GEOSCIENCE

TESTING FACILITIES

IN GEORGIA, 1982

COMPILED BY

HAROLD R. VINCENT

CIRCULAR 7

Department of Natural Resources
Environmental Protection Division
Georgia Geologic Survey
GEOSCIENCE TESTING FACILITIES IN GEORGIA, 1982

Compiled By:

Harold R. Vincent

Circular 7

DEPARTMENT OF NATURAL RESOURCES
Joe. D. Tanner, Commissioner

ENVIRONMENTAL PROTECTION DIVISION
J. Leonard Ledbetter, Director

GEORGIA GEOLOGIC SURVEY
William H. McLemore, State Geologist

ATLANTA
1983
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INTRODUCTION

This publication is an attempt to group together, in a single document, the names and capabilities of firms, colleges, and universities in Georgia that can perform field and laboratory testing services for the mining industry. This document, in turn, can be used by mineral explorers and producers in identifying those organizations in Georgia that can assist in solving geologically related problems.

The author has attempted to include all the appropriate laboratory capabilities of each organization, not just what is available within the state. This means that if an organization does not have a testing laboratory within Georgia but does have an office within the state, the laboratory facilities of the firm are included in this document. Although it is beyond the scope of this publication to list and describe the entire range of capabilities of an organization, this document does provide a listing of the major mineral-related testing facilities of the respected firms. It should be kept in mind that the testing services listed in this document are restricted to those performed by equipment owned directly by the identified organizations; services provided by firms or private individuals with equipment that is leased or contracted out are not included here.

In addition, a national listing of professionally registered geologists that can perform consulting services in the State of Georgia may be obtained by contacting the State Board of Registered Geologists, Professional Examining Board, 166 Pryor Street, S.W., Atlanta, Georgia, 30303, (404) 656-2281.
The field and laboratory testing facilities are listed alphabetically and in a consistent format in order to avoid confusion and erroneous interpretations about an organization's testing capabilities. For example, a generally accepted term such as "Proctor tests" is used in place of "Soil density tests". This format eliminates problems in cases such as geotechnical and/or soils engineering where different firms may have different names for the same type of test.

This survey of mineral testing facilities was based on interviews with representatives of the various organizations. While we believe the information to be accurate, the possibility of omission or incorrect listings cannot be discounted. If omissions or errors are noted, please notify the Georgia Geologic Survey so that an errata sheet can be provided and subsequent editions of this circular revised. ANYONE WISHING TO UTILIZE MINERAL TESTING FACILITIES LISTED HEREIN SHOULD CAREFULLY CHECK WITH ALL CANDIDATE ORGANIZATIONS TO VERIFY EQUIPMENT AVAILABILITY AND CAPABILITY.

Unless otherwise noted, all organizations listed in this document are available for performing testing services for private industry and government agencies. For each organization listed, the appropriate fee is negotiable based upon the type of service provided.
COLLEGES AND UNIVERSITIES
Columbus College
Department of Chemistry and Geology
Columbus, Georgia 31993
(404) 568-2292    GIST: 251-2292

Dr. Paul J. Beyer, Chairman

Instrumentation:
Arc emission spectroscopy
Atomic absorption spectrometer: flame
Petrographic microscopes
X-ray diffraction spectrometer

Geotechnical / Soils Engineering:
Sieve analysis

Mineral Engineering / Sample Preparation:
Rock crushers and pulverizers
Thin section preparation equipment
Emory University  
Department of Geology  
Atlanta, Georgia  30322  
(404) 329-6491  

Dr. Arthur T. Allen, Chairman  

Instrumentation:  
  Atomic absorption spectrometer: flame  
  Computer controlled petrographic image analyzer  
  Geiger counters  
  Petrographic microscopes (transmitted and reflected light)  
  Scanning electron microscope with energy dispersive X-ray analyzer  
  Seismic surveys: 6 channel portable seismograph  
  X-ray diffraction spectrometer  

Geotechnical / Soils Engineering:  
  Sieve analysis  

Mineral Engineering / Sample Preparation:  
  Magnetic separator  
  Rock crushers and pulverizers  
  Thin section preparation equipment
Georgia Institute of Technology  
Engineering Experiment Station  
Energy and Materials Sciences Laboratory  
Atlanta, Georgia  30332  

Biomass Conversion Division  
Thermal Process Branch  
(404) 894-3635  

Dr. J.A. Knight, Branch Director  

Instrumentation:  
Atomic absorption spectrometers: flame and furnace  
Atomic emission spectrometer  
Calorimeter: differential scanning type with thermobalance  
Fiber optic scanner for thin layer chromatography  
Gas chromatograph  
Infra-red spectrometer  
Liquid chromatograph  
Ultra-violet spectrometer  

