

**EXPLOSIVE CRATERING USING A GEOTECHNICAL
CENTRIFUGE ON KAOLIN CLAY SURFACE**

By

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ABSTRACT

Geotechnical centrifuge model tests were performed to study the effects of explosives on level ground clay. The soil type used in this research was Kaolin clay. Tests varied in water content and wet density.

Six explosive tests were run at 80g on Kaolin clay. The objective of the centrifuge tests was to measure the effects of soil density and water content on blast crater size. In the low water content tests, it was determined that a homogeneous sample was especially important when following the standard procedure. When determining the crater size, it was apparent that water content and wet density proved to be important parameters to consider.