

## CHAPTER V

### CONCLUSIONS

As temperature increases, the enrichment ratio increases for all three surfactants (approaching 100 in one case) while rate of surfactant recovery stays approximately constant for CPC and DADS and mildly decreases for SDS. Therefore, increasing temperature has a generally positive impact on the foam fractionation as more concentrated foam liquid is recovered overhead.

As salinity is increased, the foam wetness increases as enrichment ratio decreases, so generally a higher volume of a less concentrated solution is foamed overhead for a slightly increased foam recovery rate. Therefore, whether increased salinity is beneficial or not depends on the goals of the separation.