

# *Direct Push Analytical Corp.*

**Doing it Right the First Time**

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In 1998, Geoprobe®, arguably the world leader in direct push technology, developed the Dual Tube soil sampling technology. The Dual Tube method of soil sampling allows for discrete and continuous soil sampling with NO slough, PERIOD. For collecting discrete and continuous soil samples, it is the most efficient direct push tooling method, with some limited drawbacks (it has greater sidewall friction than a standard MacroCore sampler and it is difficult to retrieve samples when “heave” inside the tool string is an issue)(see the Geoprobe® Tab on our website, Dual tube versus MacroCore for further details). Even though this method is available and is hands down the best method for collecting soil samples beyond 4 feet in depth, not all probe operators use it, and more importantly, not all consultants demand it.

If your current direct push provider is not using the Dual Tube method of sampling, they are probably using the MacroCore sampler. The MacroCore soil sampler is not only a slower sampling method within the top 20 ft. of the subsurface, but more importantly it is a soil sampler that creates and allows sidewall sloughing and cave-in. When using the MacroCore sampler, you pull it out of the hole at each sample interval and then push it back down to depth, each sample interval. All of the pushing and pulling in and out of the hole inevitably creates slough. The MacroCore sampler can be ran with a closed point piston system that can alleviate non-representative samples being collected, but the majority of direct push operators using the MacroCore system run it open and do not use the closed point piston system. Please see Dual Tube vs. Macrocore under Geoprobe tab on our website.

***The point being that if you are not getting representative samples, you are not effectively delineating the contamination and all of your calculations and conclusions are incorrect!***

*As of 2007, approximately only 25-30% of Geoprobe registered operators have purchased the Dual Tube soil sampling technology, and some only use it as a “backup” system to the MacroCore sampler. Direct Push Analytical has used the Dual Tube system since 1999, and since that time has always used it as the preferred soil sampling system.*