### EDUCATION:

B.Sc. Mechanical Engineering, Colorado School of Mines, Golden, Colorado, 2008

### **REGISTRATION:**

Registered Professional Engineer in Arizona, California, Colorado, Georgia, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Texas, Utah, and Wyoming. Certified Diplomate of Forensic Engineering.

## **EXPERIENCE:**

Vice President of Engineering, Knott Laboratory, LLC, January 2025 to Present Director of Engineering, Knott Laboratory, LLC January 2020 to December 2024 Engineering Manager, Knott Laboratory, LLC, January 2019 to December 2020 Senior Engineer, Knott Laboratory, LLC, September 2018 to December 2019. Consulting Engineer, Engineering Design & Testing Corp., Centennial, CO, August 2015 to September 2018 Lead Engineer, Iofina Resources, Inc., Greenwood Village, CO, August 2013 to August 2015 Engineer II, Shaw, Stone, & Webster, Cherry Hill, NJ, February 2009 to August 2013 Mechanical Engineer Intern, Caterpillar, Inc., Summer 2008

## FORENSIC ENGINEERING INVESTIGATIONS:

While at Knott Laboratory and formerly Engineering Design & Testing Corp., Mr. Mowry has conducted, analyzed, and testified to numerous forensic engineering investigations involving property damage, personal injury, and death including, but not limited to:

- Premises Liability
  - o Slips-and-falls, including those related to snow and ice accumulation and mitigation (snow and ice removal)
  - o Slip-resistance, Tribology, and Tribometry
  - Sweep logs and property inspections for pedestrian safety
  - o Trips-and-falls, step-and-falls, falls on the same level
  - o Building Codes (e.g., IBC, IRC, IFC, IPMC, IPC, IFGC, NFPA, UBC, UPC, local and regional building codes, etc.)
  - Stairway safety
  - Federal Regulations (e.g., ADA, FHA, CFRs, etc.)
  - Pedestrian/Walkway safety
  - o Lighting and visibility
  - Fire safety (e.g., fire suppression systems, fire alarms, construction requirements, etc.)
  - o Carbon monoxide
- Workplace/Construction Safety
  - Fall Protection (working at heights)
  - Scaffolding
  - Confined Space
  - Crane-related incidents
  - Material handling matters
  - OSHA Regulations
  - o Industry specifications and codes (e.g., ASME, ITSDF, NFSI, etc.)
  - Heavy equipment (e.g., implements of husbandry, skid steers, material handling equipment, etc.)
- Property Damage
  - Water losses
  - o Commercial and residential plumbing, piping, valves, fittings, tanks, etc.
  - o Appliances
  - o Fires
  - Moisture intrusion
  - $\circ$  Hail damage
  - Heavy equipment failures
  - Fire suppression systems
  - o Boilers, furnaces, water heaters, etc.
  - Construction defects
  - o Building codes (e.g., IBC, IPC, UBC, UPC, IFGC, IECC, etc.)





- Product Defects
  - o Safety hierarchy
  - Design defects
  - Manufacturing defects
  - Product recalls
  - CPSC requirements
  - o Industry codes, standards, and regulations (e.g., ASME, ISO, etc.)
- Vehicle Crash Reconstruction
  - EDR imaging
  - Visibility studies
- Failure Analyses
  - Valves, Fittings, fixtures, and components
  - Plastic, PEX, and PVC piping
  - Metallic plumbing and piping
  - o Gears, bearings, etc.
  - o Fatigue analysis
  - Brittle and ductile failures
  - o Dezincificaiton, oxidative degradation, environmental stress cracking, and material compatibility matters
- Incident Reconstruction
  - o Photogrammetry
  - Videogrammetry
  - Camera Matching
  - Object Matching
  - o Matchmoving

## FAILURE ANALYSIS:

Mr. Mowry has conducted multiple failure analyses on various components including plumbing fittings and fixtures, PVC piping, copper and iron water piping, gear teeth, bearings, and other components. Through Mr. Mowry's education and experience, he frequently examines mechanical systems and components and determines the cause of failure, including failure to maintain, improper use, long term wear and tear, and design or manufacturing defects.

## CERTIFICATIONS

Mr. Mowry holds, or has previously held, the following certifications:

- Fall Protection
- Scaffold Worker
- Confined Space Entry
- Radiation Worker
- Lock-Out Tag-Out (LOTO)
- Certified English XL Tribometrist (CXLT)
- Certified Fire and Explosion Investigator (CFEI)

# **EXPERT TESTIMONY**

As a result of Mr. Mowry's investigations and analyses, he has provided expert witness testimony in both federal and state courts in matters related to forensic engineering, investigations, failure analyses, pedestrian safety, plumbing failures, and more. Mr. Mowry's work has been for both plaintiffs and defendants.



## ENGINEERING AND DESIGN

While at lofina Resources, Inc., Mr. Mowry oversaw the design, installation, and improvement of multiple iodine extraction facilities located on salt water disposal facilities in the mid-stream oil and gas fields in northwestern Oklahoma. He performed equipment sizing and hydraulic analyses for pumps and piping systems, including acidic and caustic fluid handling systems. Mr. Mowry worked closely with project scheduling and budgeting through the design, construction, and commissioning of the facilities. While at Shaw, Stone, & Webster, he also was involved in multiple multimillion-dollar projects including overseeing the design, management, implementation, and start-up of multiple heavy equipment replacement projects at an operational nuclear power generation facility. His work at Shaw, Stone, & Webster included the replacement of the high-pressure turbine, condensate pumps and motors, low and high-pressure feedwater heaters, isolated phase bus duct cooler, main feedwater pumps and motors, and main steam and feedwater pipe support upgrades. In addition, Mr. Mowry oversaw multiple licensing and design basis evaluation projects for nuclear safety related equipment at an operational nuclear power generation facility. He performed federal regulatory evaluation and industry code evaluation for mechanical systems including the auxiliary feedwater systems, containment fan cooling units, and the containment spray system. In addition, Mr. Mowry was the author of a license amendment request submitted to the Nuclear Regulatory Commission to revise the licensing basis for the nuclear facility.

ASME

ASTM

### **PROFESSIONAL AFFILIATIONS:**

Mr. Mowry is a member of the following technical and professional societies:

- NFPA National Fire Protection Association
- NSPE National Society of Professional Engineers
- NAFE National Academy of Forensic Engineers

American Society of Mechanical Engineers ASTM International

