

# Leak test update

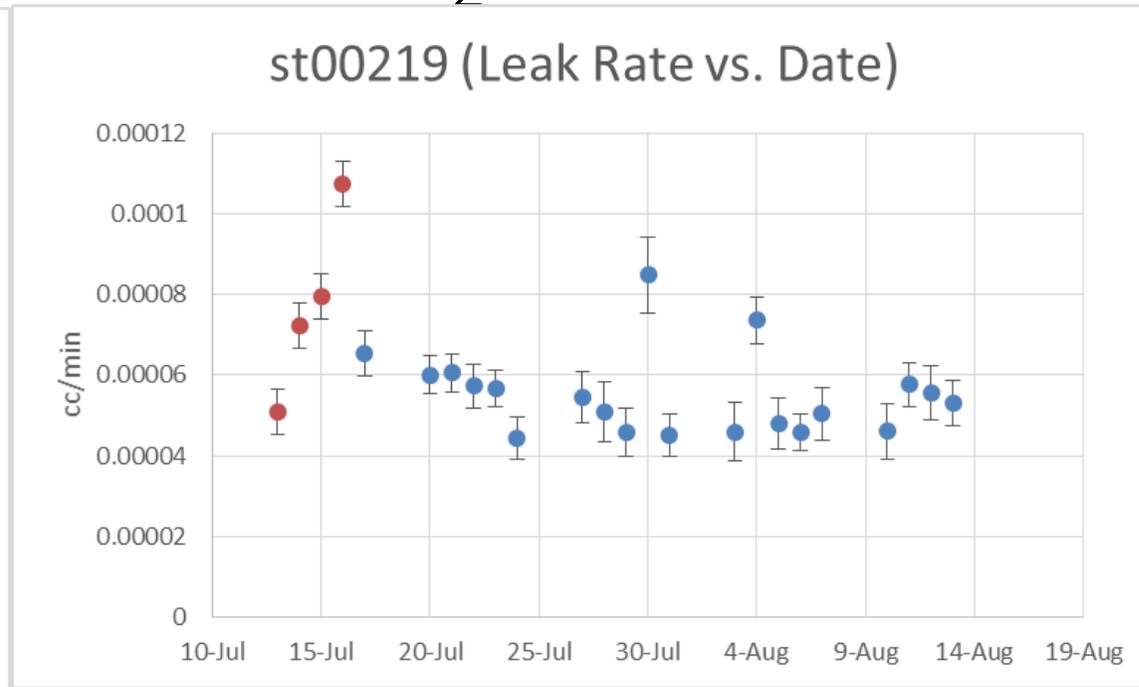
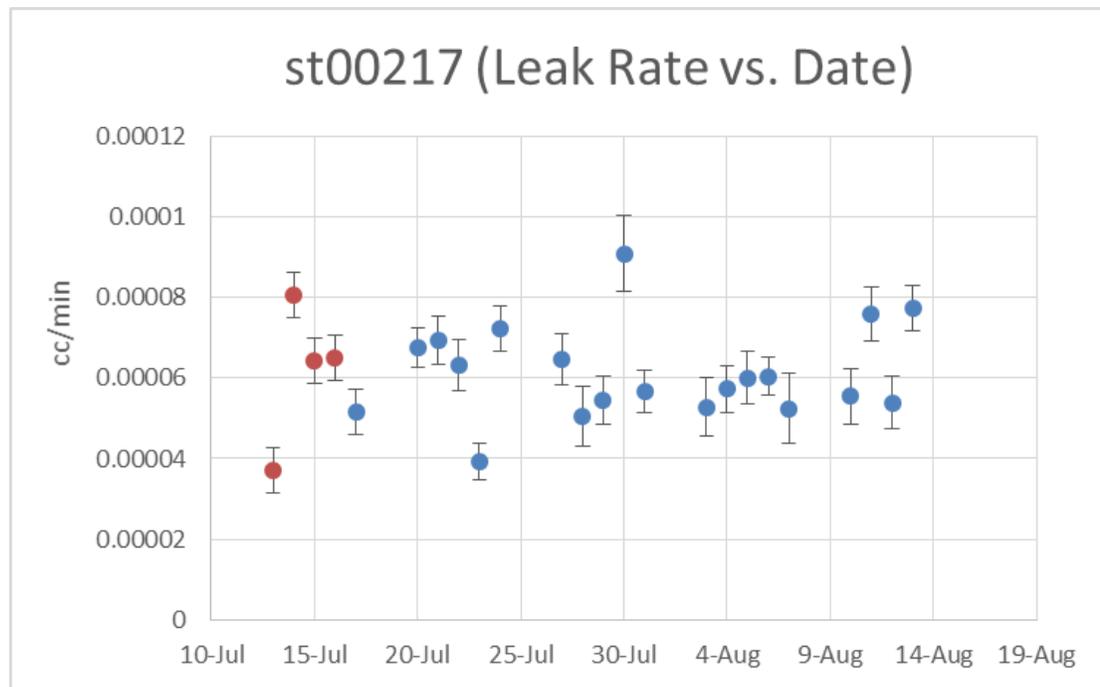
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Aug 14<sup>th</sup>

