CUTTING TRANSPORT IN RC DRILLING USING COMPRESSIBLE FLUIDS

MINEX CRC PROGRAM 1

Drilling Technologies

PHD OR MASTERS PROJECT

Curtin University

PRIMARY SUPERVISOR

Assoc. Prof. Masood Mostofi e: masood.mostofi@curtin.edu.au t: +61 8 9266 4989

CO-SUPERVISORS

Assoc. Prof. Dimple Quyn (Curtin University) Dr. Yevhen Kovalyshen (CSIRO)

PARTICIPATING ORGANISATIONS





RESEARCH PROJECT

The cutting transportation has an important role in hole cleaning, sampling integrity and depth capacity of RC drilling. Fluid hydraulics of RC drilling is a three-phase flow composed of liquid, solid and air. The fluid flow of compressible fluids has been studied in other engineering disciplines, but limited research has been conducted in the context of RC drilling.

This research aims at experimental and theoretical study of RC fluid flow based on field scale experiments in the lab and also data collected from field.