

## Discussion of Results

For this experiment we gathered data from a working Rankine cycle steam turbine power system. In our experiment we gathered data for the boiler pressure, turbine inlet pressure, turbine exit pressure, boiler temperature, turbine inlet and exit temperatures, fluid flow and generated amprige and voltage. All pressures were in PSIG and temperatures were recorded in degree C.

It is difficult to tell what could have led to the errors in our lab since the data we gathered was missing the pressure so we used data from a lab preformed in 2006. Assuming the previous lab was similar to the one we completed there could be many causes for the error. Experimental error could have been a major cause for the error. There was a leak in the filler tube which could have given us an inaccurate measurement of the water. Also many of the tubes connecting the boiler to the turbine leaked. There was also some oil that leaked from the thumbscrews. There may have been human error in recording the pressure and adjusting the steam valve to keep the system at steady state.

It is difficult to provide a correlation between our results and those expected since the data we used was recorded 5 years ago. Assuming the lab was the same and the objectives of the experiment were similar the results are similar to what we would have expected.