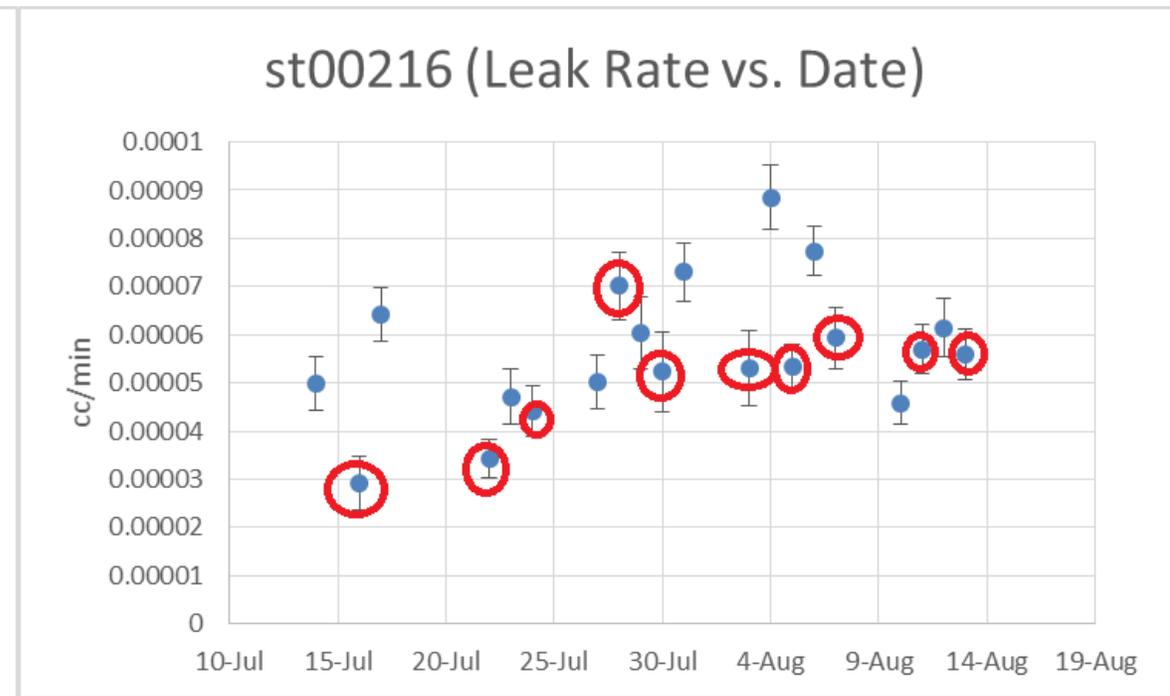
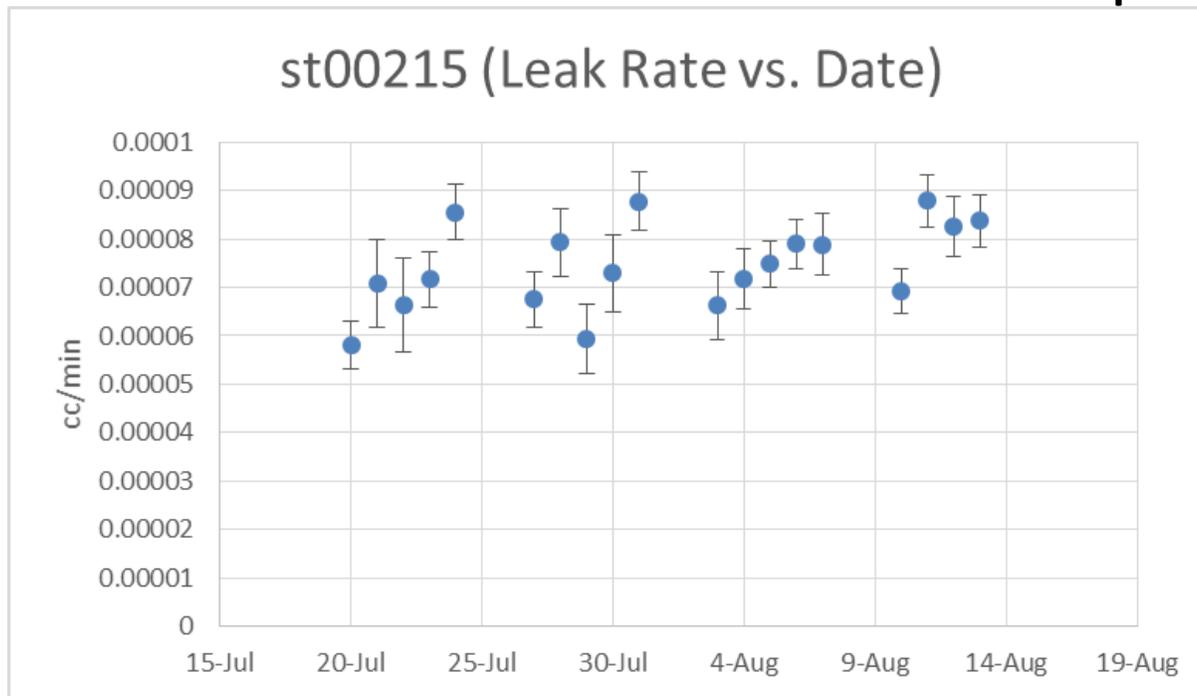
# Consistency test results update

