



Taylor Fleming | P.L.(Eng.), Eng.L.
APEGA and EGBC Professional Instrumentation and Controls Engineer
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Objective

Seeking full time or part time employment to enhance my current skills and apply my instrumentation and controls experience and education to help clients reach their goals.

Summary of Qualifications

- Experienced professional in instrumentation and controls engineering.
- 11 years of experience in the energy sector specializing in work with EPC companies.
- Recognized for having an excellent ability to build and maintain strong client relationships.
- Consistently producing high quality project work within scope, time and budget.
- Strong commitment to client services within a fast-paced work environment.

Education and Training

- SAIT Instrumentation Engineering Technology September 2007 to April 2009.
- SAIT Electronics Engineering Technology September 2004 to April 2006.
- Crescent Heights High School September 2000 to June 2003.

Experience with the following Programs

- InTools Smart Plant Instrumentation (SPI.)
- AutoCAD 2D drafting I/O schematics and P&ID development.
- Allen Bradley Bur-Mac PLC systems using RS Ladder Logic 5 software at SAIT.
- Distributed Control Systems (DCS) such as ABB using Delta V software at SAIT.
- System Control and Data Acquisition (S.C.A.D.A) at SAIT.
- Foundation Fieldbus programming and wiring topologies at SAIT.
- Control valve, pressure safety valve, flow meters, and orifice plate sizing experience using Fisher spec manager, size master, instrument tool kit and the Daniel orifice flow calculator.

Computer Skills

Excellent computer skills using Auto CAD, Visual Basic Programming, Visio, Microsoft Word, Excel, PowerPoint, Access, Outlook, Prism and Familiar with C++ Programming.

Transferable Skills

- Demonstrate excellent communication and interpersonal skills.
- Friendly and positive attitude towards co-workers and customers.
- Excellent people skills and an energetic team player.
- Adapt quickly to new situations and welcome daily challenges.
- Ability to solve problems and complete tasks within required time frames.

Industry Affiliations

- (ASET) The Association of Science and Engineering Technology Professionals of Alberta.
- (ISA) International Society of Automation.
- (SAIT) Southern Alberta Institute of Technology Alumni.
- (APEGA) The Association of Professional Engineers and Geoscientists of Alberta.
- (EGBC) The Engineerings & Geoscientists of British Columbia.

Awards, Scholarships and Certificates

- Jason Lang Scholarship - Academic Achievement.
- Standard First Aid.
- ENFORM H2S Alive Certificate.
- Workplace Hazardous Materials Information System (WHMIS) certificate.
- Petroleum Safety Training (PST).
- Enerplus Site Safety Training.
- Husky Site Safety Training.
- Certificate of Training - Transportation of Dangerous Goods Regulations.
- CNRL Site Safety Training

Work Experience



Equinox Engineering Ltd

Instrumentation and Controls Engineer

June 2019 to present

Working in the instrumentation and controls group as a project lead. This includes As-building tripsto help our clients get their drawings to match up with their facility. Also helping our client during project commissioning phase completing site RFI's as well as helping the client through their Software Integrate Function Test (SIFT). I have helped develop some of the most intricate all-encompassing instrument and control indexes for the GB unit in Pembina. Developed Control Architecture drawing for some Conoco Philips Canada well pads. I will help determine a scope and have input into a project DBM and PEP for the job at hand. I would develop all the instrumentation FEED documents and initiate an initial Material Take Off (MTO). This would include a cost estimate, instrument index, P&ID's and a risk register for any potential issues during detailed design. After approval of the FEED work from our client we would go into detailed design. I would then need to work with the process group to develop the P&ID's and create a tagging scheme. I would then develop an instrument index and data sheets for all the instruments to be purchased. I would create RFQ packages, do bid evaluations and finally I would generate PO packages for purchasing of all instrumentation related equipment. I would also have to create installation details for all the product purchased for the facility. During the scope of any project we are also required to create schedule's and progress reports as well as man power loading estimates. Once the detailed engineering is complete, we will be engaged with the construction team to get the facility built. We will answer any and all RFI's that come in from the construction and commissioning teams. Once the facility is operational, we will then receive all our documentation back from the start-up crew in the form of red lines. We then as-build the documents for submission to our clients for their record.