Mineral Engineering / Sample Preparation:  
Mortar mill  

Materials Sciences Division  
Materials Characterization Branch  

Mr. J.L. Brown, Branch Director  
(404) 894-3460  

Instrumentation:  
Arc emission spectrograph  
Asbestos analysis  
Electron diffraction analysis  
Electron microprobe  
Infra-red spectrometer  
Medical-type X-ray  
Optical microscopy and metallography  
Oxygen asher  
Scanning electron microscope with energy dispersive  
X-ray analyzer  
Transmission electron microscope  
X-ray diffraction spectrometer  
X-ray fluorescence spectrometer  

Mineral Engineering / Sample Preparation:  
Ultra microtome: very fine thin section preparation
Instrumentation:
- Automatic thermal expansion apparatus
- Metallographic microscopes
- Particle size analyzer: Sedigraph
- Petrographic microscopes
- Reflectance spectrophotometer for brightness test and color measure
- Scanning electron microscope with energy dispersive X-ray analyzer
- Surface area analyzer: BET Ar adsorption
- Universal tester: mechanical properties
- X-ray diffraction spectrometer
- X-ray fluorescence spectrometer

Mineral Engineering / Sample Preparation:
- Extrusion, granulation, and compaction equipment
- Grinding and polishing equipment
- Kilns to 1600°C
- Tungsten carbide impact mill
Georgia Institute of Technology  
School of Chemical Engineering  
Atlanta, Georgia  30332

Georgia Mining and Mineral Resources Institute:  
(404) 894-2893    GIST:  222-2893

Dr. John E. Husted, Director

Instrumentation:
   Binocular microscopes  
   Microscopes with micrometer eyepiece  
   Petrographic research microscopes

Mineral Engineering / Sample Preparation:
   Ball mill: batch  
   Cone crushe  
   Double deck vibrating screens  
   Double roll crushe  
   Electrostatic separator: high intensity  
   Flotation cells  
   Gyratory crushe  
   Humphrey spiral  
   Jaw crushe  
   Jig (Hartz type)  
   Magnetic scalpel  
   Magnetic separator (high intensity dry roll-type): up to 18,000 gauss  
   Magnetic separator (high intensity dry lift-type): up to 16,000 gauss  
   Magnetic separator (high intensity wet-type): <21,000 gauss  
   Pulverizer  
   Rod mill: batch  
   Sieve analysis  
   Solvent extraction unit  
   Triple deck screen: 18"  
   Wifley table with two decks: coal and mineral
Instrumentation:
- Atomic absorption spectrometers: flame and furnace
- Electron microprobe
- Gas chromatograph
- Gravity meters
- Magnetometers
- Mass spectrometer
- Petrographic microscopes
- Potassium-argon dating laboratory
- Scanning electron microscope
- Seismic surveys: 12 channel portable seismographs
- X-ray diffraction spectrometer
- X-ray fluorescence spectrometer

Geotechnical / Soils Engineering:
- Sieve analysis

Mineral Engineering / Sample Preparation:
- Rock crushers and pulverizers
- Thin section preparation equipment
Georgia Southern College
Department of Geology
Statesboro, Georgia 30458
(912) 681-5361 GIST: 364-5361

Dr. H. Stanley Hanson, Chairman

Instrumentation:
  Differential thermal analysis
  Earth resistivity meter
  Petrographic microscopes
  Scanning electron microscope
  Seismic surveys: 6 channel portable seismograph

Geotechnical / Soils Engineering:
  Hydrometers
  Sieve analysis

Mineral Engineering / Sample Preparation:
  Thin section preparation equipment
Instrumentation:
Earth resistivity meter (Soiltest)  
Gas chromatograph  
Gravity meters (Prospector models)  
Magnetometers (portable and base)  
Petrographic microscopes  
Portable induction salimeter  
Scanning electron microscope  
Seismic surveys: 4 channel portable seismograph  
Seismograph stations: 3 long period, 1 short period  
Underwater sediment samplers  
X-ray diffraction spectrometer  
X-ray fluorescence spectrometer

Geotechnical / Soils Engineering:
Hydrometers  
Power soil augers  
Sieve analysis

Mineral Engineering / Sample Preparation:
Gravity separator  
Magnetic separator  
Rock crushers and pulverizers  
Thin section preparation equipment

