C.E.T. Competency Profile - Sample Document

1. Technical Analysis Competency

Describe a situation or activity in which you applied discipline-specific knowledge to data collection, analysis, and documentation of results.

Indicator	Competency Logbook Entry Examples
Differentiate between solids, liquids, and gases. *(Chemical Engineering competency sample - indicator 1.01)*	When conducting Emergency Planning Zone (EPZ) calculations, I differentiated between gas and liquids in wells and pipelines, as well as gas and liquid phases in wells and pipelines that contain both.
Describe the types of geospatial data. *(Survey and Geomatics competency sample - indicator 1.01)*	The types of geospatial data are "vector" and "raster". Many of my positions that I have held require the use and understanding of both of these data types. When I worked at (*company name*) we conducted drone surveys which collected raster data. Based on this raster data I interpolated drainage models and generated a vector drainage layer that we were able to overlay onto aerial imagery to determine dirt works requirements.
Assess electrical safety before gathering data. *(Electrical competency sample - indicator 1.02)*	I have now taken AIT Alberta rectifier training. This was a 5 day, 40 hour course that taught us everything that is needed for rectifier training. We stepped into all parts of the rectifier and how dangerous they can be. First we talked about safety, and the necessary steps of how to correctly power down a rectifier, and test all voltage point prior to contacting it. Then moving into proper troubleshooting for all parts of a rectifier. Finally ending it with how to safely operate and adjust a rectifier, The rectifier is the largest single handed electrical item that can kill you. Dealing with them daily, I have proven how I can safely assess a rectifier prior to me working on it. I am now supervising projects and can help provide learning to junior employees about how to safely work around rectifiers as well. Another item we have is AC step potential, testing the AC voltage on pipe structure before touching them daily, this safety measure reduces AC shock hazard. I demonstrate safe practice on all electrical features, as electricity is typically invisible and can cause some serious damage with a small piece of complacency .
Verify the documentation obtained from stakeholders, such as: 1) Specifications; 2) Technical drawings; 3) Calibration materials; 4) Bills of materials; 5) Operation and maintenance manuals; and 6) Site visits. *(Mechanical competency sample - indicator 1.03)*	My experience on verifying the documentation obtained from stakeholders includes: 1. Reviewing shop drawings received from contractor to ensure they meet project specifications and requirements. 2. Reviewing operation and maintenance manuals provided by contractors to ensure that they provide accurate and complete instructions for proper operation and maintenance of the equipment. 3. Conducting site visits to verify that the actual conditions on site match the project requirements and specifications. 4. Review bills of materials against standard RS means and determine the submitted quotes is adequate for the changing scope.

Interpret results from instrumentation (e.g., level gauges, flow meters, and HMI). *(Chemical Engineering competency sample - indicator 1.04)*	I used ERCBH2S modelling software to conduct EPZ calculations. To conduct EPZ calculations I used pipeline flowrates and well production data obtained via software.
Assess the condition of air, hydrogeology, hydrology, aquatic or terrestrial systems. *(Environmental competency sample - indicator 1.04)*	As an *(company name)* environmental advisor for *(number of years)* , I managed remediation/reclamation projects of inactive natural gas well/station sites while working with consultants, labs, *(company name)* groups. These involved hiring consultants for Phase I-III Env Site Assessments and risk assessments, doing field visits during consultants' work, reviewing lab analytical results (soil, groundwater) and reports, working with consultants/AER toward closure and submitting Rec Cert applications. I also completed Phase I Env. Site Assessments (ESAs) under supervision of *(supervisor name)* to assess for areas of potential env. concern and associated potential aquatic/terrestrial contaminants of concern at abandoned lease sites to be disposed to landowners. While completing these, I assessed systems e.g., AB Env's ESAR; aerial photos; historical *(company name)* records; land titles; spill, Env Law Ctr & PTMAA reports and completed site inspections and interviewed *(company name)* Operators about sites' environmental history.
Perform quantitative and qualitative analyses and tests using laboratory procedures and/or field procedures appropriate to the discipline. *(General competency sample: Materials - indicator 1.05)*	Qualitative testing such as compressive strength or air content of concrete is frequently conducted and discussed with peers/supervisors in the interest of making continued improvements to processes. Quantitative analysis in this position can be shown through the measurement of aggregate, determinations of moisture content, sieve results etc, where relative masses of different components are compared and used to assess changes in production factors or appropriateness for use.
Evaluate, analyze, and interpret data to solve technical problems. *(General competency sample: Geoscience - indicator 1.06)*	While working for (*company name*), multiple slope inclinometers (SI's) in the region of the external tailings area (ETA) showed inconsistent discrepancies between the current and previous readings. By comparing reads between two different SI probes, the historical readings of those instruments, and the data from surrounding piezometers, I was able to work with the ETA field engineer to determine that there was no structural failure present in the tailings dam but rather the initial SI probe was out of calibration and needed to be tagged out and calibrated. The analysis and interpretation of this data I performed with the field engineer confirmed the stability of the ETA: continued monitoring of those SI's with a different probe and the ongoing collection of nearby VWP's was requested until the original probe was recalibrated and returned to service.

