

# Sidney Carter

Metallurgical Technologist



## EXPERIENCE

### **Metallurgical Technologist**

2018-Present

### **Metallurgical Technician**

2010-2018

## MEMBERSHIPS

- American Society Of Mechanical Engineers (ASME)
- American Institute Of Chemical Engineers (AIChE)
- National Association Of Corrosion Engineers (NACE)
- American Association For Testing And Materials (ASTM)

Mr. Sidney Carter has served as Metallurgical Laboratory Technician for Sheppard T. Powell Associates LLC (STPA) since 2010. Prior to 2010, Mr. Carter assisted STPA on a part-time basis. Mr. Carter performs various procedures on tube and metal specimens as they relate to the analysis of said specimens. Such procedures include but are not limited to conducting dimensional and visual assessments, cutting tubes for examination, removing deposits/scale via the mechanical method for composition analysis (consistent with Test Method-A of ASTM D3483-83, Standard Test Methods for Accumulated Deposition in a Steam Generator Tube), and calculating deposit density measurements. Mr. Carter is also charged with creating mounted specimens from those samples requiring in-depth metallurgical analyses such as related to determining microstructure, cause of failure, and remaining life assessment.

Additionally, under the direction of the Metallurgical Director, Mr. Carter has employed the Scanning Electron Microscope (SEM) to examine samples at magnifications from 25X to 800X. Mr. Carter also has experience with employing the SEM technique in combination with Energy Dispersive X-ray Spectroscopy (EDXS) - this to indicate the elemental composition of deposits/scales and other applicable samples.