Miscellaneous / Hydrologic:
Electric water-level recorder  
Monitor-well-sampling pumps (two inches in diameter)  
Water chemistry field testing equipment
Georgia State University  
Department of Geology  
Atlanta, Georgia  30303  
(404) 658-2272  
GIST: 223-2272

Dr. V.J. Henry, Chairman

Instrumentation:
- Binocular microscopes
- Geiger counters
- Magnetometer
- Petrographic microscopes
- X-ray diffraction spectrometer
- X-ray fluorescence spectrometer

Geotechnical / Soils Engineering:
- Centrifuge
- Sieve analysis

Mineral Engineering / Sample Preparation:
- Magnetic separator
- Rock crushers and pulverizers
- Thin section preparation equipment
Instrumentation:
- Atomic absorption spectrometer
- Atomic emission spectrometer
- Autoclaves: high pressure-temperature
- Carbon 14 dating laboratory
- Earth resistivity meters
- Electron microprobe
- Geiger counters
- Magnetometers
- Mass spectrometer
- NBS tetrahedral anvil
- Neutron activation laboratory
- Paleomagnetism analysis
- Petrographic microscopes (transmitted and reflected light)
- Phase transformation analysis
- Potassium-argon dating laboratory
- Scanning electron microscope
- Seismic surveys: 6 channel portable seismograph
- Stable isotope laboratory
- Stress analysis: triaxial
- X-ray diffraction spectrometer
- X-ray fluorescence spectrometer

Geotechnical / Soils Engineering:
- Hydrometers
- Sieve analysis

Mineral Engineering / Sample Preparation:
- Magnetic separators
- Rock crushers and pulverizers
- Thin section preparation equipment
West Georgia College
Department of Geology
Carrollton, Georgia 30118
(404) 834-1250    GIST: 232-1250

Dr. Sumner Long, Chairman

Instrumentation:
  Atomic absorption spectrometer: flame
  Petrographic microscopes
  X-ray diffraction spectrometer

Geotechnical / Soils Engineering:
  Centrifuges
  Sieve analysis

Mineral Engineering / Sample Preparation:
  Magnetic separator
  Rock crushers and pulverizers
  Thin section preparation equipment
CONSULTING FIRMS
Applied Biology, Inc.
641 DeKalb Industrial Way
Decatur, Georgia 30033
(404) 296-3900

Dr. Steve N. Tsoukalas, Director of Chemistry Division

Instrumentation:
  Atomic absorption spectrometer: furnace
  Carbon analysis: trace and total
  Gas chromatograph
  Gas chromatograph with mass spectrometer
  Organic and microbiology laboratory
  Ultra-violet spectrometer
  Wet chemistry laboratory
Applied Technical Services, Inc.
1990 Delk Industrial Blvd.
Marietta, Georgia 30067
(404) 952-8705

Mr. Bob Dunning, Director

Instrumentation:
  Arc emission spectrograph
  Atomic absorption spectrometers: flame and furnace
  Gas chromatograph
  Infra-red spectrometer
  Wet chemistry laboratory
The Aquafine Corporation
157 Darien Highway
Brunswick, Georgia  31520
(912) 265-2000

Dr. Joseph Iannicelli, Owner

Mineral Engineering / Sample Preparation:
   Blungers
   Centrifuges
   Filter press
   Magnetic separator (high intensity mobile small production model): 20,000 gauss
   Magnetic separator (high intensity pilot plant model): 20,000 gauss
   Pellitizer
   Screens:  18"
   Spray dryers: conversion of slurry to powder

Miscellaneous:
   Water chemistry analysis and purification facilities
Armstrong Research Institute  
P.O. Box 23022  
Savannah, Georgia  31403  
(912) 238-4176  

Dr. Cedric Stratton, Director  

Armstrong Research Institute consists of several faculty members of the Department of Chemistry at Armstrong State College who perform independent testing services.  

Instrumentation:  
  Biological microscopes  
  Gas chromatograph  
  Infra-red spectrometer  
  Ultra-violet spectrometer  
  Wet chemistry laboratory
Atec Associates Inc. of Georgia
1190 Hayes Industrial Drive, N.E.
Marietta, Georgia 30062
(404) 427-9456

Mr. Larry D. Mullins, Senior Project Engineer

Instrumentation:
  Seismic surveys: 12 channel portable seismographs

Geotechnical / Soils Engineering:
  Aggregate testing
  Asphalt testing
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Concrete testing
  Consolidation tests
  Drilling rigs: continuous coring, augers, split spoon samplers
  Field density tests
  Hydrometer
  Permeability: constant and falling heads
  Plate load tests
  Proctor tests
  Shear tests: triaxial
  Sieve analysis
Atlanta Testing and Engineering Consultants, Inc.
105 Technology Parkway
Norcross, Georgia 30092
(404) 448-0242

