

Summary Bio

Nick Logan
Instrumentation Specialist
(Geotechnical) Dam
Safety Advisor



Nationality
New Zealand

Language
English



Key Qualifications

Co-leader of Antarctic research project , Dec 1977 - March 1978
Geochemistry research towards PHD, 1975 – 1977
Master of Science (Honours) (Geochemistry) VUM, 1975
Bachelor of Science (Geology and Chemistry) Victoria University of Wellington, NZ, 1973

Professional Affiliations

Member of Institution of Professional Engineers New Zealand
Member of NZ Society of Large Dams

SPECIALISATION

Geotechnical Instrumentation for dams, landslides, roads, tunnels
Automated Data Acquisition Systems
Instrument Design, Manufacture and Installation

SUMMARY BIO

Nick Logan is an Instrumentation Specialist at Damwatch Services Ltd and is based in Wellington.

Nick Logan has been involved in dam instrumentation for twenty three years, with considerable experience in design, manufacture, installation and monitoring of geotechnical instrumentation during site investigations, construction and facility operation. For sixteen years Nick has also carried out maintenance, refurbishment and upgrading of existing piezometers and gaugehouses at many of the large hydro and water storage dams in New Zealand. Nick is now also responsible for the telemetry functions of the Damwatch Dam Monitoring System, including data collection, alarm notification, data management and analysis.

His experience with geotechnical instrumentation includes:

- Installation, performance evaluation, and function testing of all types of piezometers.
- Design, manufacture and installation of borehole packers for artesian control.
- Design and installation of weirs, flumes, settlement cells and settlement tubes.
- Design, manufacture, installation and monitoring of various types of extensometer.
- Installation and monitoring of inclinometer and tilt systems.
- Construction and commissioning of new piezometer gaugehouses.
- Design and Installation of data logging systems.
- Technical advice on instrumentation selection.
- Specifications for instrument installation, purchasing and maintenance procedures.

Nick has installed 300 instruments in 30 earth, rockfill and clay dams (up to 100m high), canals and reservoir slopes. He manages the maintenance and calibration of 700 instruments on behalf of clients. Nick has been involved in instrumentation at the following dam sites and power investigation sites:

Rocky Valley, Tekapo Canal, Ohau A,B and C, Upper and Lower Huia, Waitakere, Wairoa, Mangatangi, Upper Mangatawhiri,, Cosseys, Karapiro, Arapuni, Waipapa, Whakamaru, Atiamuri, Ohakuri, Matahina, Otamangakau, Moawhango, Patea, Cobb, Maitai, Pukaki, Ruataniwha, Benmore, Aviemore, Waitaki, Hawea, Clyde, Roxburgh, Mararoa Lake Control, Mohaka River, Luggate, Kawerau Gorge, Clyde Landslide Stabilization.