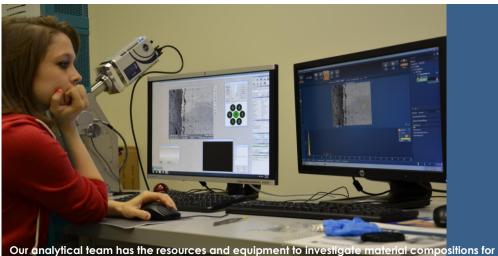


## **ITLS Information Sheet**



#### Forensic Science Support Services

providing forensic science support in your cause of failure assessments.

### Complete Characterization ( Analysis of Materials:

ITLS supports our clients by providing extensive conventional chemical analysis support. Our services include; OES (Plasma and Spark); XRF, LECO Combustion, Typical materials assessed, include:

- Ferrous Materials
- Non Ferrous Materials
- Polymers

Our Support Services include a number of provisions, including:

- Metallography-Cross Sectioning
- Cr(VI) ROHS Testing
- FTIR (of organic materials)
- ICP-MS (metals non-metals in liquids)

#### **Optical Microscopy**

Our Keyence microscopic equipment allows us to **digitally** (to 1000X) overlay photographs of a surface, showing complete depth of field of a fracture. Through articulation, we can photograph, accurately measure and 3-D model the fracture surface, to help you in assessing a cause of failure.



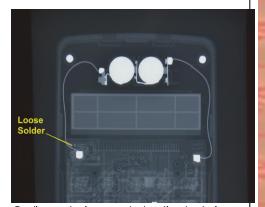
# Scanning Electron Microscope (SEM) w/Energy Dispersive Spectrometry (EDS)

Our Laboratory has the top of the line **SEM/EDS** equipment for performing material evaluations, and quantitative and qualitative chemical analysis on a microscopic level.

If warranted, ITLS can support your assessments with Consulting Metallurgical Engineers, ScD's, PhD's.

#### Industrial Radiography

Industrial Radiography may be a valuable tool for you in performing an evaluation of a part or component, in a cause of failure case.



Radiography is a nondestructive technique of **looking at the "inside" of an item** without compromising the condition of the part or component.

## ITLS Forensic Science Support Services include:

- •Conventional Chemical Analysis
  - •Ferrous Materials
  - Non-ferrous Materials
  - Polymers
- •Scanning Electron
  Microscopic Evaluation
  w/EDS
  - Chemical Analysis
  - Coating Identification
  - Matrix Composition
- Light Microscopic Analysis
  - •Complete depth of field
  - •3D Modeling
- •Industrial Radiography
  Services



"ITLS has the Chemical, Metallurgical and Nondestructive analytical tools to support your cause of failure assessments."

