



reducing geotechnical uncertainty

**Contact: Allan McConnell**  
 Phone: 0417-748-669  
 Fax: 07-3358-4366  
 Email: allan@insitu.com.au

**Mailing Address**  
 187 Elliott Road  
 BANYO  
 Qld 4014

## DATA SHEET

## OUR SAMPLER 'MENU'

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### PPI (Piston Pneumatic Injection) Sampler

Our 'flagship' soft soil and tailings sampler. Developed entirely in-house. Under a process of continuous improvement, it is now relatively fast & efficient to use.

All 316 stainless steel. 63mm dia x 850mm long. <10% area ratio. Stationary piston. Uses high pressure gas burst to 'cut' the sample free from the ground. Replaces suction with a modest air pressure, when pulling out.



*So far this sampler has exceeded our highest expectations.*

*We have obtained 100% recovery of every sample attempted in very soft or firmer soils.*

*We have also sampled tailings with qc <100kPa.*

### Vertek Piston Sampler

All 316 stainless. 35mm dia sample. 50mm OD. Has a floating piston. Core catchers for loose granular soils. Very tough so can sample stiff soils. Sample tube or splits can be used.

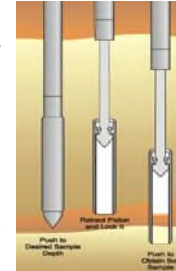


### 'Gregg' Sampler

This sampler was introduced to us by Peter Robertson of Gregg Drilling, USA, for which we thank him.

A simple piston sampler, made for fast deployment in soft to stiff soils.

(provided to us by Gregg Drilling)



*In the near future we will carry one of these on every rig, on every job*

### Eziprobe Sampler

Our Eziprobe Sampler can take continuous samples from ground surface in any material that will stay 'open' when the sampler is withdrawn. Useful for PASS samplings etc.



### Window Sampler

Window samplers have been used in Europe for decades. We recently introduced them into IGS 83mm and 95mm dia. They can be pushed or driven into almost anything - even ballast.

Sampling thru ballast & below



### PF (Piston Flap) Sampler

This recently evolved from our PPI sampler, on a tailings project with some 'almost liquid' tailings. We introduced a flap valve in the cutting face - allowing us to sample basically liquid materials.



*We thank our client ATC Williams for help with this sampler's design*

### BS (Bulk Sediment) Sampler sample from 20m

Our BS - bulk sediment - sampler is a semi-continuous low-flow-&-pressure air-lift sampler that we developed to take discrete large volume samples of very soft to soft sediments. It works. It is very fast to use.



*In addition to the sampling above, we also install standpipes and piezometers, and we undertake several types of in situ tests: CPT, Tee-Bar, DMT, SDMT and Vane Shear. In situ tests are described on a separate Data Sheet.*