Mr. W.J. van Reenen, President

Instrumentation:
  Earth resistivity meters
  Seismic surveys: 6 channel portable seismograph

Geotechnical / Soils Engineering:
  Aggregate testing
  Asphalt testing
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Concrete testing
  Consolidation tests
  Drilling rigs: all-terrain rigs, continuous coring, augers
  Field density tests
  Hydrometer
  Los Angeles abrasion tests
  Permeability: constant and falling heads
  Plate load tests
  Proctor tests
  Shear tests: triaxial
  Sieve analysis
  Unconfined compression tests
Betz Converse Murdoch, Inc.
306 Flint Avenue
Albany, Georgia  31701
(404) 432-7191

Laboratory Divisions:

521 W. Germantown Pike
Norristown, PA  19401
(215) 825-0447

Ms. Sharon A. Nordstrom

325 Thirteenth Street
Dunbar, WV  25064
(304) 766-6283

Ms. Pamela G. Villers

Instrumentation:
  Atomic absorption spectrometers: flame and furnace
  Calorimeters
  Carbon analysis: organic and total
  Gas chromatograph
  Infra-red spectrometer
  Ion chromatograph
  Sulphur analysis
  Trinocular polarizing microscopes
  Ultra-violet to visible spectrometer
  Wet chemistry laboratory

Geotechnical / Soils Engineering:
  Sieve analysis

Mineral Engineering / Sample Preparation:
  Ash fusion furnace
  Grindability tester
  Mill crusher
  Muffle furnace
  Riffs and splitters
  Rock crushers and pulverizers

Miscellaneous:
  Biological laboratory: bioassay
Mr. James Smith, Office Manager

Instrumentation:
   Atomic absorption spectrometer: flame
   Gas chromatograph with mass spectrometer
   Wet chemistry laboratory
Instrumentation:

- Analog recording truck
- Atomic absorption spectrometer: furnace
- Borehole logging tools: resistivity, gamma-ray, caliper, temperature, fluid-conductivity, fluid-velocity, sidewall core gun
- Carbon analysis: organic
cation exchange coefficient
Earth conductivity meters
Earth resistivity meters
Gas chromatograph
Gas chromatograph with mass spectrometer
Liquid chromatograph
Magnetometer
Ultra-violet to visible spectrometer
Wet chemistry laboratory

Geotechnical / Soils Engineering:

- Aggregate testing
- Asphalt testing
- Atterberg limits
- California Bearing Ratio: field and laboratory
- Centrifuge
- Concrete testing
- Consolidation tests
- Field density tests
- Hydrometer
- Permeability: falling and constant heads
- Plate load tests
- Proctor tests
- Shear tests: direct and triaxial
- Sieve analysis

Miscellaneous:

- Biological laboratory: bioassays
- Centrifugal surface pumps for aquifer tests
- Water chemistry field test equipment
Clayton Environmental Consultants, Inc.
2141 Kingston Center - N.E.
Marietta, Georgia
(404) 952-3064

Mr. Charles Blake, Branch Manager

Instrumentation:
Atomic absorption spectrometers: flame and furnace
Atomic emission spectrometer
Gas chromatograph
Infra-red spectrometer
Scanning electron microscope
X-ray diffraction spectrometer
X-ray fluorescence spectrometer

Geotechnical / Soils Engineering:
Sieve analysis

Mineral Engineering / Sample Preparation:
Ball mill
CSRA Testing Laboratories, Inc.
1005 Emmett Street
Augusta, Georgia 30904
(404) 733-6960

Mr. Jim Pope, President

Geotechnical / Soils Engineering:
 Aggregate testing
 Asphalt testing
 Atterberg limits
 California Bearing Ratio: field and laboratory
 Concrete testing
 Consolidation tests
 Drilling rigs: continuous coring, augers, split spoon samplers
 Field density tests
 Hydrometers
 Permeability: constant and falling heads
 Plate load tests
 Procter tests
 Shear tests: direct and triaxial
 Sieve analysis
Coleman Engineering Laboratory, Inc.  
721 Bohler Avenue  
Augusta, Georgia 30904  
(404) 733-3663

Mr. Chuck Rushing, Branch Manager

Coleman Engineering Laboratories, Inc. is a subsidiary of Soil Systems, Inc. (see listing). All equipment is utilized through the Marietta office.
Dames and Moore
455 E. Paces Ferry Rd. N.E.
Atlanta, Georgia 30305
(404) 262-2915

