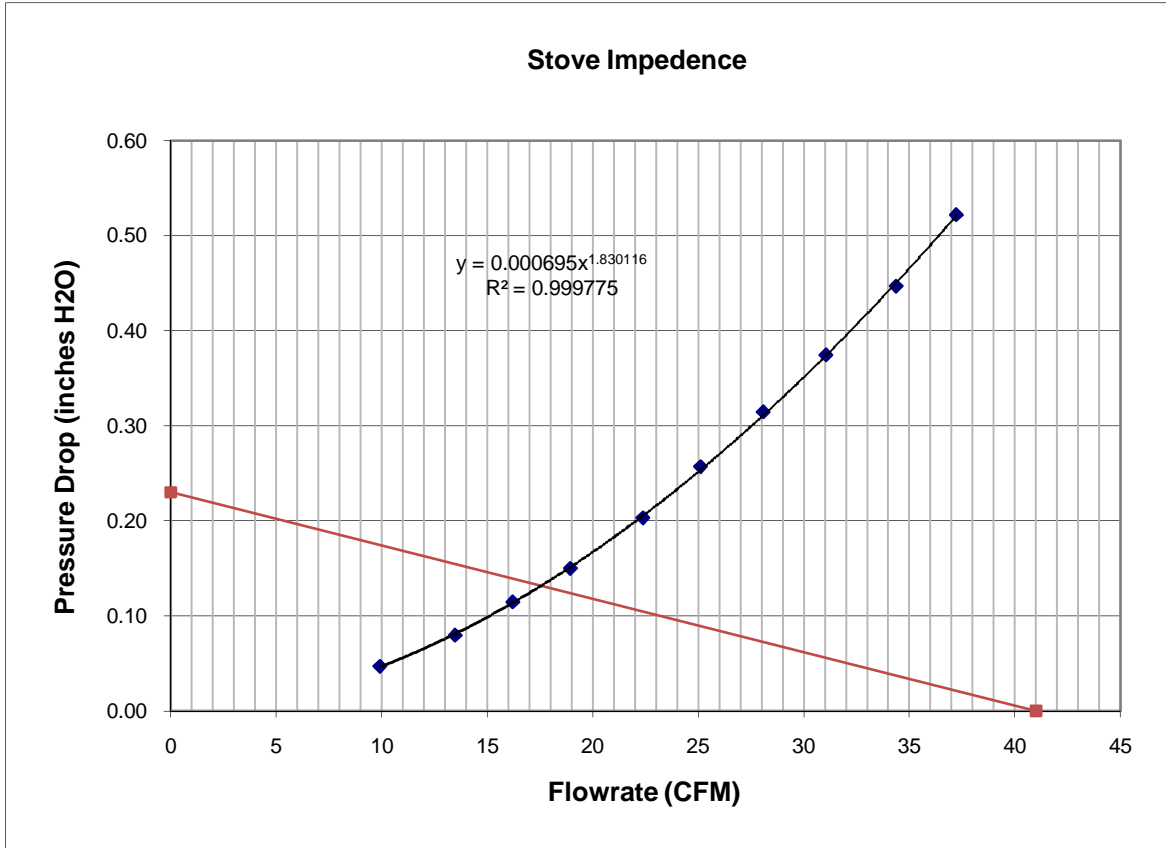


## Pressure Drop through Stove System

A test was performed to analyze the pressure drop needed across the fan to provide the proper airflow to the combustion chamber. The first generation stove was used for this test. A pressure tap was inserted into the wall of the inlet section of the stove to measure the pressure of the air just before it enters the combustion chamber. The fan speed was varied to alter the flow rate and pressure measurements were taken with a pressure sensor. Due to the limited number of holes for airflow, the pressure increased much quicker than originally expected. The conclusion drawn from this test was the need for either a lower flow rate or more holes in the stove to increase the flow and lower the pressure.



\*Red Line approximates the current fan capacity