Thermochem laboratories maintain the following specialized equipment to deliver the results you expect.

LABORATORY EQUIPMENT

- 1 Perkin Elmer Optima 7000DV ICP-OES
- 1 Perkin Elmer PinAAcle 900F Atomic Absorption Spectrometer
- 1 Perkin Elmer FIAS 100 Mercury Analyzer
- 1 Waters Acquity Ultra-Performance Liquid Chromatograph with Fluorescence and Tunable UV Detectors
- 1 Waters 1525/717 HPLC with Gradient Pump and Autosampler
- 1 Waters 2475 Variable Wavelength Fluorescence Detector
- 2 Thermo Scientific UltiMate 3000 Ultrahigh-Performance Liquid Chromatographs with RS Fluorescence Detectors
- 1 Thermo Scientific Photodiode Array Detector
- 1 Thermo Scientific Dionex 5000+ Single-Channel Gradient High-Performance Ion Chromatograph
- 1 Thermo Scientific Dionex 5000+ Dual-Channel High-Performance Ion Chromatograph with Eluent Generation Module
- 3 Thermo Scientific Dionex AS-AP Autosamplers
- 1 Thermo Scientific Dionex AS40 Autosampler
- 1 Hitachi F-2000 Spectrofluorometer 1 cm discrete sample cell, flow analysis cell
- 2 Oasis HLB 6CC LP extraction stations with cartridges
- 1 Agilent 1260 Infinity Ultra-High Performance Liquid Chromatography System
- 1 Agilent 6490 Triple Quadrupole Mass Spectrometer
- 1 Agilent 5975 Mass Selective Detector
- 1 Agilent 7890 GC with Dual Thermal Conductivity Detectors and Flame Ionization Detector
- 1 Thermo Scientific Trace 1310/1300 Gas Chromatograph with Electron Capture and Thermal Conductivity Detectors
- 2 Thermo Scientific Trace 1310/1300 Gas Chromatograph with Thermal Conductivity Detector
- 2 Hewlett Packard 5890 Gas Chromatographs with Flame Ionization and Electron Capture Detectors
- 2 Hewlett Packard 5890 Gas Chromatographs with Thermal Conductivity Detector and Electron Capture Detectors
- 2 Total Inorganic Carbon NDIR Flow Injection Analysis System with California Analytical 600 IR Detector
- 2 Mettler Toledo T70 Autotitratators
- 2 Timberline TL-2800 Ammonia Analyzer
- 2 HACH DR2800 Spectrophotometer
- 2 Turner Designs Trilogy Fluorimeters
- 1 Ocean Optics Neofox Oxygen Detector
- 1 Pylon AB6A Radon Monitor
- 1 O-I 4420 Electrolytic Conductivity Detector
- 1 FIA lab Flow Injection Analysis System
- 1 Thermo Scientific Chromeleon 7 Laboratory Data System

Power Generation

- Power plant chemical process simulation modeling for feasibility analysis and power cycle optimization (to maximize generation and minimize scaling)
- Pilot testing services, including equipment design and fabrication, for feasibility analysis and power cycle optimization (to maximize generation and minimize scaling)
- Steam purity and quality measurement; Power plant performance testing services, third-party verification of contractual compliance and process optimization
- Corrosion and scale deposition testing and consulting services
- Comprehensive in-house laboratory chemical analysis services
- Environmental emissions testing and emission control system design and optimization
FIELD INSTRUMENTATION AND EQUIPMENT

- 6 Handheld Fluorimeters
- 2 On-line Fluorimeters
- 1 Field-portable Photoacoustic Detector for Gas Tracers
- 6 MicroMod MFC Gas Mass Flow Controllers
- 6 MicroMod LDS Liquid Tracer Delivery Systems
- 2 High-Volume Liquid Tracer Injection Skid, 1200 liter tank, 50 lpm pump
- 2 High-Pressure Gas Tracer Delivery Units, Liquefied-gas pumps, 120 bar
- 2 High-Pressure Liquid Tracer Delivery Units, 100 bar, 1 lpm pump
- 8 Standard Pressure Two-Phase Sampling Separators, Condensers, Coolers per ASTM E-1675
- 2 High Pressure Two-Phase Sampling Separators and condensers, ABSA certified
- 8 Retractable Traversing Isokinetic Sampling Probes
- 8 Retractable Cal-Port Sampling Probes, per ASTM E-947
- 12 NIST-traceable Pressure and Temperature Instrumentation
- 2 NIST-Traceable Dry Well Temperature Calibrators
- 6 NIST-traceable Dry Gas Flow Calibrators and Volume Meters
- 12 Electromagnetic Liquid Flow Meters
- 2 Automated pH Monitoring Systems
- 1 On-line Steam Sample Concentrator with Na and SiO2 analyzers
- 2 On-line Steam Calorimeters
- 2 High-Temperature Two-Phase Downhole Sampling Tools with PTS sensors
- 6 High-Temperature PTS Tools Memory / SRO
- 4 Surface Read-out Displays and Data Logging Units
- 1 40 x 40 ft. Low Emissions Container Muffler (LECM, 800 ton/hr capacity)
- Instrumentation and Data Logging System for LECM
- Logging Tool Test Oven, 400 C rating
- Steam Generator Test Loop for Logging tool and On-line Steam Quality Instrumentation Testing and Calibration
- Mobile Lab Unit (Sprinter Van Type)