



## Nonpassive Discrete Sampler

Deep discrete sampler

### Summary

<b>Media:</b>	Groundwater
<b>Study Type:</b>	Side by side
<b>Technology:</b>	Nonpassive grab sampler
<b>Peer Reviewed:</b>	No
<b>Publication Date:</b>	August 2002

### Study Description

Test solutions were prepared for explosives compounds (sourced from Louisiana Army Ammunition Plant groundwater), volatile organic compounds (VOCs) and pesticides (solutions made using chemicals mixed with deionized water), and metals (using certified metals standards) in polyvinylchloride standpipe for sampler evaluation. A groundwater monitoring well containing trichloroethene was also sampled as part of the study.

Samples were collected using discrete interval sampler devices (also using Kabis sampler, Hydrasleeve sampler, passive diffusion bag sampler, and pneumo-bailer) and results were compared to control concentrations.

### Remedial Phase

Not applicable; study was performed to evaluate ease of use of each sampler and analytical results from each sampler in a controlled setting.

### Outcome

The discrete interval sampler was noted as being more complicated and took longer to operate than the other samplers in the study (except the pneumo-bailer). The study noted no significant differences in results for the discrete sampler for explosives compounds, pesticides, volatile organics, or metals. The device did on occasion yield “unusually low [VOC] values that appeared to be anomalous, and this may be cause for concern.”

### References

L.V. Parker and C.H. Clark. 2002. Study of Five Discrete Interval-Type Groundwater Sampling Devices. USACE Technical Report ERDC/CRREL TR-02-12. <https://apps.dtic.mil/sti/tr/pdf/ADA406027.pdf>