

## PROFILE OF QUALIFICATIONS

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- 8+ Years' Experience with Multiple Industrial and Municipal Drinking/Waste Water Treatment Technologies, Research Publications, Process Engineering, Water Treatment Plant Operations and Project Management.
- Safety Management including HAZID and HAZOP studies and failure mode analysis of industrial pilot studies facilities.
- Project Management including FEED studies, economic evaluation of project life cycle, cost estimation, risk analysis and budgeting.
- Knowledge of relevant environmental regulations and standards including EPA's SDWA (D/DBPR, SWTR, IESWTR, LT1/LT2ESWTR), ELGs, AWWA Standards, CEAA, CEPA, DWQMS and the Fisheries Act.
- Pilot Plants Integrity Maintenance Project design and technical review including Factory Acceptance and Return Acceptance Test
- Good knowledge of Capital and Expense Projects Management Systems in projects.
- A team player with good attention to detail, brilliant analytical and technical reporting skills.
- Experience managing in excess of \$500000 (CDN)/year budget on water treatment projects.

## EDUCATION

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- [2017] Master of Science, Environmental Science (Department of Civil and Environmental Engineering)  
University of Alberta, Edmonton, Canada
- [2011] Bachelor of Science, Biological Science (Deans List)  
University of Calgary, Calgary, Canada

## WORK EXPERIENCE

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[September 2017– Present] Engineering Project Manager - Pilots – General Electric/ Suez Water Technologies and Solutions.  
Oakville, ON.

### Job Role:

- Planning, development and execution of entire pilot studies on drinking water and wastewater treatment, which includes the full scope of project management, design/technical review, equipment coordination/delivery & Operation, data review and technical reports.
- Work with Process Engineers and Safety Supervisors to develop and execute specific processes for pilot equipments and technologies including but not limited to Ultrafiltration (UF), MBR membrane technologies, RO, EDRs, Biological systems using biofilm.
- Review equipment designs, PFDs and P&IDs plans, drawings, as well as develop proposals and purchase orders.
- Manage internal and external project resources to provide timely in-house equipment and process support to clients.
- Conduct regular meetings with Clients, Operations staff, internal resources and Field Service Representatives to provide information and to optimize the pilot's performance to meet and exceed the Client's objectives.
- Working with multi-disciplinary team of field and office personnel; managing field personnel to ensure all plant operation activities are clearly communicated, understood, and completed safely by developing and communicating procedures for operations and management of process change.
- Leading the development of site-specific job hazard assessment, supervising safety reviews including HAZID and HAZOP studies.
- Field visits to client sites in Canada (BC, AB, ON) and the United States (TX, SD, VA) to commission & decommission pilot equipment, train clients on operation of the equipment and to provide support as needed.

[September 2014– August 2017] Research Lead and Teaching Associate – University of Alberta. Edmonton, AB.

### Job Role:

- Master, Lead Author and Co-Author of Several Peer Refereed Technical Publications on The Subject Matter of Biological Nutrient Removal(BNR) In Municipal Wastewater Treatment.
- Operated and Monitored A Small-Scale Conventional Activated Sludge Plant and An Integrated Fixed -Film Activated Sludge (IFAS) Plant with A Combined Maximum Flow Of 46000 Gallons Per Day. Used Process Automation Systems with DCS And PLC Capabilities Specifically Delta V.
- Prepared Proposals During Project Initiation, Which Detailed the Scope, Budget Forecast, Work Plan and Time Management Plan for The Project.
- Supervised the collection and analysis of field samples for Ammonia, Phosphorous, Nitrite/Nitrate, COD And BOD.
- Designed and Implemented Tracer Studies to Determine Hydrological Profile and Flow characteristics of Pilot-scale treatment plants.
- Integral Part of The Execution Team for The Installation and Conversion of Conventional Activated Sludge Plant to An IFAS Plant.
- Teaching and Rendering First Year Undergraduate Civil and Environmental Courses to Students in the Program. Courses Included Environmental Impact Assessment, Environmental Engineering 101.

[October 2013 – August 2014] Technical Specialist, B.I.T. – Canyon Technical Services (now Trican Well Services) Red Deer, AB.

Job Role:

- Providing engineering and technical support for high pressure pumping of fracturing fluids at various client well locations in Central and Western Canada.
- Advising clients on the most cost-effective blends of fracturing fluids, fracturing sand and additives based on laboratory results and field quality control tests.
- Developed initiatives for the Treatment and Re-use of process-affected Water (flowback water).
- Providing field operators and operations engineers with detailed engineering requirements to increase well production, reduce operating and maintenance costs for new and existing oil well facilities in Alberta, Saskatchewan and Manitoba.
- Developing and maintaining project schedules and execution timelines while monitoring execution progress.
- Leading the quality control team on testing and ensuring quality of fracturing and completions fluids, and cleaning acids.
- Supervising the creation of new, and the overhaul of existing standard operating procedures for fracturing fluid handling to meet the industry standards and regulations.
- Coordinated fracturing fluid sample deliveries to analytical laboratories for testing.
- Providing and communicating technical reports and summaries on field operations.
- Supporting in the continuous improvement program of client facilities by incorporating strategies, codes of practice, standard operating procedures, and implementation of Risk Mitigation and Response Plans
- Provide mentorship and direction, including development of On-Boarding for new hires, junior EITs and interns to the quality control/ Project Management Team.

[Sept. 2011 – January 2012] Quality Control Technician [Jan 2012 – October 2013] Quality Control Supervisor – Synoil Energy Services. Calgary, AB.

Job Role:

- Conducted quality control tests on all samples of drilling, fracturing completions fluid and acid, and liaised with clients to ensure that QC requirements were met.
- Developed standard operating procedure documents for fluid handling and testing in-house.
- Managing and supervising field service teams with equipment at oil well sites.
- Maintained pressure pumping machinery in-house, including pumps, valves, gauges, sensors etc.
- Tracked and accounted for large volume fracturing fluid transfer / delivery to customer sites with tankers
- Prepared technical reports and summary on both field operations and in-house procedures.
- Provide mentorship and direction for new hires, and interns.

[July 2008 – Jun 2011] Research Assistant and Community Advisor -University of Calgary. Calgary, AB.

Role responsibilities:

- Provided technical review and laboratory technical support in the study of naphthenic acid biodegradation in oil sands process affected water (Suncor supported project)
- Presented research findings at several industrial and academic conferences.
- Organized events and led activities to engage students, create awareness and promote quality living on campus residence

## ACHIEVEMENTS/AWARDS

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2014 - 16] NSERC Industrial Postgraduate Scholarship Award  
[2011] Genome Alberta Undergraduate Student Awards

## PROFESSIONAL MEMBERSHIP

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- ASPB (Member)
- PMI (Member)
- Journal of Environmental Engineering (Member)

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