



Department of Water Resources (DWR) Sacramento Valley, CA  
HydraSleeve

### Summary

<b>Media:</b>	Groundwater
<b>Study Type:</b>	Side-by-Side
<b>Technology:</b>	Grab
<b>Peer Reviewed:</b>	No
<b>Publication Date:</b>	December 5, 2007

### Study Description

The presentation describes the HydraSleeve, its advantages and limitations, a field evaluation, and data evaluation compared to 3–5 volume purge and pumped samples.

The California DWR-Central District performed a groundwater sampling study comparing HydraSleeve sample results to pumped results for major ions, minor ions, trace ions, and physical parameters, and Zymax Forensics for stable isotopes of O and H, in eleven wells at four DWR multilevel well sites in the Sacramento Valley. Well depths ranged from 47 feet to 557 feet below ground surface.

### Outcome

The study concluded:

- The HydraSleeve produced results that correlated well to industry standard the HydraSleeve had excellent data reproducibility, indicating high precision.
- The results of the evaluation are consistent with those obtained by the US Army Corps of Engineers in a trial of passive sampling devices at the former McClellan Air Force Base in California.
- The HydraSleeve requires minimal equipment and personnel, is inexpensive and disposable, is quick and easy to use, and generates no purge water.
- The use of the HydraSleeve following a standard procedure should produce highly accurate and reproducible data at both clean and contaminated water sites.
- DWR has been using HydraSleeves on these sites since the study was conducted.

### Case Study Source

HydraSleeve, A No-Purge Groundwater Sampler for All Constituents and Evaluation of its Use on DWR Projects.

### References

Bonds, Chris. "HYDRASleeve A No-Purge Groundwater Sampler for All Constituents and Evaluation of Its Use on DWR Projects." PowerPoint presented at the Geology and Groundwater Meeting, Stove Pipe Wells, Death Valley, December 5, 2007.

Parsons. "Final Results Report for the Demonstration of No-Purge Groundwater Sampling Devices at Former McClellan Air Force Base, California," October 2005. [https://clu-in.org/download/char/passamp/mcclellan\\_final\\_results\\_report.pdf](https://clu-in.org/download/char/passamp/mcclellan_final_results_report.pdf).



*\*The Parsons study referenced a New England case study with 30 wells 30–200 feet deep comparing HydraSleeve to low-flow pumping in which the low-flow sampling required 2 weeks and four people and the HydraSleeve required 4 days with two people. No citation provided.*