➤ Clients and Projects;

- **Pembina Pipeline Corp**

-Duvernay Complex Kria LSD 03-33-062-20 W5M – Stabilization Facility (DS3) (June 2019 to December 2020)

- **Conoco Philips Canada**

-Montney Well Pads a-13-L/94A-12 (Pad 3) - (December 2019 to December 2020)

- **Santos (Queensland Australia)**
- Arcadia Valley Phase 2 Compressor Station – ACS-03 FEED (March 2020 to August 2020)
- CNRL
- Minehead As-Building Trip – Develop P&IDs and captured all the new instrumentation and equipment – (December 2020)



Fortress Engineering Ltd
Instrumentation and Controls Engineer
September 2018 to October 2019

Working in the instrumentation and controls group as a project lead. This includes meeting with our clients and delegating work to our team members. I will determine a scope and have input into a project DBM and PEP for the job at hand. I would develop all the instrumentation FEED documents and initiate an initial engineering cost for our clients. This would include a cost estimate, instrument index, P&ID's and a risk register for any potential issues during detailed design. After approval of the FEED work from our client we would go into detailed design. I would then need to work with the process group to develop the P&ID's and create a tagging scheme. I would then develop an instrument index and data sheets for all the instruments to be purchased. I would create RFQ packages, do bid evaluations and finally I would generate PO packages for purchasing of all instrumentation related equipment. I would also have to create installation details for all the product purchased for the facility. During the scope of any project we are also required to create schedule's and progress reports as well as man power loading estimates. Once the detailed engineering is complete, we will be engaged with the construction team to get the facility built. We will answer any and all RFI's that come in from the construction and commissioning teams. Once the facility is operational, we will then receive all our documentation back from the start-up crew in the form of red lines. We then as-build the documents for submission to our clients for their record.

➤ **Clients and Projects;**

- **Pembina Pipeline Corp**
- NWR Terminal 2012008 – Pembina RFS (September 2018 to December 2018)
- EFX Empress Rail Loading 2017042 – FEED Phase (September 2018 to December 2018)
- Redwater C3+ Truck Offloading 2018034 (November 2018 to December 2018)
- **Methanex Corporation**
- 18007 LOD.029 Rail Scrubber (November 2018 to March 2019)
- 18044 MEC.361 Crude Tank Scrubber (October 2018 to April 2019)
- **XTO Energy (Midland, Texas)**
- 18099 Delaware Compressor Station (October 2018 to April 2018)
- 18102 Tiger Compressor Station (October 2018 to April 2018)
- 18103 Wildcat Compressor Station (October 2018 to April 2018)
- 18104 Spartan Compressor Station (April 2019 to October 2019)
- 18105 Maverick Compressor Station (April 2019 to October 2019)



WSP Global Oil and Gas
Instrumentation and Controls Engineer
June 2017 to September 2018

Working in the instrumentation and controls group which includes meeting with our clients to determine a scope and PEP for the job at hand. I would develop all the instrumentation FEED documents and initiate an initial engineering cost for our clients. This would include a cost estimate, instrument index, P&ID's and a risk register for any potential issues during detailed design. After approval from our client we would go into detailed design. I would then need to work with the process group to develop the P&ID's and create a tagging scheme. I would then develop an instrument index and data sheets for all the instruments to be purchased. I would create RFQ packages, do bid evaluations and finally I would generate PO packages for purchasing of all instrumentation related equipment. During the scope of any project we are also required to create schedule's and progress reports as well as man power loading estimates. For projects where many vessels are in a facility, I will create level tables from the tank vendor drawings to help the commissioning team with the level transmitters and bridals. Once the detailed engineering is complete, we will be required to answer any RFI's that come in from the construction and commissioning teams. Once the facility is operational, we will then receive all our documentation back from the start-up crew in the form of red lines. We then as-build the documents for submission to our clients for their record.

➤ **Clients and Projects;**

• **Pembina**

-151-13501-00 Duvernay D1 Gas Plant c/w as-builts LSD: 14-28-62-20 W5M (June 2017 – September 2018)

-171-06823-00 KRIA Phase 1 Gas Processing Facility (DR2): LSD 14-28-062-20 W5M (August 2017 – February 2018)

-171-06823-00 KRIA Phase 1 Inlet Liquid Handling (DH1): LSD 03-33-062-20 W5M (August 2017 – February 2018)

-171-06823-00 KRIA Phase 1 Stabilization Facilities (DS1/DS2): LSD 14-28-062-20 W5M (August 2017 – February 2018)

• **Shell**

-Fox Creek 23 Ext Well Site (June 2017 – July 2017)

• **Keyera**

-161-03865-00 Simonette Gas Plant Liquid LACT LSD:12-05-63-25 W5M (June 2017 – Nov 2017)

-161-12566-00 Simonette Gas Plant Liquid Storage LSD:12-05-63-25 W5M (June 2017 – June 2018)

-161-16224-00 Simonette Liquids Handling Expansion LSD: 09-06-063-25 W5M (October 2017 – Jan 2018)

-171-05922-00 Simonette AOC Inlet Facility Phase 2 LSD: 09-06-063-25 W5M (November 2017 – Jan 2018)

-171-11839-00 Simonette Wapiti Line Heater LSD: 11-10-065-02 W6M (November 2017 – Feb 2018)

-171-07921-00 Simonette Acid Gas Injection Project (Jan 2018 – September 2018)



Trialta Projects Inc.