Mr. William Smith, Chief Geotechnical Engineer

Instrumentation:
  Analog recording trucks
  Atomic absorption spectrometers: flame and furnace
  Borehole logging tools: self-potential, resistivity,
    gamma-ray, neutron, high resolution density, compensated density,
    differential temperature, acoustic velocity, caliper, sidewall core gun
  Downhole shockwave inducers
  Earth deformation recorders
  Earth resistivity meters
  Gas chromatographs
  Magnetometers
  Marine sight scan sonar
  Metal and subsurface density anomaly locator
  Petrographic microscopes
  Remote sensing image enhancer
  Seismic surveys: 12 channel portable refraction seismograph

Geotechnical / Soils Engineering:
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Complete rock mechanics laboratory
  Consolidation tests
  Drilling rigs: continuous coring, augers, split spoon samplers
  Field density tests
  Permeability: falling and constant head
  Plate load tests
  Proctor tests
  Shear tests: direct and triaxial
  Sieve analysis

Mineral Engineering / Sample Preparation:
  Thin section preparation equipment
Environmental Science and Engineering, Inc.
2200 Northlake Parkway, N.E.
Atlanta, Georgia 30345
(404) 458-9700

Mr. Kenneth Rosaski, Office Manager

Laboratory:

P.O. Box ESE
Gainesville, Florida 32602
1-800-874-8496

Mr. Stuart A. Whitlock; Manager, Chemistry Department

Instrumentation:

Alpha spectrometer
Atomic absorption spectrometer: furnace
Carbon analysis: organic
Colorimeter
Gamma-ray spectrometer
Gas chromatograph
Gas chromatography / fourier transform
infra-red spectroscopy
Gas chromatograph with mass spectrometer
Geiger counters
Hydrocarbon analyzer
Inductively coupled argon plasma spectrometer
Infra-red spectrometer
Liquid chromatograph
NDIR spectrometers
Radon gas counting system
Thermoluminescent dosimetry system
Ultra-violet to visible spectrometer
Visible spectrometer
Federer-Sailors and Associates
1732 Pleasant Hill Road
Duluth, Georgia 30136
(404) 923-4044

Mr. James Sailors, Vice President

Geotechnical / Soils Engineering:
  Aggregate testing
  Asphalt testing
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Concrete testing
  Consolidation tests
  Drilling rigs: continuous coring, augers, split spoon
  samplers
  Field density tests
  Hydrometer
  Permeability: constant and falling heads
  Plate load tests
  Proctor tests
  Shear tests: triaxial
  Sieve analysis
Geo/Hydro Engineers, Inc.  
3002 Kingston Ct.  
Marietta, Georgia 30067  
(404)427-5050

Mr. Lee Squier, President

Geotechnical / Soils Engineering:
  Atterberg limits  
  Concrete testing  
  Consolidation tests  
  Field density tests  
  Hydrometer  
  Proctor tests  
  Sieve analysis
Georgia Kaolin Company
Deepstep, Georgia 31082
(912) 552-5225

Mr. Sam Pickering, Assistant Director

Instrumentation:
  Electron microprobe
  Reflectance spectrophotometer: brightness test
  Scanning electron microscope
  X-ray diffraction spectrometer
  X-ray fluorescence spectrometer

Geotechnical / Soils Engineering:
  Drilling rigs: continuous coring, augers, split spoon samplers
  Sieve analysis

Mineral Engineering / Sample Preparation (kaolin):
  Abrasion tests
  Adsorption tests
  Cation exchange coefficient
  Chemical leaching and bleaching properties
  Delamination
  Fractionation
  Grit and insoluble residue tests
  High and low shear viscosity
Golder Associates
5125 Peachtree Road, N.E.
Atlanta, Georgia  30341
(404) 458-9686

Mr. William F. Brumund, Principal

Geotechnical / Soils Engineering:
  Aggregate testing
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Consolidation tests
  Field density tests
  Hydrometer
  Permeability: constant and falling heads
  Plate load tests
  Proctor tests
  Shear tests: direct and triaxial
  Sieve analysis
Ground Water and Soil Services
Route 2 - Whitesville Road
LaGrange, Georgia 30240
(404) 882-2657

Mr. Don A. Watson, President

Instrumentation:
  Earth resistivity meter

Geotechnical / Soils Engineering:
  Drilling rigs: rock coring, augers, split spoon and thin wall tube samplers
  Sieve analysis
Hill - Pister Engineers, Inc.
1804 Montreal Ct.
Tucker, Georgia 30084
(404) 939-7720

