FINAL PROJECT REPORT

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UNIVERSITY OF TECHNOLOGY MARA SHAH ALAM SELANGOR DARUL EHSAN

AN ALTERNATIVE TO SHUT DOWN BY USING HOT TAPPING AND PLUGGING METHOD

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1.0 INTRODUCTION

Hot taps (or pressure taps) provide a means to add connections to piping, pressure vessels and other process equipment and tankage without disrupting normal process operations. Hot taps can also be used to make connections into equipment where it would be impractical to prepare the equipment for hot work such as internally loose lined vessels or long runs of piping. Connections attached by hot tapping can also be used for plugging or stoppling to isolate sections of piping. Hot taps should, however, be used only where it is impractical to take the equipment out of service.

Each hot tap must be evaluated individually by using sound engineering judgement and by considering all potentially adverse conditions. Design of the hot tap connection and reinforcing pad, if necessary) should be in accordance with the proper code (e.g. ASME Pressure Vessel Code, API 650 Specification for Welded Storage Tanks, ANSI B31.3 Code for Pressure Piping). Fittings and valves should be evaluated to be sure they would accommodate the process conditions and the hot tap machine.

As with other specialized processes, understanding of the terminology for hot tapping is important to the ability to apply the information contained in this recommended practice.