

al544

Anna Lee

Summer 2010 Contributions

I was part of the ANC Control team. We worked on producing a plausible lime feeder that will help to produce optimal pH for flocculation when dosing with Alum. This was my first semester with AguaClara so I found many things unfamiliar. I spent the semester learning how to use the Process Controller and doing calculations using Mathcad while running experiments varying lime amounts.

Fall 2010 Contributions

I was part of the Inlet Manifold team. The sedimentation tank was experiencing circular and uneven flows that hindered flocs from successfully settling. We discovered that the horizontal velocity in the water flow through the inlet manifold, caused such flows so we focused on designing a new inlet manifold that reduced or eliminated horizontal velocity.

Spring 2011 Contributions

I was the leader of Sedimentation Tank Hydraulics team. We concentrated on creating an optimal geometry of the bottom of sedimentation tank in order to produce the floc blanket. We realized that our current design of sedimentation tank was not producing floc blankets because there are many dead spaces where flow cannot be reached for the flocs to be resuspended. In order to minimize this dead space, we ran experiments using our 2D model of Sedimentation tank changing the geometry each time.

Fall 2011 Contributions

This semester, I am really interesting in exploring POU water filter system using foam medium. This is very different from what I have been working on because this is not only in small scale but there are many different approaches we can take in designing and fabricating this technology.

Pages created

[ANC Control Summer 2010 Research](#)

[Fall 2010 Inlet Manifold Team](#)

[Sedimentation Tank Hydraulics Wiki](#)

[Sedimentation Tank Hydraulics Documents](#)