

Geotechnical Services

Powertech Labs offers specialized leading-edge testing on embankment dam material, conventional soils tests, and research and development services.

Powertech has developed state-of-the-art test equipment to assess filter performance of embankment dams using:

- a 100-mm diameter permeameter cell for fine-grained soils, or
- a 300-mm diameter permeameter cell with maximum particle size up to 37.5 mm, or
- a 500-mm diameter permeameter cell with maximum particle size up to 75 mm, or
- a 1000-mm diameter permeameter cell in development, with a maximum particle size up to 125 mm

Internal stability testing

Assessment of the internal stability (suffusion) of embankment dam material can be performed with either upward or downward seepage flow, and at low or high gradients (0.1 to 20).

Continuing Erosion Filter (CEF) test/Filter compatibility testing

The Continuing Erosion Filter (CEF) test assesses the filter compatibility between a base-filter soil combination. A seal or no-seal outcome is determined, along with the extent of erosion.

Flume testing

A state-of-the-art testing apparatus, 5m x 1m x 1m, assesses the performance of a cracked filter. The test evaluates the response of a granular filter subjected to a concentrated leak.

FOR MORE INFORMATION CONTACT:

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Other soil testing capabilities:

- Pinhole Dispersion test for dispersive soils
- Hole Erosion Test (HET)
- Index testing: sieve analysis, hydrometer, Atterberg limits, standard or modified compaction
- Thermal resistivity measurements (field and laboratory)
- Electrical resistivity measurements (field and laboratory)



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ABOUT POWERTECH LABS:

Powertech Labs Inc. is one of the largest testing and research laboratories in North America, situated in beautiful British Columbia, Canada. Our 11acre facility offers 15 different testing labs for a one-stopshop approach to managing electrical utilities, and testing gas components, pressure vessels and systems.

Outside of the utilities industry, Powertech provides routine testing capabilities, product development, research and consulting services to support an array of industrialtype operations, electrical equipment manufacturers and automotive original equipment manufacturers.

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