Mr. D.E. Hill, President

Marketing Office:

Hill-Staton Engineers, Inc.
6201 Hamilton Road
Columbus, Georgia 31904
(404) 322-0664

Mr. Lance Hartman, Office Marketing Representative

Instrumentation:
- Blast and vibration monitoring equipment
- Earth resistivity meter

Geotechnical / Soils Engineering:
- Aggregate testing
- Asphalt testing
- Atterberg limits
- California Bearing Ratio: field and laboratory
- Concrete testing
- Consolidation tests
- Drilling rigs: continuous coring, augers, split spoon samplers
- Field density tests
- Hydrometer
- Permeability: constant and falling heads
- Plate load tests
- Proctor tests
- Shear tests: direct and triaxial
- Sieve Analysis
Jay Evans Testing Laboratories
216 Society Avenue
Albany, Georgia 31701
(912) 436-7761

Ms. Mary Summerville, Branch Manager

Instrumentation:
Atomic absorption spectrometer: flame
Gas chromatograph with mass spectrometer
Infra-red spectrometer
Magnetometers
Seismic surveys: 12 channel portable seismograph
X-ray diffraction spectrometer
X-ray fluorescence spectrometer

Geotechnical / Soils Engineering:
Aggregate testing
Asphalt testing
Atterberg limits
California Bearing Ratio: field and laboratory
Concrete testing
Consolidation tests
Hydrometer
Permeability tests: constant and falling heads
Plate load tests
Proctor tests
Shear tests: direct and triaxial
Sieve analysis
Instrumentation:
Analog recording truck
Atomic absorption spectrometers: flame and furnace
Borehole logging tools: self potential, resistivity
gamma-ray, neutron, high resolution
density, compensated density,
caliper, acoustic velocity,
differential temperature, sidewall
core gun
Calorimeter
Carbon-sulphur ionization
Colorimeter
Earth resistivity meters
Gravity meter
Magnetometers
Seismic surveys: 24 channel refraction seismograph and
12 channel reflection seismograph
Wet chemistry laboratory

Geotechnical / Soils Engineering:
Hydrometer
Permeability: constant and falling heads
Sieve analysis

Mineral Engineering / Sample Preparation:
Muffle furnace for sample digestion
Rock crushers and pulverizers

Miscellaneous:
Microbiology laboratory
Law Engineering Testing Company
396 Plasters Avenue, N.E.
Atlanta, Georgia 30324
(404) 873-4761

Mr. Joe C. Drumheller, Senior Geologist

Instrumentation:
  Biological-type microscopes
  Metallographic microscopes

Geotechnical / Soils Engineering:
  Aggregate testing
  Asphalt testing
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Concrete testing
  Consolidation tests
  Drilling rigs: continuous coring, augers, split spoon samplers
  Field density tests
  Plate load tests
  Proctor tests
  Shear tests: direct and triaxial
  Sieve analysis

Mineral Engineering / Sample Preparation:
  Thin section preparation equipment
MacMillan Research
1221 Barclay Circle S.W.
Marietta, Georgia 30060
(404) 427-3101

Dr. J.E. MacMillan, Owner

Instrumentation:
   Arc emission spectrograph
   Atomic absorption spectrometers: flame and furnace
   Gas chromatograph
   Geiger counters
   Infra-red spectrometer
   Scanning electron microscope
   X-ray diffraction spectrometer
   X-ray fluorescence spectrometer

Geotechnical / Soils Engineering:
   Centrifuges
   Sieve analysis

Mineral Engineering / Sample Preparation:
   Rock crushers and pulverizers
Preston Testing and Engineering Company, Inc.
3243 Vineville Avenue
Macon, Georgia 31204
(912) 475-2941

Mr. Ray Preston, President

Geotechnical / Soils Engineering:
Aggregate testing
Asphalt testing
Atterberg limits
California Bearing Ratio: field and laboratory
Concrete testing
Consolidation tests
Drilling rigs: continuous coring, augers, split spoon samplers
Field density tests
Hydrometers
Permeability: constant and falling heads
Plate load tests
Proctor tests
Shear tests: direct and triaxial
Sieve analysis
R & D, Inc.
2731 Waters Road, S.W.
Atlanta, Georgia 30354
(404) 768-1580