--straws flushed with N<sub>2</sub>--



# Consistency test results update

--straws replace viton--



- St00215 has been replaced viton every time before measurement.

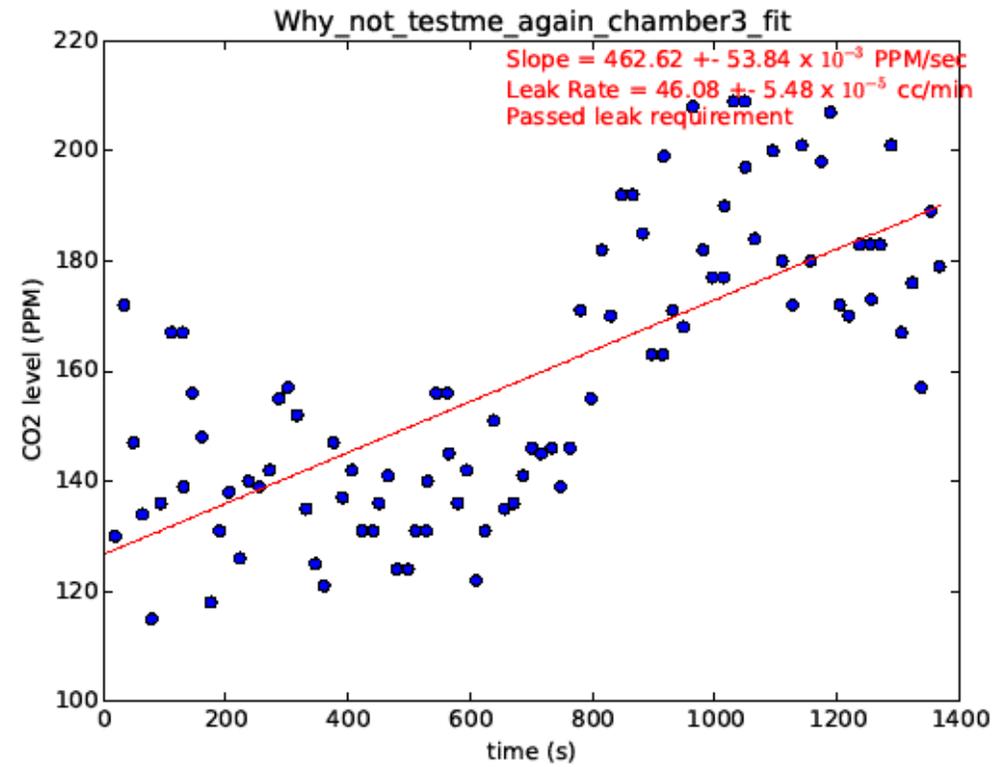
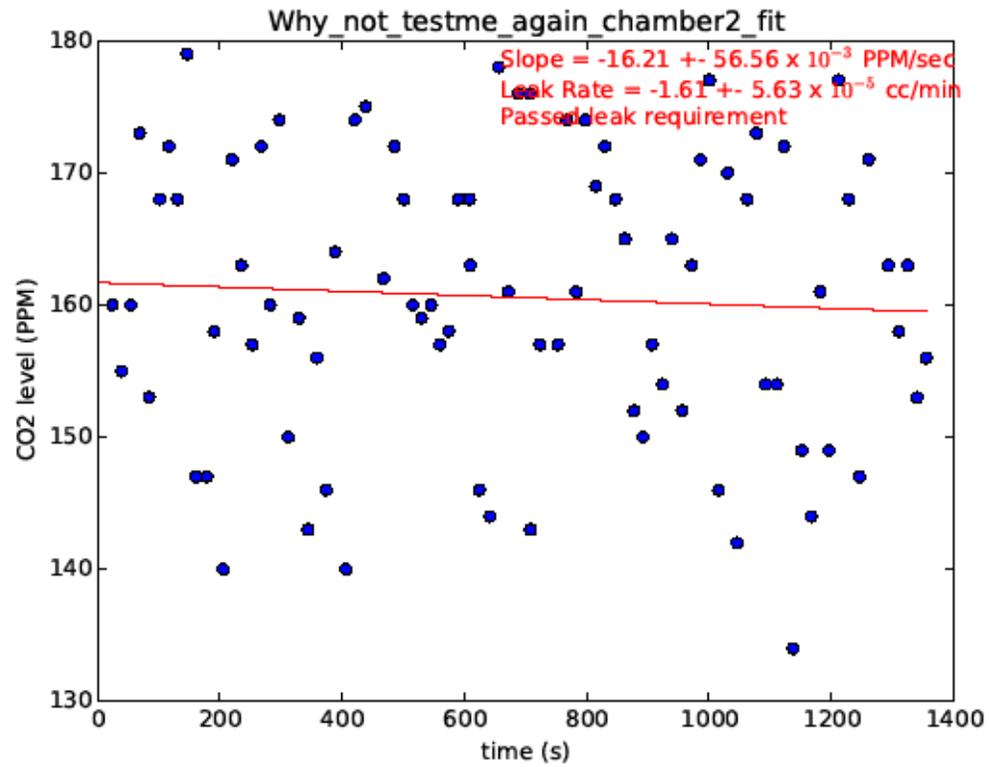
- St00216 has been replace viton every other day.
- Measurement didn't decrease this time

# Kink investigation

- I try to imitate the case of CO<sub>2</sub> stay between straw and plastic tube
  1. Flush straw with N<sub>2</sub> and sealed it.
  2. Insert straw into chamber and flush chamber with N<sub>2</sub> for 5 SCFH for half minute .
  3. Turn off the sensor and fan. Close valve Let the end of the tube stay close to where eye can see it.
  4. Use the syringe to impale the plastic tube cap and then get some CO<sub>2</sub> inside the syringe.
  5. Put the syringe end inside the tube and then push the syringe inside the chamber as deep as possible.
  6. Inject 0.05ml CO<sub>2</sub>.
  7. Take the syringe out, close the valve.
  8. Turn on the fan and detector. Begin recording data.

