

The Canadian
Geotechnical Society



La Société Canadienne
de Géotechnique

CGS Luncheon Presentation

PDA and CAPWAP Foiled by Hard Fat Clay

Presented by:
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Presentation Abstract:

A pile load test program in northeastern Wyoming revealed inaccuracies in PDA and CAPWAP capacity predictions. While very accurate at one test site, the PDA and CAPWAP predictions were substantially higher than static load test results at a second site. Reanalysis of the data indicated that the CAPWAP results could be made to approximately match that from the static load tests by increasing the damping in the model; however, the solutions were not unique because equally acceptable matches were found at much lower damping. The unusual dynamic behavior is thought to be related to a thick layer of hard fat clay penetrated by the piles.

The paper was presented at the 2005 University of Minnesota Geotechnical Engineering Conference. It was co-authored with Dr. R.W. Christensen, Ph.D., P.E. of Madison, Wisconsin and Dr. T. Preber, Ph.D., P.E. of Rapid City, South Dakota, USA.

About the Presenter:

Taunya Ernst completed her B.Sc. in Geological Engineering in 1996 at the University of North Dakota in Grand Forks, North Dakota, USA. Taunya worked for STRATA Geotech (fka CE&MT) for 20 years before joining KGS group in April 2017. Her areas of specialization include deep foundation design and inspection, including static and dynamic load testing of piles with the objective of optimizing foundation designs. Ms. Ernst also has extensive experience in geotechnical laboratory testing including soil strength and consolidation and swell properties. Taunya's project experience is diverse and includes: heavy industrial coal mining facilities; coal and gas fired power generation stations; power transmission and distribution facilities; community facilities including hospitals, schools, recreation and sports facilities; highway and railroad bridges; and earthen dams.

Date: Wednesday, April 21, 2021

Time: Presentation at 12:00 PM

Registration Fee: Free Event!

Location: MS Teams Meeting

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- This event qualifies for 1 Professional Development Hour. The event is classified as 'Informal Activity' under EGM's CPD Program.
- Please note that if you are unable to attend, someone else can be sent in your place. We are accepting walk-ins depending on seating availability.
- If you wish to be added to the mailing list, please send an email to cgs.manitoba@gmail.com