



# CHAPTER VII

## *CONCLUSION*

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## CHAPTER 7

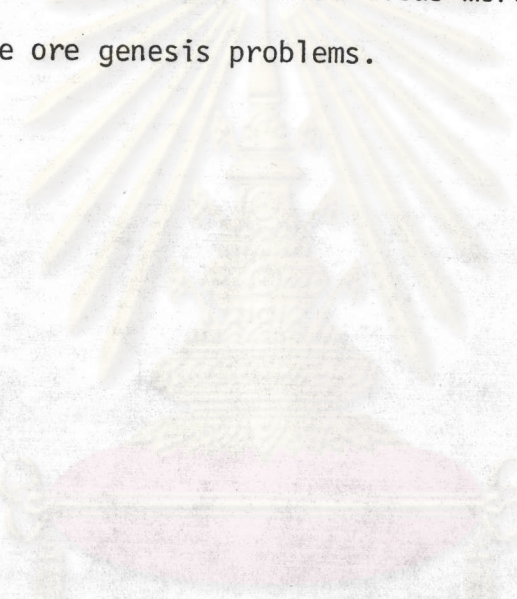
### CONCLUSION

This study has revealed a number of important characteristics and nature of cassiterite-sulfide (magnetite) mineralization taken place at the Takua Pit Thong mine. These important aspects of mineralization not only help in understanding the ore genesis outlined in the previous section but also provide as an essential tool for exploration of similar type of deposit prevailed in this region. As of the exploration guide, the following summary should be helpful.

The Takua Pit Thong cassiterite-sulfide (magnetite) deposit is located near the crest of granitic pluton and closely associated with the highly differentiated fine-to-medium-grained biotite (+ muscovite, tourmaline) granite. The orebodies are spatially confined within and nearby the granite/marble intercalated with calcsilicate hornfels contact, and structurally controlled by the north-south sheared zone. As a consequence, the favorable site of ore deposition is likely to be where the north-south sheared zone intersecting the contact between granite and marble intercalated with calcsilicate hornfels of the Thung Song Group. Furthermore, the appearance of green biotite alteration, especially filling along the north-south open fractures, is a good indication of the mineralization nearby. The intimate association of magnetite or pyrrhotite with cassiterite in the ore zone should resort one to explore the concealed orebody by means of magnetic and gravity surveys.

Last, but by no means least, the occurrence of metasomatic infilling minerals both in granitic rocks and country rocks, e.g., brown biotite, phlogopite, plagioclase etc., is a positive sign to look for further evidences of mineralization.

Finally, many important aspects of the Takua Pit Thong mineralization still remain unsolved. The most immediate one is the problem of chemical composition of the micas in the orebodies. Understanding on the nature of these micas more thoroughly would help solving the ore genesis problems.



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