MATERGENICS - Pittsburgh has created a specialized algorithm to rate soil corrosivity as it relates to buried steel assets for early detection of corrosion activity with a high degree of confidence. Our dedicated lab has rapid turn-around times and is supported by a multidisciplinary team of NACE\(^1\) certified materials and corrosion engineers, Cathodic Protection design and installation specialists, coating specialists, chemists, and lab and field engineers. The combination of field and lab analysis provides essential data for geotechnical, asset management, site surveys, CP installations, and failure analysis.

\(^1\)National Association of Corrosion Engineers
Knowing the corrosion rate of a metallic material is critical to determine the remaining life of underground structures. It also helps to understand whether or not mitigation, coating or cathodic protection is required. We at MATERGENICS are not only able to determine the corrosion, but we also have the expertise to provide you with a recommendation that is specific to your application. Using our unique algorithms developed by expert corrosion engineers, the soil around a buried metallic asset is assigned a soil corrosivity (SC) rating that is based on a number of parameters including soil resistivity, pH, chlorides, sulfates, properties, and linear resistance polarization. These ratings identify high soil corrosivity areas where assets are located and, based on these ratings, decisions for inspection frequency, prioritization, and long term planning can be made with confidence. This is what distinguishes us from our competition.

Corrosion and Engineering Methods

- AASHTO T290: Sulfate Ion Content in Soil
- AASHTO T291: Chloride Ion Content in Soil
- ASTM C1580: Sulfate Ion Content in Soil
- ASTM D1498: Redox Potential of Water
- ASTM D2216: Moisture Content of Soil
- ASTM D2487: Soil Classification
- ASTM D421: Dry Prep of Soil Samples
- ASTM D4318: Liquid Limit, Plastic Limit, Plastic Index of Soils
- ASTM D422: Particle Size Analysis of Soils
- ASTM D4972: pH of Soils
- ASTM D512: Chloride Ion in Water
- ASTM G102: Corrosion Rate
- ASTM G51: pH of Soil for Corrosion
- ASTM G57: Soil Resistivity
- ASTM D4658: Sulfide Ion in Water
- ASTM G162: Conducting and Evaluating Lab Soil Corrosion Tests

Additional Tests Available Upon Request

MATERGENICS
100 Business Center Drive
Pittsburg, PA 15205
Tel: +1 (412) 788-1263
Fax: +1 (412) 788-1283
info@matergenicsinc.com
www.matergenicsinc.com