

CO2 Leak Progress

University of Minnesota

Yan Ke

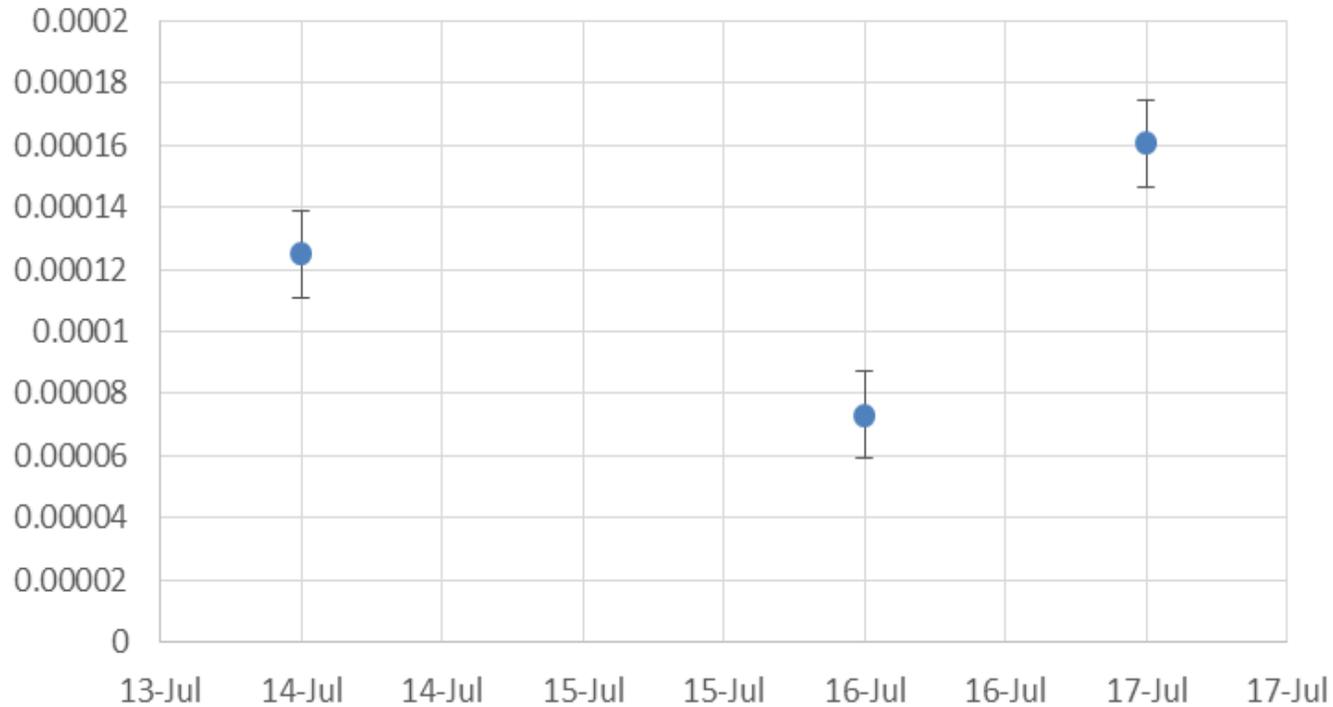
Jul 17th 2015

Apparatus progress

- I cut one of the gray phone wire into two and make both of them working, We can run 3 chambers now without any problem.
- New wires coming on Monday
- Received Dan's python code. It will be working soon.
- st00130 and st00218 has been damaged by high pressure test(60psi absolute). I'll try 45psi next time.

