

23 Feb - Gas supply reprogrammed to shut off when pressure reaches 1.87"wc and turn back on when it falls to 1.82"wc

12 Mar - Gas supply reprogrammed to shut off when pressure reaches 1.47"wc and turn back on when it falls to 1.42"wc

13 Mar - Gas supply reprogrammed to shut off when pressure reaches 1.27"wc and turn back on when it falls to 1.22"wc

Detector pressure vs Hall B ambient pressure



There are 2 components that make up the gas usage rate.

- 1) Gas leakage from the detector volume
- 2) Gas loss out the bubbler due to ambient pressure changes

Current Status

Overall gas usage is dominated by gas lost out the bubblers due to ambient pressure changes.

More time is needed to determine the effect of the gas pressure control setpoint on gas usage.

A total of 53 Kg of C4F10 gas remains in the supply tank as of 20 March 2018.

Moving Forward

What happens to the 75 kg of gas remaining in the detector volume, post run?

Is there a plan to eventually recover gas remaining in the detector volume?

Will the LTCC be operated for the next experiment?