Project Engineer

January 2017 to March 2018

Working with different project teams to complete work including oil batteries, gas plants and wells. This work will include going through client specifications and industry codes. Completing FEED packages including cost estimates, DBM, Scope of work documents and a project execution plan. During detailed design, we would get into such deliverables as shut down keys, material take offs, bill of materials, schedules, man hour estimates, material requisition packages, data sheets and control narratives.

➤ **Clients and Projects;**

• **Crescent Point Energy**

-Crescent Point 14-32-8-8 W2M Blending Facility (January 2017 – April 2017)

-Torquay-Oungre Oil Battery FEED (March – June 2017)

- Torquay-Oungre Oil Battery Detailed Engineering (September 2017 – March 2018)

• **Taq North Ltd.**

-04-16-43-10 W5M Sunchild Dual Well Pad Tie-In

-03-17-43-11 W5M Single Well Tie In

-05-19-045-08 W5M Single Well Addition

-17044 Sweet Separator Package

• **Vermilion Energy Corporation.**

-16032Northgate 05-20 Hazop Implementation

-16034 Northgate 01-10 Hazop Implementation

-16082 Steelman 13-07-03-04 W2M SWB

-17043 12-23-52-16 Process Review

• **Blackspur Oil Corporation.**

- 16119 Battery Upgrade at 02-29-19-13 W4M – Control Valve Sizing



Upside Engineering Ltd.

Senior Instrumentation & Automation Engineer.

March 2012 to August 2017.

Working in the instrumentation, automation and controls group as a project lead. This includes meeting with our clients to determine a scope and PEP for the job at hand. I would develop all the instrumentation FEED documents for an initial engineering cost for our clients. This would include a cost estimate, instrument index, P&ID's and a risk register for any potential issues during detailed design. After approval from our client we would go into detailed design. I would then need to work with the process group to develop the P&ID's and create a tagging scheme. I would then develop an instrument index and data sheets for all the instruments to be purchased. I would create RFQ packages, do bid evaluations and finally I would generate PO packages for purchasing of all instrumentation related equipment. During the scope of any project we are also required to create schedules and progress reports as well as man power loading estimates. Once the detailed engineering is complete, we will be required to answer any RFI's that come in from the construction and commissioning teams. Once the facility is operational, we will then receive all our documentation back from the start-up crew in the form of red lines. We then as-build the documents for submission to our client for their records.

➤ **Clients and Projects;**

• **Gibson Energy**

-Hardisty Athabasca Twining Pipeline (July 2014- Oct 2014) Tank farm expansion

-Hardisty West Terminal Expansion (July 2014- Oct 2014) Tank farm

• **Husky Oil Operations Ltd**

-LLB Direct Pipeline Project Facility (December 2014- October 2015) Feed study for the Husky tank farm in Lloydminster.

-Hardisty Tank 472 Inspection (May 2015 – August 2015) Replace equipment on a burnt up tank.

• **IPL**

-Hardisty Receiving and Distribution Terminal (February 2013 – October 2014) New 42" line from La Corey terminal to this distribution terminal including custody transfer metering and QA building

-Christina Lake Pump Station (November 2012 – January 2014)

-Partial Bow River Reversal FEED (March 2016 – August 2016)

-Partial Bow River Reversal Detail (September 2016 – June 2017)

• **Pembina**

-Cheecham Pipeline Drag Reducing Agent (DRA) Skid (July 2014 – August 2014) Pipeline capacity expansion using a drag reducing agent.

