

GRL-PDI Newsletter

The feature article in the Summer 2003 Newsletter from GRL Engineers Inc. and **Pile Dynamics Inc.** concerns the installation of a test shaft in Pile Dynamics' yard for PDI's research and training purposes.

The test shaft is a 60-inch diameter shaft, 40 ft. long. Four concrete mix designs were used (in 10-foot lifts) to evaluate ultrasonic signals in different mixes including 3000, 4000 and 6000 psi and a self-consolidating concrete. The shaft has eight CSL access tubes attached to a full length reinforcing cage to allow cross hole sonic logging (CSL) using PDI's Cross-Hole Analyzer. Various manufactured

defects were suspended on the cage, chosen to investigate defect size and position by non-destructive testing methods.

Initial testing has revealed interesting results about detecting various defects, as well as changes with wave speed and CSL data quality with time.

The test shaft should prove to be a useful training and research tool.

The newsletter contains other news of interest to those involved in Foundation Testing and Quality Assurance. Contact Information is: website: www.pile.com - e-mail: info@pile.com - phone: 216-831-6131 – fax: 216-831-0916.