# CHAPTER V
# CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Conclusions

The effect of operational parameters of multistage foam fractionation on motor oil removal. A branced alcohol propoxylate sulfate sodium salt ($C_{14-15}(PO)_4SO_4Na$) was used to form microemulsion with motor oil and to generate foam. The increase in feed surfactant concentration, NaCl concentration and air flow rate showed significant affects on the oil removal efficiency whereas the effect of feed flow rate was insignificant.

## 5.2 Recommendations

The froth flotation column had a weak point about siphon. This problem couldn't be solved completely. Some of motor oil stuck in the gap between tray. For this experiment, microemulsion couldn't be form so the result isn't good enough. It's interesting if running experiment that can foam microemulsion. Adding oil and NaCl in multistage froth flotation, the operation zone was changed so much if compare with adding pure surfactant. Due to the hot weather in Thailand, the air pump was always stop working during running process.