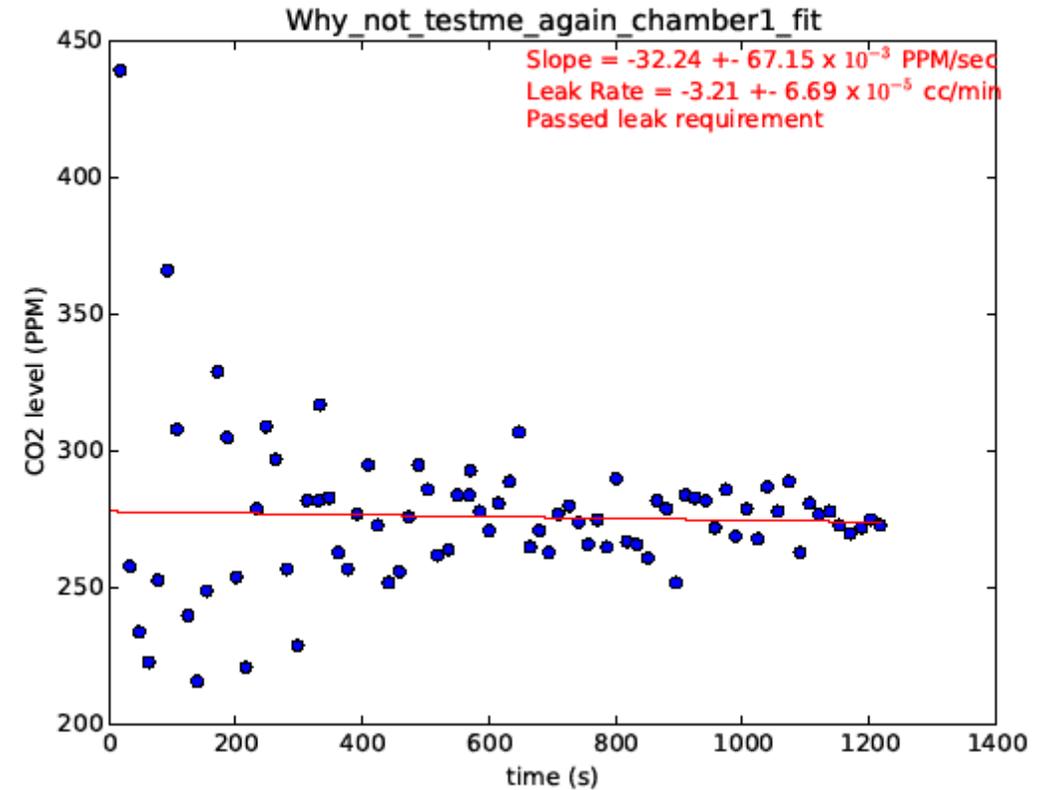
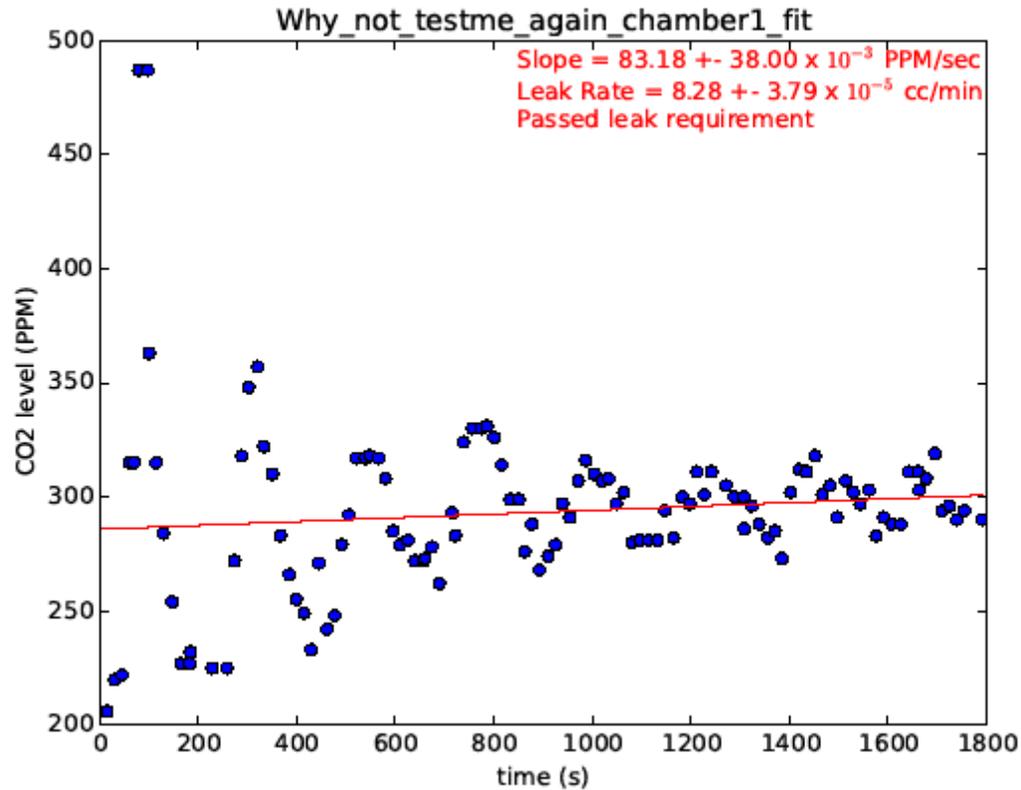


