

IGS Technical Note

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Geotechnical Services

CPT & Piezocone
 Dilatometer
 Seismic Dilatometer
 Vane Shear
 Tee-Bar
 Push-Sampling
 Piezometer Installation
 In Situ Permeability

Field Fleet ("the girls")

Esme – 10-20t all-terrain



Beryl – 15t 4 wheel drive



Eunice – 20t 6x4 bogey

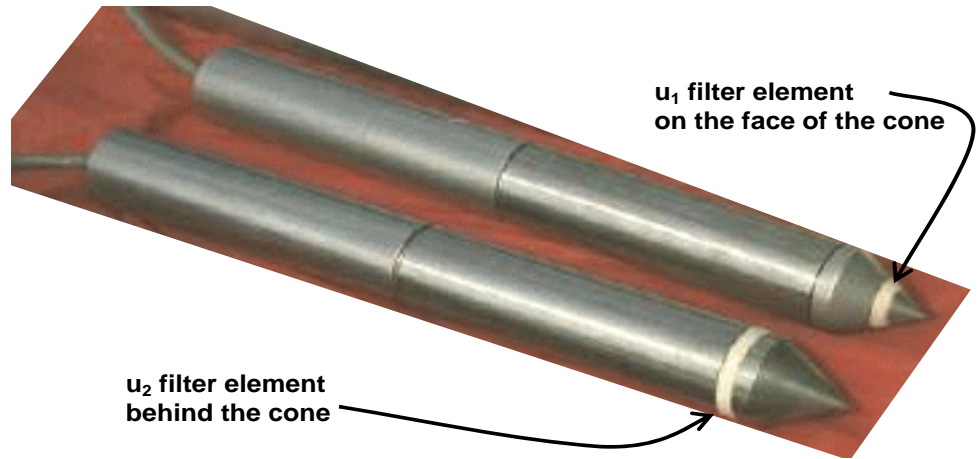


Baby Jayne – 15t portable



Pore Pressures in "Difficult" Soils

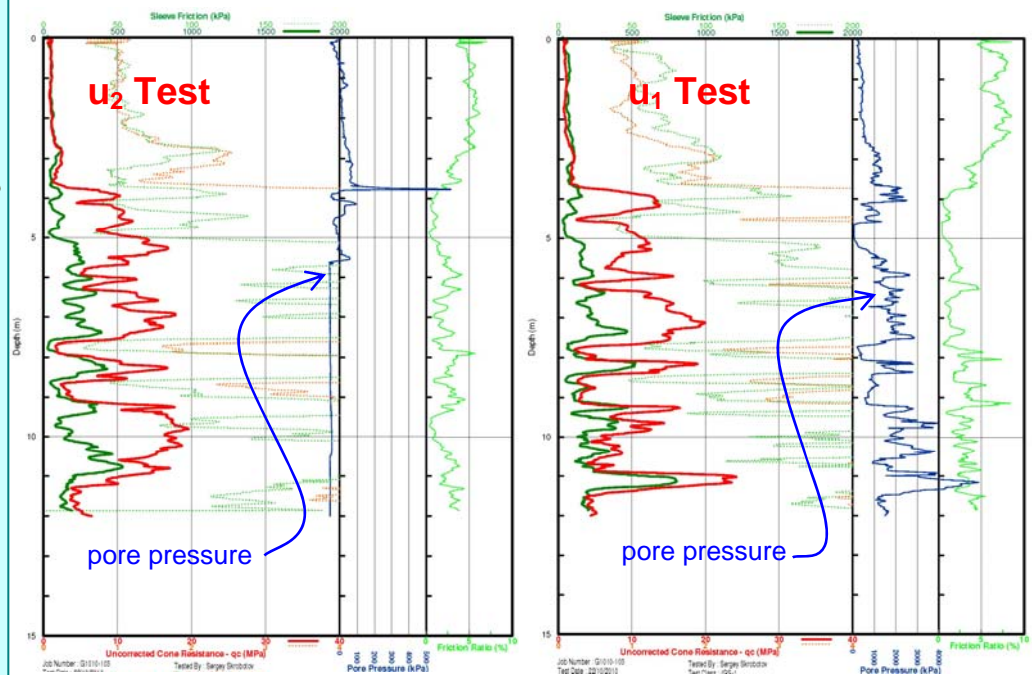
IGS has recently undertaken side-by-side piezo-cone testing on a site with soils that have a record of "pore pressure going negative" – we trialled the u_1 piezo filter position in our Geomil piezocones and got remarkable results.



As far as we know, the vast majority of piezo-cone tests are made with filter element in the u_2 position – this is effectively the "industry standard" world-wide.

There are sites where the soils are difficult to test by piezo-cone: dilatant natural soils cause pore pressures to fluctuate wildly and frequently go negative; some tailings deposits behave the same way; clients get frustrated, and so does IGS.

In a trial on some very difficult soils in Victoria (Pakenham area) we undertook a side-by-side trial at a few test locations. We consistently got very different pore pressure responses during these tests. The results of one typical pair of tests are shown below.



IGS does not promote one test method above another – it is our clients' choice. This information is reported as a service, not as any form of recommendation.

reducing geotechnical uncertainty