news **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

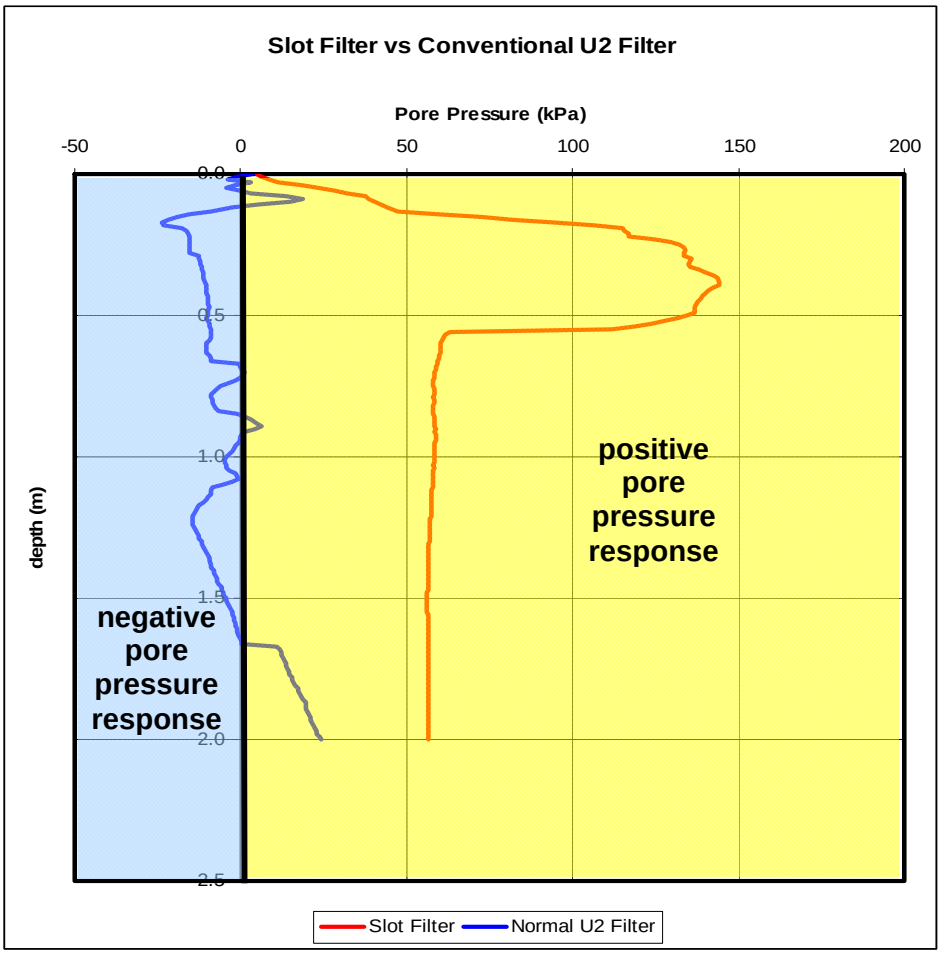
Piezo-Cone Slot Filter Trials

(in the pursuit of better pore pressure response in difficult ground)

During piezo-cone testing, there is sometimes a problem in maintaining pore pressure response through "difficult" soils such as fissured clays and, often-enough, through the unsaturated and desiccated zone of soil at the top of a soil profile. Sometimes negative pore pressures develop and these take time to stabilise, slowing a test push or even leading to a re-push to re-establish proper response. How much this matters depends on the client, the soil and the situation.

IGS has recently undertaken some trials, comparing conventional glycerol saturated pore pressure filters with a 0.3mm slot filter, packed with grease. The slot filter technique is not radically new; it's been in use by some operators in Europe for some years. But it's new to IGS - and as far as we know is pretty-much new to our market.

Typical trial results below show a marked improvement in pore pressure behaviour through, in this case, an upper desiccated zone. Below that, good behaviour continued, although the slot filter response was slightly damped - due to viscosity effects.



Note that, as always, IGS does not hold itself out to be a consultant or professional adviser.
It is up to the client to decide on the applicability of use of slot filters for their own particular purpose

reducing geotechnical uncertainty