Mr. Samuel J. Rowe, President

Geotechnical / Soils Engineering:
Aggregate testing
Asphalt testing
Atterberg limits
California Bearing Ratio: field and laboratory
Concrete testing
Consolidation tests
Drilling rigs: continuous coring, augers, split spoon samplers
Field density tests
Hydrometers
Permeability: constant and falling heads
Plate load tests
Proctor tests
Shear tests: direct and triaxial
Sieve analysis
Savannah Laboratories and Environmental Services, Inc.
P.O. Box 13842
Savannah, Georgia 31406
(912) 354-7858

Dr. James W. Andrews, Director

Instrumentation:
  Atomic absorption spectrometers: flame and furnace
  Carbon analysis
  Gas chromatograph
  Wet chemistry laboratory

Mineral Engineering / Sample Preparation:
  Filtered air cleanroom for trace metals sample preparation

Miscellaneous:
  Biological laboratory: bioassays
  Water chemistry field test equipment
Soil Consultants, Inc.
P.O. Box 1907
Savannah, Georgia  31401
(912) 236-5022

Mr. Thomas A. Ferrara, Manager

Instrumentation:
  Seismic surveys: blasting seismographs

Geotechnical / Soils Engineering:
  Aggregate testing
  Asphalt testing
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Concrete testing
  Consolidation tests
  Drilling rigs: continuous coring, augers, split spoon samplers
  Field density tests
  Harvard miniature compaction tests
  Hydrometers
  Permeability: constant and falling heads
  Plate load tests
  Proctor tests
  Shear tests: direct and triaxial
  Sieve analysis
  Truss tests
  Unconfined compression tests

Miscellaneous:
  Non-destructive testing: radiography, ultrasonic,
    magnetic particle inspection,
    liquid penetration inspection
Soil and Material Engineers, Inc.
3300 Marjan Drive, N.E.
Atlanta, Georgia 30340
(404) 451-5772

Mr. Jack T. Parker, Manager

Instrumentation:
- Earth resistivity meters
- Gas chromatograph
- Seismic surveys: portable refraction seismographs

Geotechnical / Soils Engineering:
- Asphalt testing
- Atterberg limits
- California Bearing Ratio: field and laboratory
- Concrete testing
- Consolidation tests
- Drilling rigs: continuous coring, augers, split spoon samplers
- Hydrometers
- Permeability: constant and falling heads
- Plate load tests
- Proctor tests
- Shear tests: triaxial
- Sieve analysis

Miscellaneous:
- Non-destructive testing: radiography, ultrasonic, magnetic particle inspection, dye penetrant inspection.
Soil Systems, Inc.
525 Webb Industrial Drive
Marietta, Georgia 30062
(404) 424-6200

Mr. Dale Todd, Office Manager

Instrumentation:
Atomic absorption spectrometers: flame and furnace
Atomic emission spectrometers
Earth resistivity meters
Gas chromatograph
Gas chromatograph with mass spectrometer
Infra-red spectrometer
Seismic surveys: 6 channel portable seismographs
Ultra-violet spectrometer

Geotechnical / Soils Engineering:
Asphalt testing
Atterberg limits
California Bearing Ratio: field and laboratory
Concrete testing
Consolidation tests
Drilling rigs: continuous coring, augers, split spoon samplers
Field density tests
Hydrometers
Non-linear stress dependent modulus tests
Permeability: falling and constant heads
Plate load tests
Proctor tests
Shear tests: triaxial
Sieve analysis
Wapora, Inc.
5980 Unity Drive, N.E.
Suite F
Atlanta, Georgia  30071
(404) 447-4433

Mr. Jerry Hitzemann, Branch Manager

Instrumentation:
   Atomic absorption spectrometers: flame and furnace
   Gas chromatograph
   Infra-red spectrometer
   Wet chemistry laboratory

Geotechnical / Soils Engineering:
   Hydrometers
   Sieve analysis

Miscellaneous / Hydrologic:
   Centrifugal surface pump for aquifer tests
   Water chemistry field testing equipment
Ward Engineering
196 15th Street N.W.
Atlanta, Georgia 30318
(404) 872-1132

Mr. Steven Ward, Vice President

Geotechnical / Soils Engineering:
  Aggregate tests
  Asphalt tests
  Atterberg limits
  Concrete tests
  Drilling rigs: continuous coring, augers, split spoon samplers
  Field density tests
  Hydrometer
  Proctor tests
  Sieve analysis
Instrumentation:
- Analog recording truck
- Atomic absorption spectrometers: flame and furnace
- Borehole logging tools: gamma, self-potential, fluid resistivity, conductivity
- Calorimeter
- Carbon analysis: total and organic
- Earth conductivity meters
- Earth resistivity meters
- Gas chromatograph
- Gas chromatograph with mass spectrometer
- Geiger counters
- Ground penetrating radar scanner
- Inductively coupled plasma spectrometer
- Infra-red spectrometer
- Ion chromatograph
- Liquid chromatograph
- Magnetometer
- Organic-halide analyzer
- Seismic surveys: 6 channel portable refraction seismograph
- Surface tensiometer
- Survey altimeter
- Ultra-violet to visible spectrometer
- Wet chemistry laboratory

