



Applied Science
& Engineering,
Inc.



Magnified view of headlight components from a vehicle involved in a collision. Several mechanical indicators demonstrate that it was on at the time of impact. Subtle materials indicators show that it was on well before the instant of impact.

ASE specializes in investigating the mechanical causes of losses. Even losses that do not immediately appear to have a mechanical origin are often linked to mechanical problems.

- **Fire.** We investigate fires to determine the cause and origin and also analyze the site or product of origin to specify the cause more precisely. Our mechanical engineering background is an asset in this work because the cause and spread of fire involve mechanical processes. This is true even if the fire begins with an electrical component. We have backgrounds in materials and in heat transfer, which are necessary to understand how items ignite and burn.
- **Vehicle accidents.** We perform accident reconstructions, including determining speeds at impact. The reconstructions can involve analysis of crush, friction with the roadway, and other mechanical phenomena. Understanding vehicle systems that may have contributed to an accident also requires mechanical expertise. For example, we examine headlights to determine whether they were on at the time of impact.
- **Structures.** We investigate issues related to materials and damage, such as causes of water damage and mold, and component failures and damage.
- **Injuries and product liability.** We evaluate the safety of products and facilities.

Investigating Mechanical Causes of Losses: Applied Science and Engineering, Inc.

ASE engineers have the expertise necessary to investigate the causes of losses. Just let us know when we can help you.



Robert Taylor, III, M.S., P.E. has decades of experience in forensic engineering and has conducted more than 2500 technical investigations. He has two Masters degrees in engineering, and he is licensed as a Professional Engineer in South Carolina and North Carolina.



Robert "Rob" Taylor, IV, M.S., P.E. is accredited as a Traffic Accident Reconstructionist by the Accreditation Commission for Traffic Accident Reconstruction (ACTAR) and as a Certified Fire and Explosion Investigator by National Association of Fire Investigators (NAFI). He is licensed as a Professional Engineer in South Carolina. Rob's main specialties are vehicle accidents and fires.

Serving the Carolinas and beyond from two locations

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