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ชนิดสตราตาบาวด์ ที่เหมืองแร่สองห้อง กาญจนบุรี



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ASPECTS OF THE GEOLOGY AND MINERAGRAPHIC STUDIES OF
STRATABOUND LEAD-ZINC OREBODIES AT SONG TOH MINE,
KANCHANABURI

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บทคัดย่อ

แหล่งแร่ตะกั่ว-สังกะสี เหมืองสองห้อง ประกอบด้วยชั้นสายแร่ใหญ่ ๆ ๒ ชั้น อันมีแร่
องค์ประกอบที่สำคัญ ได้แก่ แร่กาสนา, แร่ไพไรท์ และแร่สฟาเลอไรท์ การสะสมตัวของแร่
ดังกล่าวมีลักษณะ เป็นลำดับชั้นแทรกสลับอยู่กับชั้นของหินปูน ชุดทุ่งสง ซึ่งมีอายุในสมัยกลางยุค
ออร์โดวิเซียน หินปูนนี้ ประกอบด้วยลำดับของหินปูนสีเทาอ่อนสลับกับหินปูนสีเทาเข้ม จัดวางตัว
อยู่ข้างใต้หินดินดาน และหินปูนของชุดตะนาวศรี ซึ่งเกิดการสะสมตัวในยุคไซลูเรียน-ดีโวเนียน
มวลขนาดใหญ่ของหินแกรนิตอายุเปอร์เมียนถึงไทรแอสซิก โดยประมาณ หรืออาจอ่อนกว่านั้น
ไหลกระจายอยู่รอบนอกของบริเวณแหล่งแร่

ในการศึกษาแร่ของแหล่งแร่นี้ เนื้อแร่ที่ปรากฏอยู่ในแร่ซิลไฟต์ และปรากฏการณ์ที่แร่
ซิลไฟต์เกิดแทรกกับแร่อื่น ๆ ที่มีกำเนิดแบบการสะสมตัวของตะกอน จึงถูกแปลความหมายว่า
แร่มีกำเนิดจากการตกตะกอน และต่อมาภายหลังได้ถูกเปลี่ยนแปลงให้ผิดลักษณะไปจากเดิมโดย
เหตุการณ์ที่เกี่ยวข้องกับการเปลี่ยนแปลงของผิวโลกในบริเวณนี้ การเปลี่ยนแปลงของผิวโลก
ดังกล่าวเกิดขึ้นในสภาวะที่มีแรงดัน และอุณหภูมิค่อนข้างต่ำ ลักษณะเนื้อแร่ดั้งเดิมยังคงรักษาไว้
ในแร่ไพไรท์ ถึงแม้ว่าจะขาดหลักฐานสำคัญที่ชี้บ่งต้นกำเนิดที่แท้จริงของแหล่งแร่นี้ อย่างไรก็ตาม
ผลของการศึกษานี้ได้แสดงให้เห็นคดีที่ว่าแหล่งแร่นี้ได้ถูกเปลี่ยนแปลงทำให้เนื้อแร่ และลักษณะผิดไปจาก
เดิม พร้อม ๆ กับหินที่ล้อมรอบตัวสายแร่



Thesis Title Aspects of the Geology and Mineragraphic Studies
of Stratabound Lead-Zinc Orebodies at Song Toh Mine,
Kanchanaburi

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ABSTRACT

The Song Toh Pb-Zn deposit comprises two major lode horizons of galena-pyrite-sphalerite mineralization represented by a series of interlayered dolomitized carbonate beds and mineralized units occurring within a middle Ordovician succession of interbedded dark gray-light gray dolomitized, argillaceous limestone (the so-called Thung Song Group) overlain by a Silurian-Devonian sequence of shale, siltstone, mudstone and minor argillaceous limestone (the so-called Tanaosi Group). Many granitic stocks of probable Permo-Triassic or younger ages are exposed at the outskirts of the mine area.

In this present investigation of the Song Toh ores, the textures seen in the sulfides and in ore-gangue intergrowths have been interpreted as being due to sedimentary deposition which have been, subsequently, modified by the effects of tectonically deformational events at relatively low pressure-temperature conditions. The original textures of these ores may be best preserved by pyrite.

Despite the lack of concrete evidence to the origin of the sulfide mineralization, the result of this present study gives a favour to the view that the orebody has been deformed contemporaneously with the enclosing rocks.

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