



## Method Statement Window Sampling (Hand-held)

The equipment will be delivered to site in a van or vehicle and can be carried by hand around the site. Window sampling involves the use of a hydraulic or electric gun, powered from a mobile (petrol or diesel) power pack or a suitable mains supply, to drive sampling tubes of various diameters into the ground.

Crews will hold valid and current skilled CSCS cards and be provided with written instructions prior to the start of work.

Proposed exploratory locations will require a firm and level working space of 1m x 2m and minimum headroom of 2.4m, and will be set out with reference to utility information and drawings/plans, access and egress routes, as well as other hazards such as obstacles, soft, uneven or sloping ground etc; maintaining safe distances from any overhead cables, lifting covers where required and CAT scanning each position.

Any surface concrete/other hard cover will be broken out to a suitable size and, if required, an inspection pit excavated by hand to a minimum depth of 1.2mbgl, with continuous scanning as the pit is deepened.

The equipment will be carried into position and erected in a safe manner. It may be necessary to protect the ground surface from contaminated arisings using plastic sheeting, wooden boards etc. and to use sand-bags to contain liquids.

A window sampler is a high tensile steel tube with a hardened cutting shoe to penetrate hard materials. Each sampler is usually 1m or 2m long with a series of "windows" or slots cut in the wall of the tube through which to view or extract soil samples. Samplers are driven down into the ground using a percussive hammer. Samplers usually range in diameter from 100mm down to 35 mm. These are used systematically, starting with the widest and subsequently at reducing diameter to the required depth or limit of the technique. The full samplers are either jacked out manually or pulled from the hole using a hydraulic jacking system. The rods will then be removed with a mechanical or hydraulic jack.

Once the desired depth is reached, final measurements of the depth of the hole and groundwater level are taken and the holes will be backfilled. Alternatively, if a groundwater/gas monitoring installation is required, this is constructed carefully by the crew under instruction from the Engineer and the top of the borehole fitted with an appropriate cover. An installation generally comprises plain pipe with a Bentonite surround over the top section with slotted pipe in a granular surround over the lower section.

On completion, the hole(s) will be made safe, surfaces reinstated (if specified), and the site left tidy.

### Risk Scoring and Assessment

Health, Safety and Environmental Risk is measured using a 5 x 5 matrix to obtain a result that, after control measures have been applied is scored as: Low (Proceed with care), Medium (If no alternative, proceed with care), High (Do not proceed, seek alternative).

		Severity					
		1	2	3	4	5	
		No Injury or Impact	Minor Injury or Impact	Reportable Injury or Impact	Serious Injury or Impact	Fatality, Disability or Major Impact	
<b>Likelihood</b>	Unlikely or Rare	1	1 LOW	2 LOW	3 LOW	4 LOW	5 LOW
	Remote possibility	2	2 LOW	4 LOW	6 LOW	8 <b>MED</b>	10 <b>MED</b>
	Possibly occur	3	3 LOW	6 LOW	9 <b>MED</b>	12 <b>MED</b>	15 <b>MED</b>
	Probably occur	4	4 LOW	8 LOW	12 <b>MED</b>	16 <b>HIGH</b>	20 <b>HIGH</b>
	Certain to occur	5	5 LOW	10 <b>MED</b>	15 <b>HIGH</b>	20 <b>HIGH</b>	25 <b>HIGH</b>

Hazard/Risk	Type	Affected	Control Measures	Score	Residual Risk
Operating equipment	H&S	Oprs	Trained and competent operators only.	2 x 3	Low
Contact with services	H&S	Oprs	Review positions with reference to utility plans & maintain safe distances. CAT scan positions prior to breaking ground.	1 x 5	Low
Access and rig stability	H&S	Oprs	Check route, keep level, avoid any uneven ground..	2 x 2	Low
Vibration (HAV)	H&S	Oprs	Equipment fitted with low vibration handles. Limit usage to 4 minutes per meter or two hours aggregated per man per day.	2 x 3	Low
Lifting and Handling injuries	H&S	Oprs	Keep hands clear of all moving parts and wear gloves at all times. Adopt good lifting and manual handling practices. Two-man lifts wherever possible.	2 x 3	Low
Restricted Access or Internal works	H&S	Oprs	Use electrical equipment or situate power unit externally. Ensure adequate ventilation, access, egress and lighting.	2 x 4	Med
Noise	H&S/Env	Oprs/Env	Noise a maximum of 95dB within 2m. Operators to wear ear defenders. Use warning signs if required.	2 x 2	Low
Encountering Contamination	H&S/Env	Oprs/Env	Separate contaminated arisings, store on sheeting, boards etc. Use only non-hydrocarbon lubricants on all down-hole tooling. All operatives to wear PPE/RPE based on site categorisation.	2 x 3	Low