It is important to consider thermal resistivity and conductivity measurements of in-situ soils and proposed backfill materials when designing underground transmission lines. Thermal properties indicate how the materials will dissipate heat generated by the utility.

**Field and Lab Services**

- ATL is experienced in providing field thermal resistivity testing services of in-situ soil and placed backfill materials, using ASTM D5334 and IEEE 442 compliant portable equipment. ATL also has geotechnical drilling and sampling capabilities to obtain intact or bulk samples. Field sampling capabilities include Geoprobe™, barge, ATV- and truck-mounted drill rigs, and excavators.

- Thermal Dry-Out Curves of laboratory specimens illustrate the relationship between thermal resistivity and moisture content of material, developed with specific measured moisture and thermal points (not empirically derived).

- Sample Processing: ATL can perform thermal testing on rock, concrete, fluidized thermal backfill (FTB), and intact and remolded specimens of soil. Our established sample remolding process allows accurate readings without disturbance to the structure of the sample. ATL can also perform related geotechnical testing, such as proctors, sieves, Atterberg limits, corrosion analysis, and electrical resistivity.

**What Differentiates ATL?**

- Meeting our client’s required sample turn-around-time is our goal.

- ATL has Accredited Geotechnical Laboratories, conveniently located throughout New York, to support efficient and cost-effective sample delivery/pick-up.

- We provide support for projects located across the United States, and standard shipping is 1 day from most locations in the Northeast.

**Contact our service area expert for more information:**

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