

CHAPTER VI

CONCLUSIONS

- The Cenozoic rocks in the Mae Than basin can be divided into 6 units based on their distinct lithological characteristics, namely, fluvial environment, fresh-water lake, subsiding peat-swamp environment, fresh-water lake/distal alluvial fan environment, subsiding peat-swamp environment, and fresh-water lake environment.

- Mineralogical distribution of clay minerals show that illite contains highly in the fluvial environment, whereas kaolinite is concentrated in the fresh-water lake or subsiding peat-swamp environments.

- The most likely potential source of the ball clay in the Mae Than basin would be the Permo-Triassic rhyolitic tuff from the western margin of the basin, whereas some contribution from the Permo-Triassic volcanics in the north and the Triassic Phra That Formation from the southeastern part of the basin cannot be completely ruled out.

- Generally, the Mae Than ball clay quality is slightly lower than the standard specification for sanitary ware, floor and wall tiles, stoneware and porcelain. The main quality improvement of the Mae than ball clay is to eliminate the coarse-grained fraction and combined with the appropriated blending of different grades of ball clay.