# CERTIFICATION OF APPROVAL

### **Optimization of Malaysian Mica in Oil Based Mud**

by

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Approved by,

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# CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken by unspecified sources or persons.

Jagaan Selladurai

#### ABSTRACT

It has been observed that lost circulation is one of the troublesome and costly problems encountered during drilling operation even with the best drilling practices. severity of loss of circulation can be classified according to the mud lost rate in the fractured formation. Considering the fact that lost circulation is one of the most serious and expensive problems the drilling industry is currently facing, lost circulation material (LCM) is one of the methods to solve this problem.

This report basically discusses the preliminary research and basic understanding of the chosen topic, which is Optimization of Malaysian Mica in Oil Based Mud. Preliminary research will lead to further study on the subject until the satisfactory result is obtained. This research will be a stepping stone for future research of the potential drilling fluid additives which is obtainable from abundant local resources.

Malaysia has not been explored for the possible use of local mica. Local mica will be experimented for possible use as mica and to be compared with the characteristics of the existing mica in the market. The source of Mica is taken from Bidor, Malaysia where KAOLIN(M) SDN BHD is operating the quary.

This project involves a lot of lab work to test the efficiency of Malaysian Mica. Finally, this project will identify the optimization of Malaysian Mica to be use in drilling operation as LCM in oil based mud.

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