



Mauritius

Client	Water Research Ltd
Location	Mauritius
Duration	2-days
Scope	CPTu

Lankelma was employed to undertake cone penetration testing in Mauritius in November 2018 as part of a project to increase storage capacity at Sans Souci Dam, a 35.5m high, 360m long zoned rockfill dam, supplying water to the nearby hydro-electric plant for power generation.

The 1.8 tonne CPT unit was mobilised at short notice to work on the dam crest. To improve reaction force, a bespoke solution to suit the client's budget was implemented and the CPT unit was welded to a container filled with sea water to provide ballast. Three piezocone CPTs were completed to depths of up to 20m.

The CPT data was used to define the piezometric line, observe compaction anomalies in the clay core and define geotechnical characteristics of different soil layers.

Due to the nature of the site and testing there was a risk of damaging the embankment and fracturing the core of the reservoir, so inclination (verticality of the push) during the test was closely observed and great care was taken in preparation of each test position.