Describe the principles of proportional, integral, and derivative (PID) control and their effects on the control loop. *(Instrumentation competency sample - indicator 1.06)*	Proportional control is an action that is directly proportional to the amount of error between the PV and SP found within a control system. It is fast acting and aims to reduce steady state error. It is not able to completely eliminate oscillations. Integral control incorporates the error between SP and PV and calculates the total amount over time. It then manipulates the output based on the accumulated error. It is effective at getting the error to zero, but when implemented poorly with proportional control can cause the system to become unstable. Derivative control calculates the rate of change of the error, which then allows for predicative action to reduce it. Effective at reducing (dampening) the impact of rapid change however the downside is that it can make a system more susceptible to fluctuations.
Perform field surveys and mapping of terrain and ecosystems. *(Environmental competency sample - indicator 1.07)*	I conducted field surveys/mapping of terrain and ecosystems as a environmental coordinator, *(company name)* in *(timeframe)* where I along with an environmental consulting firm I hired completed and documented field biomonitoring of vegetation in forest areas surrounding the *(company name)* sour gas plant to check for potential impacts due to the Plant's activities and air emissions. This biomonitoring project was completed as per requirements in the Plant's AB Environment Operating Approval. In addition, I completed field surveys and mapping of terrain/ecosystems for my *(theseis name)* in forest ecology completed at the *(university name)* in *(timeframe)* where I through field surveys gathered and mapped vegetation data on and near trails in natural areas east of *(city name); (location names)* .
Analyze record drawings. *(Civil competency sample - indicator 1.10)*	I created red-line drawings to update the record drawings accordingly by other personnel. Once record drawings were completed, I performed a review for any missing information and to ensure labels and leaders were at the correct location and to confirm detail designs matched the structures and tie ins completed in the field. The contractor and I also were provided with historical record drawings for the existing watermain in the Core Area. Reviewing and analyzing these drawings assisted in verifying existing and future utility locations.
Collect technical site data to inform architectural decisions about site suitability. *(Architectural competency sample - indicator 1.12)*	A project I am currently working on is a building addition onto an existing health care facility. I had reviewed geotechnical reports for the site soil conditions, and also request asbuilts and locations of services below grade to help determine which part of the site would be best to build the new addition. All of these considerations plus impacts to the existing site during construction, and also how the site function may change after the project is completed.
Interpret, examine, and verify the mechanical/ chemical/thermal properties of base materials. *(Welding competency sample - indicator 1.13)*	Ongoing review of material test certificates to confirm weldability and compliance with requirements. This review has been completed of materails for pressure vessels, structural steel, piping and pipeline components.

Assist in the development of construction scheduling. *(Construction competency sample - indicator 1.14)*	During the spring to early fall of *(year)* I was responsible for developing, updating and presenting a schedule for a highway yard upgrade project. Throughout the scheduling project I had to assign critical paths and update progress compared to baseline schedule.
Interpret laboratory results. *(Chemical competency sample - indicator 1.16)*	After collecting and digitizing the raw data from tests (e.g., FFT flocculation torque and image monitoring), I used data analysis and visualization software, e.g., Excel (pivot table), Power BI, and Python, to seek trends, ranges, and deviations from charts and graphs. I also practiced imperial formulas to interpret the liquid limit and plastic limit results in the Atterberg limit test on FFT slurry samples. With well-interpreted results, lab work summaries were written more in- depth, and better-targeted decisions were made during the project update meetings.
Analyze and interpret the power systems used in medical device systems to explain the operation and/or troubleshoot the system. *(Biomedical competency sample - indicator 1.17)*	There was a service request on an ECG machine with reported power failure issue. I first checked the condition of the power cord. I made sure the machine had the correct voltage and current when connected to a reliable power source. I also inspected the internal components (e.g. fuse, capacitor, transformer) and looked for any signs of damage, discoloration or burn marks. I checked the voltage and current output of the power supply. I also checked the resistance to ensure that there was proper grounding of the power cord and power supply. Essentially, everything checked fine and it was just a loose connection issue.
Interpret fabrication and/or construction drawings. *(EDDT competency sample - indicator 1.17)*	When reviewing shop drawings submitted by a contractor for a concrete washroom building I would compare them against the standard drawings provided by the client to confirm that the proposed product was equivalent or better than the project standard. The things that we were reviewing were connection details between the concrete precast panels using the correct connection hardware, and rebar reinforcement type.
Evaluate municipal requirements for civil infrastructure. *(Civil competency sample - indicator 1.19)*	I reviewed hydrant and curb stop details and placement locations with the local water operators to ensure these were appropriately placed for their requirements. I actively engaged with the Public Works Manager throughout the project, to ensure that the new infrastructure aligned with their expectations and existing infrastructure. An example of confirming requirements includes identifying the need for a larger service line to be installed at the public works shop for future development of a secondary filling station.
Define such concepts as permeability, porosity, compressibility, and fluid saturations. *(Petroleum competency sample - indicator 1.21)*	Permeability of a rock is the relative ability of a reservoir fluid to flow through the rock. Porosity of a rock would be the general volume of rock with open voids to hold reservoir fluids. Compressibility of a rock would be the amount of volume change in the reservoir rock and pore volume as you produce fluids from that formation. Fluid saturation would be the percentage of total pore space occupied by formation fluid.

