

# **JEFF UDALL**

**B.Sc. (Physics), B.Eng. (Mechanical), M.A.Sc. (Civil Engineering), P.Eng., CEFI**

## **CONSULTING FORENSIC ENGINEER**

- Accident Reconstruction for Motor Vehicle Accidents (Approximately 201 investigations)
- Failure Analysis of Materials & Mechanical Equipment (Approximately 142 investigations)
- Fire Investigation (Approximately 64 investigations, including vehicle fires)
- Structural Design and Damage Assessment (Approximately 289 investigations)
- Has successfully provided expert testimony in court

## **ACADEMIC BACKGROUND**

- Masters of Engineering (M.A.Sc. Civil/Structural), McMaster University, 2007
- Bachelor of Engineering (B.Eng. Mechanical), McMaster University, 1993
- Bachelor of Science (B.Sc. Physics), University of Western Ontario, 1990

## **ADDITIONAL COURSES & SEMINARS**

- Response of Materials and Structures to Fires – Carleton University Department of Civil Engineering, May 2009
- Mould, Petroleum Hydrocarbons, Perchlorates – Technical Seminar, ALS, March 2008
- Investigating Propane and Natural Gas Explosions (CAFI), November 2007
- Canadian National Advanced Fire, Arson and Explosion Investigation Training Program, CFEI (NAFI)
- CATAIR Annual Crash Conference, August 2007
- Fire Dynamics Simulator (FDS) and Smokeview, Carleton University Department of Civil Engineering, May 2007
- Investigating Fires Involving Electrical Power Distribution Systems (CAFI), April 2007
- Architects & Engineers Loss Control Seminar, Feb. 2007, Feb 2008
- Courses required for completion of Master's of Civil Engineering (2003-2006)
- Ontario Building Code short courses: House, Small Buildings, Building Structural, General Legal, 2005/2006
- Fundamentals of Connection Design, AISC, 2002
- Structural Bracing, AISC, 2001
- Accident Reconstruction Using Conservation of Momentum and Energy, SAE International, 2001
- ASME B31.1 Power Piping Course, ANRIC Enterprises, 2001
- Principles of Failure Analysis, ASM International, 2001
- Forensic Engineering & Failure Analysis, University of Toronto, 2001
- Motor Vehicle Accident Reconstruction, SAE International, 2000
- Pump System Analysis, Fluid Design Inc. & Sandwell EPC Inc., 2000
- Boiler Performance Analysis Seminar, Babcock & Wilcox Technical Training Services, 2000
- Pipe Stress Analysis Using Caesar II, COADE, 1999
- Recovery Boiler Seminar, Babcock & Wilcox Technical Training Services, 1998
- Finite Element Analysis, Ansys Training Center – HG Engineering, 1994
- Power Piping Stress Analysis, COADE, 1994

## **EMPLOYMENT BACKGROUND**

Caskanette Udall Consulting Engineers

Partner, Engineer, November 2005 – Present

Accident Reconstruction for Motor Vehicle, Pedestrian, Commercial Vehicle, Farm Vehicle, Pedestrian

Structural Design and Damage Assessment – Residential, Industrial, Agricultural

Failure Analysis of Materials and Mechanical Equipment

Fire Investigation

Caskanette & Associates Consulting Engineers  
Associate Engineer, November 1999 – November 2005

Babcock & Wilcox Canada  
Project and Design Engineering, 1993 - 2005  
Boiler Design and Performance for Boilers in Utility Power Plant, Pulp & Paper Mills, and Industrial Plants  
Structural Steel Design and Stress Analysis including Weld Design and Sizing  
Piping Design and Flexibility Analysis  
Failure Analysis of Piping and Structural Systems

SteelCraft Industries Limited, FCF Division  
Project Supervisor, 1997  
Custom Steel Fabrication Project Management  
Design and Drafting of Custom Pressure Vessels and Associated Components  
Purchasing, Planning, and Routing of Projects for Manufacturing

### **PROFESSIONAL SOCIETIES**

- Professional Engineers of Ontario (PEO)
- Ontario Society of Professional Engineers (OSPE)
- Canadian Association of Technical Accident Investigators and Reconstructionists (CATAIR)
- Society of Automotive Engineers (SAE)
- Canadian Association of Fire Investigators (CAFI)
- National Association of Fire Investigators (NAFI)

(Revised June 17, 2009)