RELIABLE DATA & CHARACTERIZATION

CONE PENETRATION TESTING

CASCADE

WHAT IS CPT?

Cone penetration testing (CPT) is an in situ data collection method that is used to identify soil types. A cone penetrometer is pushed into the ground at a standard rate while data is recorded at regular intervals during penetration. The cone penetrometer measures penetration resistance at the tip and friction in the shaft (friction sleeve) during penetration. Depths in excess of 200 feet are obtainable and no cuttings are generated during this process. CPT is used on projects ranging from geotech and infrastructure projects to remediation projects requiring high resolution site characterization (HRSC).

CAPABILITIES

Can reach depths of 200+ feet, depending on soil conditions

Capable of performing dissipation and seismic testing

Suitable for on-land and marine applications

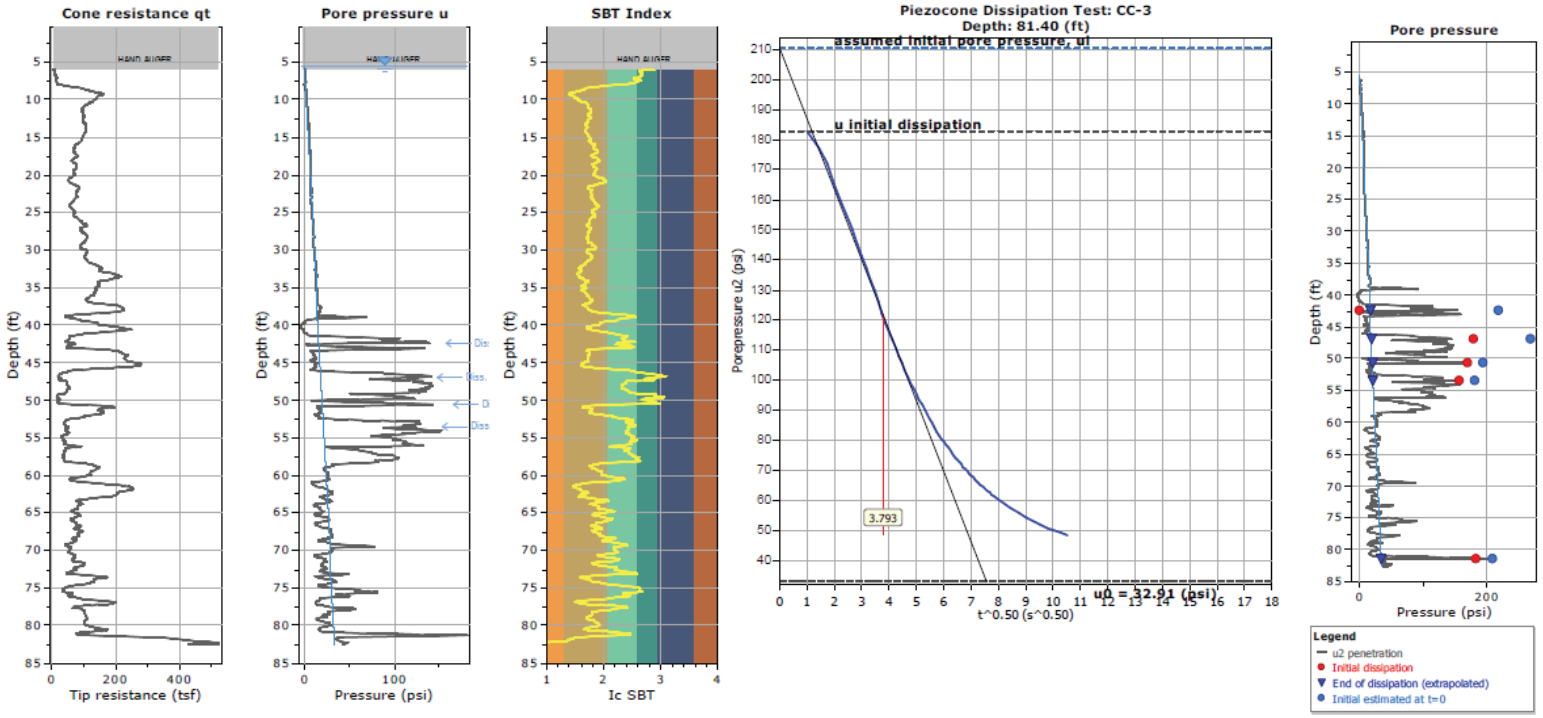
Offers site characterization using Waterloo^{APS}, MIHPT and OIP technologies

Operates on various platforms to serve limited and restricted access locations

HOW IT WORKS

Our CPT rigs use the weight of the vehicle to advance tooling into the subsurface. Utilizing the standard cone-shaped tooling (from which the technology gets its name), it can collect data regarding the friction ratio of the lithology, which allows the soil type and liquefaction resistance to be determined. This process can also be used for dissipation testing, which measures the pressure of the water in soil pores surrounding the cone tip, and for shear wave seismic testing, which measures liquefaction of the soil.

The CPT can also be used with other probes to collect HRSC data, including the membrane interface hydraulic profiling tool (MIHPT), ultra violet optical screening tool (UVOST), and the Waterloo^{APS}. These probes are driven into the ground by the CPT rig, where they collect and transmit data about subsurface contamination to be used in developing detailed conceptual site models (CSMs) for remediation planning and optimization.



Data collected using CPT can be viewed in real-time on site. Printed documentation is available day-of, provided in customizable reports with more than 20 basic and estimated parameters.

Ready to get results with CPT?
We're ready to help.
Call or email us to get started.

CASCADE

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