

SERVICE DATA SHEET

Windowless and Window Sampling

Window sampling techniques have been proven to be effective in a range of difficult and restricted access situations. In order to provide enhanced flexibility to our investigation operations the Company can call upon a wide range of small bore window sampling and probing methods. This includes safe operation on slopes with a 30° incline and can easily be combined with other procedures such as DPSH and/or Panda Probing (Version 2). These techniques can be used to expand upon the understanding of the strata in order to establish relative density (N), shear strength (s_u), CBR as well as other parameters. Recent enhancements in our reports now means that DPSH probe information can be plotted in conjunction with stratum descriptions to allow correlation of qualitative blow count data. Ancillary equipment includes the facility to pre-start window sample holes by diamond concrete coring, the ability to carry out varied sampling regimes and conduct various *in-situ* testing procedures.

Application and Sampling Methods

- Investigation method for the sampling and in-situ testing of fine grained cohesive and fine to medium granular soil materials to a maximum depth of 10m (routinely 5 to 6m).
- Thin-walled steel Shelby tube sampling in low or medium strength fine grained soils—Class 1 or 2 dependent on ground conditions.
- Open-drive standard U100 (Class 2/3) or thin-walled U100T (Class 1 or 2) sampling.
- Windowless liner sampling and small disturbed sampling (Class 3 or 4).
- Standard penetration testing; split shoe sampler (SPT_(s)) or solid cone (SPT_(c)) method dependent of soil materials (BS EN ISO 22476-3:2005)
- Installation of groundwater and gas instrumentation for post-works sampling and in-situ monitoring assessment of the sub-surface strata regime.
- Discrete contaminated land sampling for metals, asbestos, volatiles and semivolatile organic determinants.
- Diamond concrete or carriageway coring for initial access, or as part of the sampling requirements.

ALLIED EXPLORATION & GEOTECHNICS LIMITED

HEAD OFFICE

Unit 25, Stella Gill Industrial Estate Pelton Fell, Chester-le-Street County Durham, DH2 2RG. Tel: 01913874700 Fax: 01913874710

Email: enquiries@alliedexploration.co.uk



 $\label{eq:constraint} \textbf{Email: enquiries@alliedexploration.co.uk}$





Summary

Flexible and proven technique for sampling soft ground conditions.

Excellent method in restricted access situations which do not specifically require associated Class 1 (Category A) undisturbed sampling for laboratory testing purposes.

Dynamic probing using super heavy (63.5kg over 750mm drop) techniques which can be used as a strata correlation tool.

Suitable investigation tool for the installation of various small diameter (c. 50mm or less) well screen for groundwater and gas monitoring strategies.

Not suitable for coarse granular soils and cemented (rock) materials.

Benefits

- Relatively low cost.
- Straight-forward deployment to site and capable of tracking across various terrain types.
- Excellent technique where the investigation must have low impact (damage) and visibility.
- Offers discrete contamination sampling.
- Can be adapted to take better quality undisturbed samples.

Page 1 of 1