Evaluate advantages and disadvantages of technical solutions. *(Electronics competency sample - indicator 1.22)*	Prior to deciding on a technical solution, I compile the advantages and disadvantages of possible solutions. I use the technical specifications and feedback from my supervisor and colleagues to evaluate technical solutions that should be developed. Solutions are documented in either a test report or design document to be reviewed and accepted the projects stakeholders. Additionally, I perform testing in the lab to validate any advantages or disadvantages, I perform validation tests, recording the results to be analyzed. An example of this was during the *(project name)* project where I explored several possible solutions to address faulty MOSFETs on a legacy high voltage board. I evaluated 3 different MOSFETs, all of which met the voltage, current, and gate drive requirements but varied resistance and footprints specifications. I measured the heat dissipation of each candidate on a functional PCB by replacing the faulty MOSFET and using an electronic load to draw the expected max current.
Identify impacts to other systems, and participate in and follow a structured changed management protocol. *(Information competency sample - indicator 1.29)*	With operating system upgrades, I have to devise and implement a plan that allows me to make the changes with minimal impact in the office environment. This requires me to communicate with coworkers to explain to them what is happening, what will be affected and if they have any concerns to address them to me before I make the change.

2. Technical Design Competency	
Describe a situation or activity in which you designed, implemented, and/or managed discipline-specific activities in accordance with industry standards, regulations and codes.	
Indicator	Competency Logbook Entry Examples
Describe stages of a building construction process. *(Construction competency sample - indicator 2.01)*	My experience has consisted primarily of commercial or industrial buildings. In this context, following engineering and contract award, the main stages for stick-built buildings can be described as follows: - Permitting acquired and site closed in. - Geotechnical & surveying completed as required. - Site preparation & rough grading. - Underground works completed. - Foundations (including piles/footings or other) completed. - Erection of main building structure or framing. - Roofing, exterior walls and glazing completed. - Interior partitioning - Mechanical, Piping, Electrical, Fire Protection, telecom - Insulation and waterproofing - Interior finishes, decorating - Exterior features, final grading - Completion of Building Schedule(s) and Occupancy Permit.

Prepare, handle and transport samples for laboratory analysis. *(Environmental competency sample - indicator 2.01)*	During the completion of field activities, I am responsible to follow our company's established Standard Operating Procedures (SOP) correlating with the proposed projects, which are written to conform with industry standards of best practices, laboratory requirements, and regulatory guidelines. As an example, when completing a groundwater assessment at *(location name)* during *(month and year)* , samples were collected in appropriate containers according to parameter requirements (i.e. glass vials and amber bottles with no headspace for volatile parameters, plastic bottles for potability samples, etc.). Sample containers were labeled with the associated assessment point ID, as well as the time, date and location of sampling. Following sampling, each sample container was stored within a cooler for transport, and cooled to ensure a temperature below 10 degrees Celcius on arrival to the lab under a proper chain-of-custody form, ensuring the viability of the collected samples.
Collaborate with a multi-disciplinary team to solve technical problems. *(Electronics competency sample - indicator 2.02)*	In addition to collaborating with my colleagues about electronics design, I work with Mechanical Engineers, Application Engineers, System Engineers, and colleagues from Operations, Sourcing, and Project Management teams. The tools and projects I work on often require coordination between the electrical, mechanical, and applications team to effectively solve technical challenges. An example of this was during the *(project name)* project where I designed an updated backplane that connected two solid state drives (SSD) in an electronic module being designed. I worked closely with a colleague from the mechanical engineering team to provide them details on the spacing between each SSD, along with the positioning of the connectors so they could design a heatsink for the module. My work was reviewed by my supervisor, the technical lead, system engineer, and the mechanical engineering team before being accepted.
Maintain and calibrate general laboratory equipment and instruments. *(Chemical competency sample - indicator 2.02)*	When maintaining instruments like ion chromatography (IC), gas chromatography (GC), and total organic carbon (TOC), I followed checklists to start the instrument followed by baseline checks after priming the system. I generated a calibration curve using standards with concentrations of 0-100 ppm. I confirmed the linearity before performing sample measurements. By doing these, I enhanced operational safety and data quality. I also improved performance efficiency by reducing the potential troubleshooting downtime.
Implement environmental field programs. *(Environmental competency sample - indicator 2.03)*	I have designed and implemented soil assessment plans which incorporated any known historical site information (historical infrastructure, reported spills, identified ecological receptors), known or suspected safety concerns (buried facilities), while assessing areas of potential environmental concern (APEC).
Troubleshoot drawings using knowledge of the software and general drafting principles. *(EDDT competency sample - indicator 2.04)*	I made a checklist with Purging and clean up the model and drawings weekly to prevent Lag or other software problems. Control the file size below 500mb. And prevent to use space or special symbol in all the naming. Also we have plug-in to check all the setting is follow to the Standards before every submission. Which is part of Quality Assurance (QA) Checklist.

