



Glenn Cameron

Background & Experience

Glenn holds a B.Sc. in Chemistry, University of Manitoba and a M.Sc. in Metallurgical Engineering from the University of Alberta. He is a Senior Pipeline Engineering Specialist with the National Energy Board, Calgary, Alberta. His responsibilities include development and implementation of compliance strategies for the NEB regulated pipeline companies.

Glenn has over 25 years of experience in the oil and gas industry specializing in developing and implementing pipeline integrity management programs, performing risk assessments and implementing corrosion monitoring, inspection and mitigation programs. This experience covers the Canadian western basin, the lower inland United States, offshore Gulf of Mexico and South America. This industry experience is reflected in the authorship of over 20 technical articles and technical presentations and 5 copyrights from Consumer and Corporate Affairs Canada.

Qualifications and Professional Affiliations

- The Association of Professional Engineers, Geologists and Geophysicists of Alberta
- B.Sc. in Chemistry, University of Manitoba.
- M.Sc. in Metallurgical Engineering, University of Alberta.

Significant Achievements:

- Currently working for National Energy Board, Calgary, Alberta as Senior Pipeline Engineering Specialist. Glenn works in the Operations Business Unit; Compliance Planning & Analysis. Responsibilities and achievements include:
 - Development and implementation of compliance strategies for the NEB regulated companies. This is accomplished through risk models for prioritization on failure probability and the health, safety and environmental consequence.
 - Additional responsibilities include the development and implementation of Integrity Audit Protocols, used in the audit process to provide consistency in the technical depth of the integrity audit and the audit deliverables.
 - While a member of the Pipeline Audits Team, he provided technical and managerial expertise in audits of pipeline companies for compliance to the regulatory requirements for pipeline and facility design, construction and integrity management programs.
 - Provided guidance and leadership for the NEB as Project Manager for the GIS implementation project for Canada's national pipeline network.

- Provided training and mentorship for junior engineering personnel on the subjects of corrosion, integrity management, risk assessment, and regulatory compliance as it relates to pipeline and related facility integrity.
- Liaise with the Office of Pipeline Safety, Department of Transport and state regulators in pipeline integrity audits for pipeline companies regulated in the United States.
- Owned and operated G.R. Cameron & Associates Limited, Calgary, Alberta.
- Employed by Imperial Oil Resources Limited, Calgary, Alberta as Materials Engineering Advisor.
- Worked on assignment to Exxon Company USA, Houston Production Operations as Senior Staff Engineer
- Worked on assignment to Exxon Company USA, New Orleans Production Operations as Senior Staff Engineer
- Worked for Esso Resources Canada Ltd., Calgary, Alberta as Research Specialist
- Lecturer at University of Alberta, Edmonton, Alberta as Chemical Metallurgist

Publications & Presentations

"GITA's GIS for Oil and Gas Conference"

Closing Plenary Lecture, *Regulatory Issues and Development*
 Calgary, Alberta
 November, 2008

"International Pipeline Conference"

Chair, Standards and Regulations, Track 13
 Calgary, Alberta,
 September, 2008

"Integrity Management Programs: A Regulator's Perspectives and Expectations."

NACE Pipeline Integrity Management Seminar, June 24-25, 2009
 Calgary, Alberta, Canada. Keynote Speaker

"Integrity Management and Maintenance Pigging Workshops"

Initiated IMP and Pigging workshops in conjunction with the British Columbia Oil and Gas Commission, Saskatchewan Energy and Mines and the Manitoba Public Utilities Board. These workshops are held across Western Canada to engage and inform stakeholders regarding the common regulatory requirements for Integrity Management and Pipeline Pigging Programs.

"Hydrostatic and Pneumatic Testing"

Development and delivery of in house NEB training for junior engineering staff as well as external training of ERCB and BCOGC staff.
 June 12, 2008

"Policing the Pigs"

Integrity Management and Pipeline Pigging Workshop
 Arnett & Burgess Oilfield Construction
 Calgary, Alberta, April 2008-04-24

"The Importance of Pipeline Pigging for Internal Corrosion Control"

NACE Western Regional Conference, Keynote Speaker
Edmonton, Alberta, Feb 2008

"Pipeline Maintenance Pigging & Preparation for In Line Inspection"

August 8th and 9th, 2007. Buenos Aires, Argentina

"Integrity Management Systems & Integrity Management Protocols"

The Canadian Institute. Conference on Pipeline Integrity, Planning, Execution and Management. March 8 & 9, 2007, Calgary, Alberta. Conference Co-Chair & Speaker

"Integrity Management Oversight: Analysis of OPR-99 Findings"

National Energy Board Workshop,
June 2005, Calgary, Alberta

"Tecnologias SIG para el gerenciamiento de integridad de ductos basado en analisis de riesgo"

Priemiera Jornada Colombiana de Ductos, 25 y 26 de Marzo de 2004,
Bogota, Columbia. Pedro Jarpa co-author.

"Internal Corrosion Model Determines Prioritized Locations for Direct Assessment"

Pipeline World, October 2004, No. 5

"GIS Technology for Pipeline Integrity Management"

Invited article for *Pipeline & Gas Journal* describing GIS technology for risk assessment and developments of pipeline integrity management programs published March 2004.

"Crossing Cultural Boundaries"

Invited article for *World Pipelines* describing GIS applications for data integration, pipeline integrity management programs (IMP) and records management systems (RMS) in Bolivia and Brazil published February 2004.

"GIS Technology for Managing Pipeline Integrity"

GITA Annual Conference: GIS for Oil and Gas Conference and Exhibition, September 29-October 1, 2003, Houston, Texas

"The Art & Science of Pipeline Pigging"

Two day workshop given at the *University of Calgary* as part of the Department for Continuing Education Program. June 2003, May 2002.

"Pipeline Integrity Workshop – GreenPipe Industries"

One day workshop given to industry participants covering regulatory requirements in Canada and the USA. Introduction to API 1160, 49CFR Part 192 and 195, ASME B31.8S-2000 and the National Pipeline Mapping System (NPMS). Calgary, June 2003.

"GIS Applications for Pipeline Integrity"

One day workshop for VECO clients and industry participants given in Abu Dhabi, United Arab Emerits, April 2003,

"Prioritizing Pipeline Defects Using GIS-Based Risk Management Methodologies.

Pipeline Emergency Preparedness & Response Conference
October, 2001 Calgary, Alberta

"Making Pipelines Safer"

Calgary Herald Article
October, 2001 Calgary, Alberta

"Managing Pipeline Integrity to Minimize Risk"

ESRI User's Group Conference
March, 2000 Calgary, Alberta

"Risk Assessment: An Operating Model for Internal Corrosion"

Twenty-First Annual Gulf Coast Corrosion Control Seminar.
NACE International, Houston Section
February 9-12, 1997, Houston, Texas

"A Comparison of Cathodic Protection Survey Techniques and Intelligent Pig Inspections"

Exxon Company, *USA Materials Engineering & Corrosion Workshop*
Houston, Texas. June 24-26, 1996.
The Pipeline Pigging Conference, Houston, Texas. February 1997.

"Experiences with Oilfield Chemical Bidding at HPO"

Exxon Company, *USA Materials Engineering & Corrosion Workshop*
Houston, Texas. June 24-26, 1996.