# Kink test result



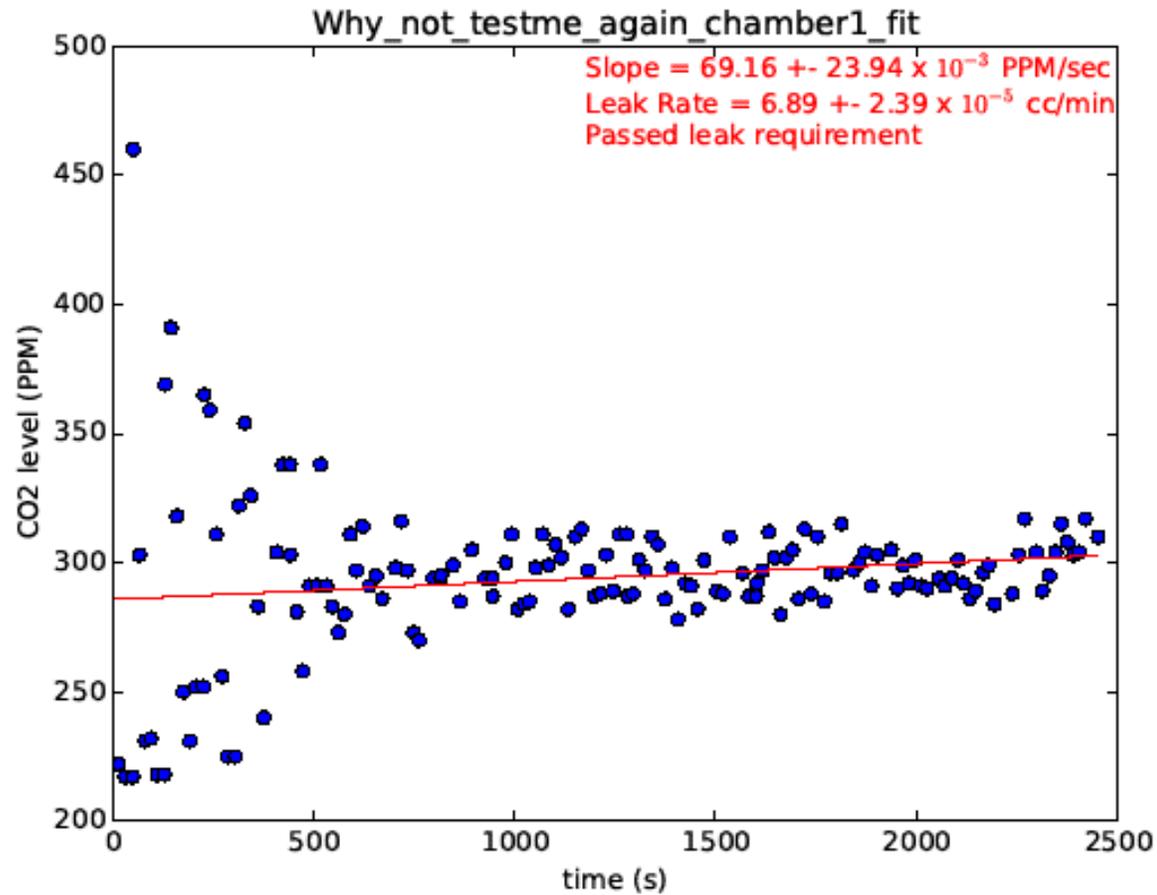
- Chamber #3 fluctuate a lot after injection.
- Chamber #2 seems good.

