**06.14.2024 – Vacuum function for HIW3 (Arduino based)**

A screen with a graph on it

Description automatically generated

* Horizontal box: 500ms
* Vertical box: 500mV
* PID setting: offset : 48, gain : 1x, pump : high
* Tested with 100% Pinene bottle and a blank bottle. Pinene > blank > blank
* Flow rate: 75ml/bottle

\*Arduino code “Vacum\_best\_062024” attached to the same folder

**Time variables (ms)**

* switchTime1 = 30
* switchTime2 = 0
* vacuumDelay = 20
* portValveCycleTime = 110 (the more you jiggle, the better it gets)
* vacuumDuration = 10

**06.17.2024 – Vacuum function for HIW3 (HARP based – ran with Bonsai)**

A screen with a graph on it

Description automatically generatedc

* Horizontal box: 500ms
* Vertical box: 2V
* PID setting: offset : 48, gain : 1x, pump : high
* Tested with 100% Pinene bottle and a blank bottle. Pinene > blank > blank
* Flow rate: 75ml/bottle

**Time variables (ms)**

* switchTime1 = 35 (supposed to be 30; added 5ms due to Bonsai’s timing delay problem)
* switchTime2 = 0
* vacuumDelay = 25 (supposed to be 20; added 5ms due to Bonsai’s timing delay problem)
* portValveCycleTime = 110 (the more you jiggle, the better it gets)
* vacuumDuration = 10

**06.26.2024 – Vacuum function for HIW3 (HARP based – ran with Bonsai)**

A screen with a graph on it

Description automatically generatedA close up of a monitor

Description automatically generated

Left = without vacuum

Right = with vacuum

\*Same configuration as the aforementioned HARP-based vacuum function

**Setup**

A diagram of a diagram

Description automatically generated