

CONE PENETRATION TESTING

CPT

CPT consists of hydraulically pushing an instrumented cone that measures resistance on tip and sleeve of the cone. The measured resistance is used to estimate soil behavior, type and soil properties. Various instrumented modules are added to the cone penetrometer to accomplish unique geotechnical and environmental investigations.

Lankelma has the resources and experience for any site investigation, brownfield or greenfield, railways or highways, restricted access or marine. Our methods ensure fast turnaround, minimum disturbance, and economical site investigations.

Advantages of CPT:

- Fast and cost effective
- Eliminates sampling and handling
- Real time results
- Complete profile
- Identifies all layers
- Minimally invasive

crawler rig

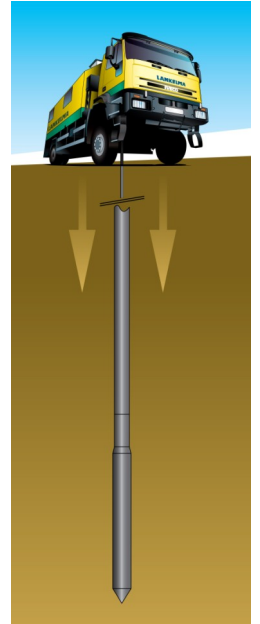


Lankelma Inc

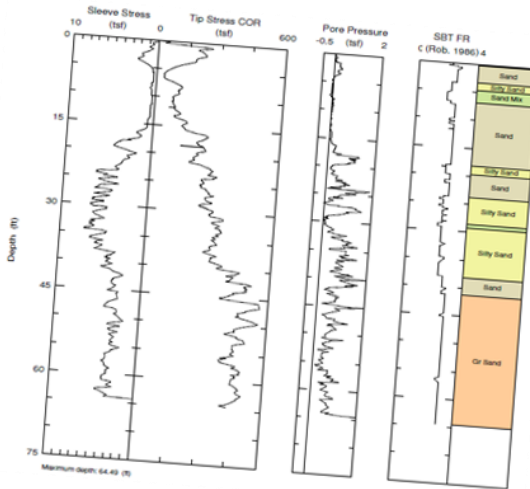
Lankelma Inc is part of the Gardline Group that was established in 1969. Gardline Group employs more than 1,000 personnel worldwide. Lankelma is one of the largest cone penetration testing (CPT) providers in the UK with offices in the UK, USA and Middle East.

Geotechnical and Environmental Services

- Piezocone penetration test (CPTU)
- Seismic CPT
- Soil, vapor and ground water sampling
- Monitoring well installation
- Fuel fluorescence detection
- Video cone logging
- Soil moisture testing
- Resistivity and temperature testing
- Membrane Interface Probe



schematic of a CPT being performed



CPT plots

images of sand (top) and chalk taken by the video cone



Rigs & Features

- 15-30 Ton push capacity rigs
- Track, truck and 'ramset' style, indoor low-overhead platforms
- Fully integrated decontamination system on truck rigs
- 'Grout-through cone to reduce the risk of cross-contamination
- Patented EAPS system for geology with intermittent refusal layers



EAPS rig