Leak test progress

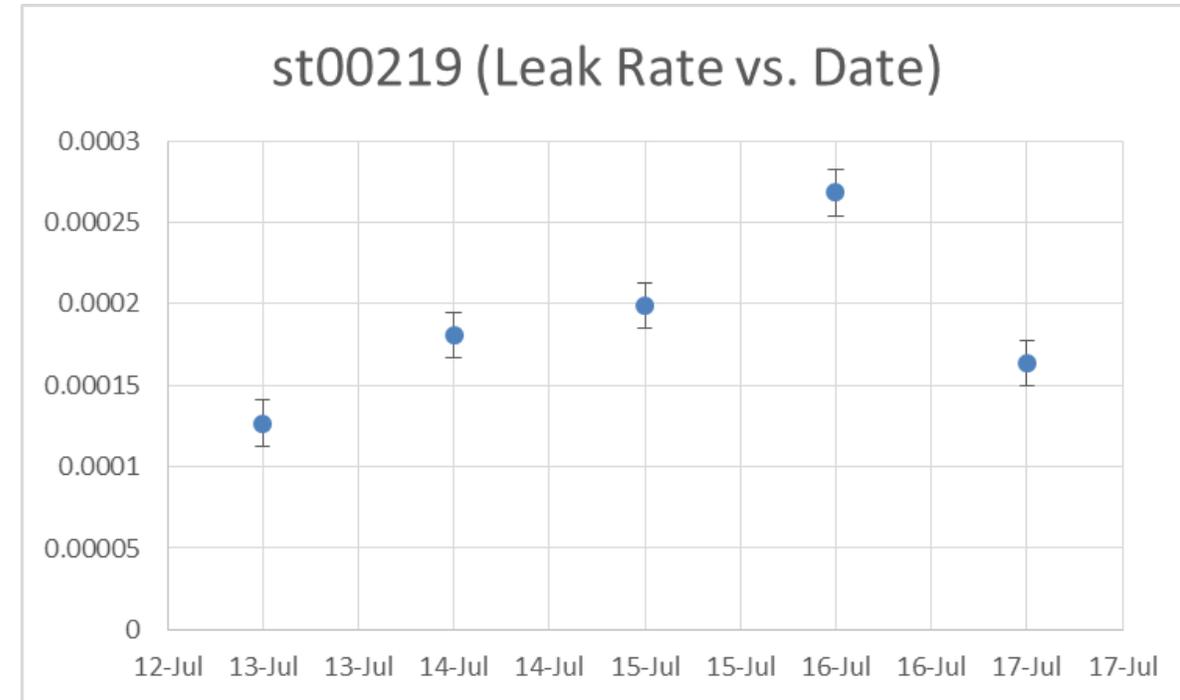
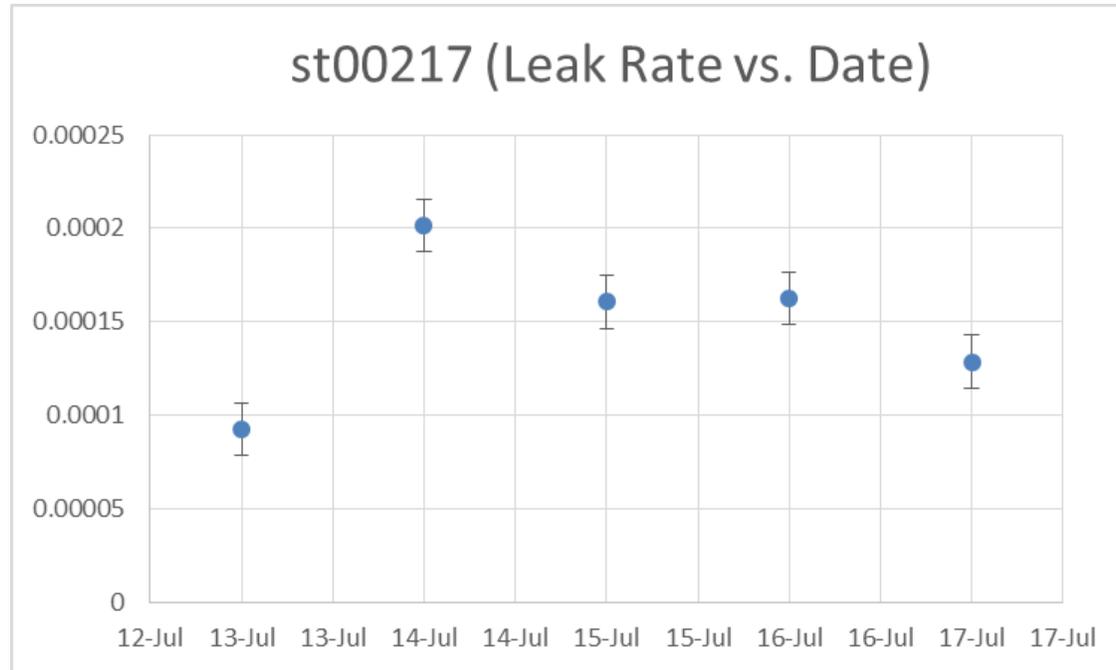
st00216 (Leak Rate vs. Date)



- New straw st00216, after the first time I tested it, I flush it with N₂. After I tested it the second time, I didn't do anything then tested it once again today (third time).
- CO₂ leave in the straw after measurement seems to be one of the reasons of "memory". Remove CO₂ will make it "amnesia".
- Note: I forgot depressurize it after the test Jul 14th until Jul 15th morning. So I didn't test it on Jul 15th

Leak test progress

- New straw st00217 and st00219 has been measuring day by day as normal except they were flushed with N2 on Jul 16th after the measurement



- The reason of increasing leak rate before Jul 17th
 - Guess 1: Guess 2: CO2 leave inside the straw cause the viton keeps bathing in CO2
 - Guess 2: Straw flushing with co2 before each measurement is not enough.
 - Guess 3: CO2 left inside the straw make the straw leaks easily.
- More guess on this?
- Will test each guess next week.