-Suncor Interconnect FEED (October 2014)

-Cheecham Lateral Phase two – FEED (November 2014 – May 2015) Pump station increasing capacity

-Horizon Capacity Expansion Ph2 – FEED (June 2015 – September 2015)

-Horizon Capacity Expansion Ph2 – Detail (October 2015 – August 2016)

-Horizon Capacity Expansion Ph2 – As-Built (September 2016 – November 2016)

• **Plains Midstream Canada**

-Josephburg Pump Station (November 2016 – August 2017)

-Plains PFS Looping (November 2016 – August 2017)

• **SemCAMS**

-KA North Separator (June 2014 – Oct 2014)

• **TransCanada Corporation**

-Northern Courier Pipeline (December 2014-Present) Major tank farm project 100 km north of Fort McMurray including QA buildings, Meter banks, etc.



Bluestar Engineering

Instrumentation Engineering Advisor

October 2014 to February 2015.

Developed their data sheet templates and created new instrumentation templates for the engineering team. Created bid packages as well as instrument indexes for Bluestar's clients. Advised all Bluestar engineer's and project managers on any and all instrumentation decisions.

➤ **Clients and Projects;**

• **Pembina**

-Saturn 11-36 LACT (Lease Approved Custody Transfer) (October 2014 to January 2015)

-Tourmaline Spirit River (October 2014 to January 2015)

• **Tourmaline**

-The Mulligan Marketing Terminal (October 2014 to January 2015)

-Earring Oil Battery (October 2014 to January 2015)

-Mulligan 14-23 Facility Expansion (October 2014 to January 2015)

• **Twin Butte**

-Twin Butte Coriolis Metering Package (October 2014 to January 2015)

• **Gibson's**

-Swan Hills 10-15 Pumping Site (October 2014 to January 2015)



JNG Projects Ltd.

Instrumentation, Automation & Controls.
March 2014 to April 2015.

Worked as an instrumentation consultant. I took old P&ID's and updated them based on new instrumentation equipment that has been installed in the field. We as build the sites by checking tags, equipment type and process lines. We then markup the P&ID's with all the new instruments, equipment and current tags.

- Clients and Sites;
 - Enerplus gas plant near Medicine Hat, Alberta (04-02-13-05 W4M)
 - Enerplus gas plant near Medicine Hat, Alberta (01-07-16-02 W4M)
 - Husky Wardlow gas plant near Brooks, Alberta (02-31-022-11 W4M)



Upside Engineering Ltd.

Instrumentation Technologist.
Oct 2010 to Feb 2012.

Worked as an Instrumentation Technologist creating RFQ packages, bid evaluations, sizing calculations, P&ID tagging schemes and developing instrument indexes and data sheets.

- Clients and Projects;
 - **Gibson Energy**
 - 2010086 Hardisty West Terminal (May 2011 – Dec 2011)
 - 2015015 Gibson under blend study (April 2015 – Present) Gibson is trying to cut the cost of diluent and use heating while shipping to rail cars.
 - **Devon Canada Corporation**
 - 2011038 Jackfish Terminal
 - **Canadian Natural Resources Limited**
 - 2010066 Central Brintnell Battery (October 2010 – October 2012)
 - 2011325 NBB Flare System Modifications (March 2012 – September 2012)
 - 2011343 D1 Steam Flood Modifications (March 2012 – June 2012)
 - 2011344 SBB Flare Upgrade (March 2012 – October 2012)
 - **Cenovus**
 - 2011413 Door Mixer T-0607 and T-0628
 - 2011446 Add DP Transmitters to Soft Make Up Cooling
 - 2011464 Upgrade BU-0402 to D55 Compliance
 - 2011465 Upgrade BU-0815 to D55 Compliance
 - 2012412 Wireless Pressure Transmitters on Multiple Storage Tanks
 - 2012417 Inst Air Dew Point Transmitters for M Pads
 - **Imperial Oil**
 - 2010116 HFO Spill Prevention Stage 3 (August 2011 – July 2012)
 - **TransCanada Pipelines**
 - 2011043 Keystone Hardisty West
 - **Pembina**
 - 2012561 Crystal Lake LACT and Pipeline Tie-In (May 2012)



TWRF Consulting Services Ltd.
President and C.E.O.
October 2010 to Present.

I am currently the President and CEO of TWRF Consulting Services, working as an engineering consultant for clients in the energy sector.



Upside Engineering Ltd.
Junior Electrical & Piping Designer.
2010 to 2011.

Worked as a 2D drafter, Implementing redlines from engineering marked up drawings and creating electrical I/O drawings and P&ID's.



Tay-Gra Engineering Ltd.
Junior Instrumentation Technologist.
2009 to 2010.

Worked with P&ID's creating instrument indexes and data sheets. Helped with shutdown keys and control narratives. Also implemented control loops and P&ID tagging and symbology.

References

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