# Kink test result with comparison



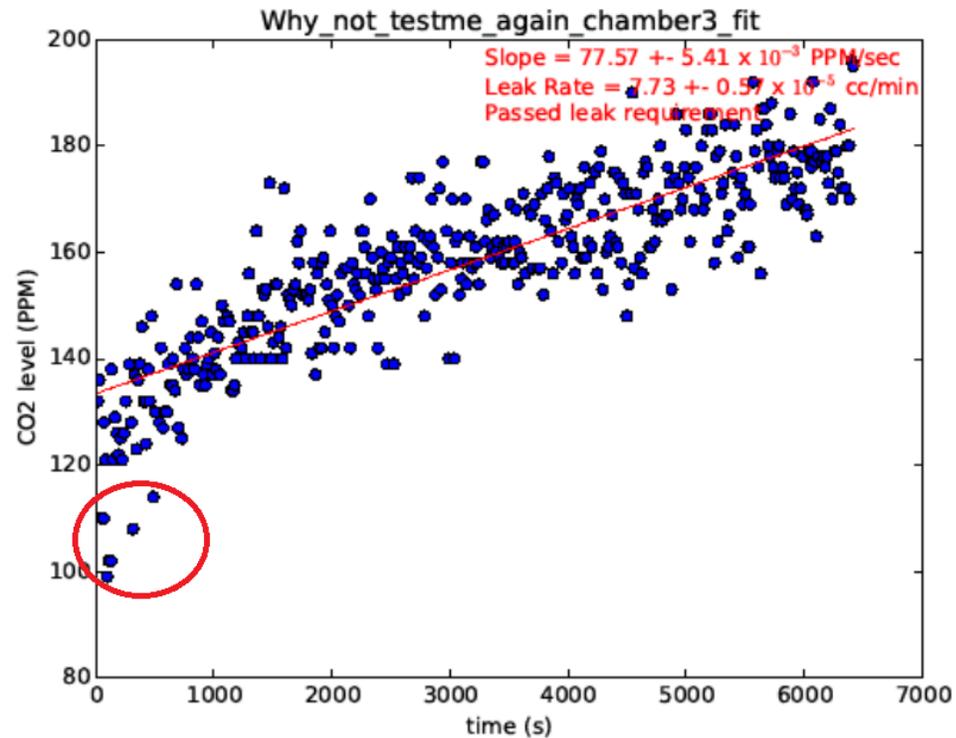
- Injected 0.05ml CO<sub>2</sub> between plastic tube and straw
- It takes much more time to become stable if CO<sub>2</sub> is injected to the place between Tube and straw.
- Injected 0.05ml CO<sub>2</sub> into chamber without straw in chamber.

# Inject CO<sub>2</sub> outside to the place between tube and chamber



- Therefore gas outside tube flows well

# Flush tube with N<sub>2</sub>, no kink thing but this



- There are five points didn't behave well

- N<sub>2</sub> nozzle fit in well to the plastic tube