



MACHINE EXCAVATED TRIAL PITS

harrisongroup
ENVIRONMENTAL

DATA SHEET

INTRODUCTION

Machine excavated trial pits represent a cost effective method of making a rapid assessment of the shallow ground conditions across a wide area.

Either JCB type machines or 360 tracked or wheeled excavators are used to dig the trial pits and depths of over 5m can be achieved.



Once the samples have been logged in the laboratory, an engineer's log is drawn up from these results and the observations made on site.



DETAILS



The driver of the excavator works under the instruction of the engineer. Excavated soil is segregated in such a way that it can be backfilled in a similar order to which it was removed.

The engineer takes depth measurements, samples and photographs as required. Observations are made from the shorter side of the pit for safety. Soil horizons are noted where there is groundwater ingress or hole collapse. After all samples have been taken and the excavation suitably detailed, the hole is backfilled and any excess spoil mounded up over the position to allow for any future settlement.

SITE SET UP

- Geotechnical Engineer and excavator

PROS

By utilising this type of trial pitting as a site investigation tool the following can be achieved:-

- Large areas can be covered in a relatively short time
- Visual inspection of large areas of near surface soils
- Good sample quality - sample types include disturbed, bulk and undisturbed samples
- In - situ testing can be carried out
- Extent of cross contamination can be seen
- Relationship between different soil horizons can be seen at first hand
- Basic standpipes can be installed to supplement those in boreholes
- Groundwater samples can be taken if the conditions are suitable