



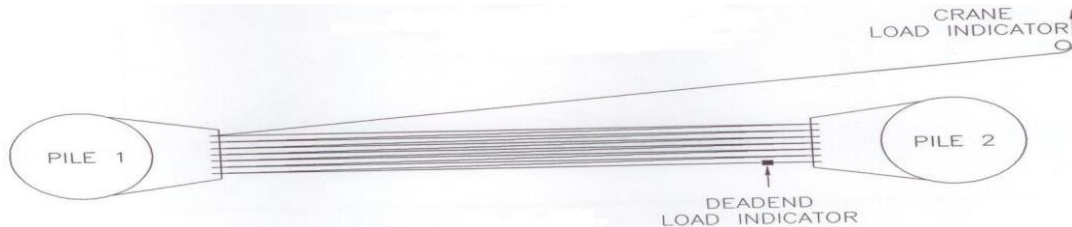
Client Focused

Worldwide Experience

Innovative, Value Added

Practical Solutions

Piling, Full-Scale Tests & PDA (Pile Dynamic Analyser) Projects Alberta & Persian Gulf Countries



GES staff have extensive piling experience, having provided our clients in Alberta, Canada and the Persian Gulf countries with piling installation monitoring, PDA testing, and full-scale pile load testing services, as follows:

- Third Petrochemical Project river intake structure, South Iraq: Review of pre-production pile load test system on behalf of Lummus Thyssen (EPC contractor) for 200-tonne compressive test on 0.4-m driven precast concrete unit.
- South Export Pier cantilever mooring / breasting dolphins, Kuwait: Design of 200-tonne (applied approx 25m above seabed) lateral load testing system for 1.8-m diameter cantilever breasting dolphins with Ballast Nedam (contractor) on behalf of KOC/Braun Transworld (Santa Fe Braun), and comparison of actual against predicted behaviour.
- Mena Abdullah Export Terminal mooring/breasting dolphin platforms, Kuwait: Design of 550-tonne uplift tests (1.5 times extreme design load) to assess acceptability of prematurely refused inclined 0.9-m diameter driven tubular steel piles with collapsed driving shoes. Piles tested using an anchored floating heavy lift ship with axial movements determined by optical methods from an adjacent platform. Worked with contractor (NPCC) on behalf of KNPC/Braun Transworld.
- Zadcó/Gasco Headquarters, Abu Dhabi: Review of planned test set up for a 3000-tonne pre-production axial test on 1.06-m (42") diameter drilled cast in-situ concrete unit on behalf of ADNOC/Leo Daly (owner/consultant).
- Kuwait Waterfront Phase V Marina Tower: Review/revise design of 400-tonne uplift pre-production load tests on 0.61-m (24") drilled cast in-situ concrete units, supervision of test pile construction/testing, and evaluation of performance on behalf of UREC/SSH (owner/consultant).
- Kuwait Business Town settlement reducing piles: Review of 1000-tonne 0.9-m diameter compression test set up design to assess typical stiffnesses for settlement reducing piles on behalf of KEO International (consultant), and comparison of actual/predicted behaviour.
- Abu Dhabi: Undertook onsite third party pile load testing services, using ground anchors, loads generally up to 300-tonne.
- UAE: Undertook test pile set up reviews/back-analyses on behalf of National Piling and Bruckner Brundbau.
- Alberta: PDA testing of timber piles and steel H and pipe piles for CN Rail and Ledcor Foundations.
- Fort McMurray, Alberta: Construction review and pile installation monitoring (including use of E-Saximeter) of over 5,000 steel H and pipe piles as well as cast-in-place concrete piles (up to 1.5 m in diameter).