Geotechnical / Soils Engineering:
- Drilling rigs: continuous coring, augers, split spoon samplers
- Hydrometers
- Lysimeters
- Permeability: constant and falling heads
- Sieve analysis

Miscellaneous:
- Biological reactors
- Ozone generators
Whitaker Laboratory, Inc.
2500 Tremont Road
Savannah, Georgia 31405
(912) 234-0696

Mr. Joe Whitaker, Owner

Geotechnical / Soils Engineering:
  Aggregate testing
  Asphalt testing
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Concrete testing
  Consolidation tests
  Drilling rigs: continuous coring, augers, split spoon samplers
  Field density tests
  Hydrometers
  Permeability: falling and constant heads
  Plate load tests
  Proctor tests
  Shear tests: direct and triaxial
  Sieve analysis
GOVERNMENT AGENCIES
Dr. William H. McLemore, State Geologist

Available for performing some limited testing services for the mining industry.

Instrumentation:
- Analog recording truck
- Borehole logging tools: self-potential, resistivity, gamma-ray, acoustic velocity
- Petrographic microscopes
- Wet chemistry laboratory
- X-ray diffraction spectrometer

Geotechnical / Soils Engineering:
- Centrifuge
- Drilling rigs: continuous coring to 1500 ft., augers

Mineral Engineering / Sample Preparation:
- Magnetic separator
- Muffle furnace
- Rock crusher
- Rock saws
- Ultra-sonic dismembrator
Mr. David Mitchell, Director

Generally not available for performing testing services for private industry, but can do hand sampling and limited testing for potential sources of aggregate maintenance for use by Transportation Construction or Maintenance subject to approval of State Materials and Research Engineer.

Instrumentation:
- Arc emission spectrograph
- Atomic absorption spectrometer: flame
- Colorimeter
- Infra-red spectrometer
- Liquid chromatograph
- Weather-ometer: accelerated weathering analysis
- Wet chemistry laboratory

Geotechnical / Soils Engineering:
- Aggregate testing
- Asphalt testing
- Atterberg limits
- California Bearing Ratio: field and laboratory
- Concrete testing
- Confined compressive strength test
- Consolidation test
- Drilling rigs: continuous coring, augers, split spoon samplers
- Permeability: constant and falling heads
- Proctor tests
- Sand equivalency tests
- Shear tests: direct and triaxial
- Sieve analysis
U.S. Army Corps of Engineers
South Atlantic Division Laboratory
611 S. Cobb Drive
Marietta, Ga. 30060
(404) 424-8811, Ext. 2346

Mr. Robert J. Stephenson, Laboratory Director

Generally not available for performing testing services for private industry except in special cases, but will perform such services for other government agencies.

Instrumentation:
  Atomic absorption spectrometer: flame
  Gas chromatograph
  Infra-red spectrometer
  Monochromatic spectrometer
  Petrographic microscopes
  Wet chemistry laboratory
  X-ray diffraction spectrometer

Geotechnical / Soils Engineering:
  Aggregate testing
  Asphalt testing
  Atterberg limits
  California Bearing Ratio: field and laboratory
  Compaction tests
  Concrete testing
  Consolidation tests
  Drilling rigs: continuous coring, augers, split spoon samplers
  Dynamic design analysis: shear, compression, and extension tests
  Field density tests
  Permeability test: constant and falling heads
  Plate load tests
  Shear tests: direct and triaxial
  Sieve analysis

Mineral Engineering / Sample Preparation:
  Rock crushers and pulverizers
  Thin section preparation equipment
U.S. Environmental Protection Agency
Southeastern Regional Laboratory
College Station Road
Athens, Georgia 30613
(404) 546-3136

Mr. James Finger, Laboratory Director

Not available for performing testing services for private industry but will perform a limited amount for other government agencies.

Instrumentation:
Atomic absorption spectrometers: flame and furnace
Gas chromatograph
Gas chromatograph with mass spectrometer
Inductively coupled plasma spectrometer
Wet chemistry laboratory

Geotechnical / Soils Engineering:
Hydrometer
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Editor: Eleanore Morrow

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