

# **Tampa Electric Laboratory Services**

Tampa Electric Laboratory Services was established in 1976 to provide accurate and cost-effective laboratory testing and environmental monitoring services to Tampa Electric Company. Since our beginning, we have expanded our laboratory to serve Tampa Electric and to also serve other clients in utilities and industries across Florida. Our goal is to provide superior customer service utilizing our experienced Project Management and Laboratory staff to help define your project, develop a customized analytical/sampling program and to provide superior analytical results using state of the art technology.

We are a **NELAP** certified laboratory with over 250 years of combined sampling, laboratory, analytical and Project Management experience. Laboratory Services offers proficiency in a wide range of analytical capabilities for various matrices including but not limited to: Groundwater, Surface water, Wastewater, Sludge, Soil, and Hazardous Wastes. Analytical testing is provided in accordance with several different regulatory programs, including RCRA, CWA, TSCA, and NPDES. We have an excellent QA infrastructure in place to facilitate the production of scientifically sound, legally defensible data ensuring all data withstands regulatory scrutiny. Rush turnaround time capability and customized reporting and electronic data deliverables are also available.

## NELAP CERTIFIED ANALYTICAL TESTING CAPABILITIES - FL DOH# E54272

### Wet Chemistry Analyses

- Alkalinity
- Ammonia
- Br, Cl, F, NO3, NO2 and SO4 EPA 300.0/9056
- Chemical Oxygen Demand
- Color
- Flash Point
- Hardness
- Ignitability of Solids
- Langlier Saturation Index
- Nitrate/Nitrite
- Oil and Grease (HEM & SGT/HEM)

### Organic Analyses

• PCB in Oil EPA 600/4-81-045

### Metals Analyses

- EPA 200.8/6020
- Low Level Mercury by EPA 1631E
- Mercury by EPA 245.1, 7470, 7471

- Organic Nitrogen
  - Ortho Phosphate
- pH
- Residue TDS, TSS, TS, % Solids
- Total and Dissolved Organic Carbon
- Total Halogens by EPA 5050/9056
- Total Nitrogen
- Total Phosphorous
- Unionized Ammonia
- PCB in Solid EPA 8082
- SPLP Leaching Procedure EPA 1312
- TCLP Leaching Procedure EPA 1311
- Trace Metals EPA 200.7/6010

### Volatiles Analyses

• Silica as SiO2

- Volatile Organic Compounds by EPA 624.1/8260
- SPLP ZHE Leaching Procedure EPA 1312
- TCLP ZHE Leaching Procedure EPA 1311

# AIR ANALYSIS TESTING CAPABILITIES

Laboratory Services supports our in-house Air Services Sample Stack Testing Group by performing the following analyses.

- Formaldehyde EPA 323
- Total Particulate Matter EPA 5, 5b, 17, 201a
- Hydrogen Halides (HCL/HF) EPA 26a
- Sulfuric Acid and Sulfur Dioxide EPA 8b





We look forward to serving your sampling and analytical needs. For further information and pricing, please contact:

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# FIELD SERVICES AND SAMPLING CAPABILITIES

ANALYTICAL TESTING

- Chlorine
- Conductivity
- CO2 (Free & Total)
- Dissolved Oxygen

OIL AND COAL

CAPABILITIES

Ferrous Iron

- full time samplers are proficient in Florida DEP field sampling SOPs for surface water and ground water. The following analyses are routinely performed in the field:
- pH
- Redox
- Residual Chlorine
- Salinity
- Silt Density Index

Density

(TOGAS)

Flash Point

Metals

PCBs

Pour Point

• Dynamic Viscosity

Gravimetric Analysis

Kinematic Viscosity

LOI-Loss on Ignition

Moisture in Oil

- Sulfite
- Salinity
- Temperature

Tampa Electric also offers in-house superior, full service environmental field sampling and analysis support. Our

Turbidity Water Depth

Laboratory Services also is equipped to provide a wide variety of analytical testing of Fuel Oils (#2 & #6), Transformer Oils, Coal, Ash and Gypsum including the following analytical testing parameters:

## Fuel/Petroleum Testing, Transformer Oil

- API Gravity
- Ash
- Asphaltenes (Normal Heptane Insolubles)
- BTU (Gross and
- Net Heat of Combustion)
- Carbon, Hydrogen and Nitrogen (CHN)
- Cloud Point
- Color
- Conductivity
- Conradson Carbon

# Gypsum and Limestone Testing

- Acid Insolubles
- CaCO3, CaSO4, CaSO3, MgCO3
  Gypsum Purity

## Coal, Fly Ash & Slag Testing

- 60 Mesh Moisture
- Air Dry Moisture
- Ash
- Ash Fusion
- Ash Minerals (SiO2, Al2O3, TiO2, Fe2O3, CaO, MgO, Na20, K20, P205)
- Base/Acid Ratio
- BTU
- Bulk Density
- Calcium Carbonate CaCO3
- Carbon, Hydrogen Nitrogen & Oxygen (CHNO)

- Chlorine and Fluorine
- by Bomb (EPA 5050/9056) Slagging Index/
- Fouling Index
- Fouling Tendency
- Grind Coal to 60 Mesh
- Hardgrove Grindability Index (HGI)
- LOI-Loss on Ignition
- Mercury by Combustion
- Oxidizer Screen Test
- Proximate Analysis
- Short Prox
- Sieve Analysis

- Saybolt Viscosity
- Sediment by Extraction
- Specific Gravity
- Sulfur and Low Level Sulfur
- Volume
- Water by

- Silica Value

  - Sulfur Trioxide
  - T250
  - Total Moisture
  - Trace Metals
  - Ultimate Analysis
  - Volatile Matter

Free and Combined Water

- Dissolved Gas Analysis
  - - Water and Sediment by



- Distillation
- - - Tendency
    - Sulfur