Select processes that maintain and preserve environmental samples. *(Environmental competency sample - indicator 2.05)*	As a environmental advisor at *(company name)* for *(number of years)* , I took auger/excavator soil and groundwater well samples while ensuring no cross-contamination occurred (used clean: gloves; equipment; containers) and wearing appropriate personal protective equipment (PPE); took sample volumes as required by laboratory instructions; stored samples in containers as per laboratory provided methods (e.g., for soil: 120 mL glass jars firmly packed, filled tightly to capacity, fitted with screw down Teflon-lined lids) with preservatives properly added as needed; clearly labeled each container and documented their sampling locations; stored samples in insulated coolers with ice packs during timely transportation to laboratories to maintain and preserve samples along with completed Chain-of-Custody documentation detailing e.g., the type of contaminants each sample was to be analyzed for.
Apply knowledge of algebra, matrix manipulation, calculus, discrete/finite mathematics and logic systems to resolve technical problems. *(General competency sample: Materials - indicator 2.06)*	I used algebra and calculus to calculate the maximum force applied to heat-treated grader blade edges under a production press used to straighten grader blades after heat treatment. I use algebra to solve equations concerning the average volume of carbide particles added to a carbide-impregnated wear-resistant weld overlay on the ground, engaging construction and mining products from data collected using visual analysis of a cross-sectional microstructure mosaic.
Produce drawings using computerassisted drafting systems. *(Architectural competency sample - indicator 2.07)*	My primary role while at *(company name)* was producing design and construction drawings, details, sections, etc., using either AutoCAD or Revit I did this on numerous school projects and commercial projects over my time there. At *(company name)* I am still producing drawings showing construction laydown areas, and also design options to help with planning discussions with our internal stakeholders.
Apply management practices appropriate to the discipline and workplace. *(General competency sample: Geoscience - indicator 2.10)*	As a project manager, I am overall responsible for delivery of the projects I manage. To do this I must manage a team of people and my own time, as well as ensure technical delivery and management of the project budget. For example I manage a large drinking water sampling program involving multiple sites and personnel from multiple *(company name)* offices. The program requires careful management as only approved staff may work on the project. Many unexpected items arise during the program, including the need for additional and repeat sampling, and the client has strict protocols around the approval of extra work before it is completed. If these protocols are not followed then the costs will not be paid by the client. Through the careful tracking of progress, early communication to the client of any issues encountered, and the clear internal communication with the project team I have been able to deliver the project on time and on budget, with all additional work approved and paid for by the client.

Assist in the development of chemical engineering processes and production techniques. *(Chemical Engineering competency sample - indicator 2.10)*	Working with my manager and fellow engineering technologist, I developed a procedure document for modeling CO2 pipeline hazard zones utilizing the ALOHA software.
Advise and interpret welding symbols, as well as other applicable requirements pertaining to weldments. *(Welding competency sample - indicator 2.12)*	Situation: During a routine inspection, a vessel made of SA516 Gr.70 was found to have low thickness at the bottom, adjacent to a 3/4" drain. The mechanical engineer proposed the installation of a leakbox to mitigate this concern and prepared a package for this task. I was assigned to conduct a cold eyes review of this package to ensure clarity and correctness of the welding requirements. Task: My task was to review the package, with a focus on welding requirements, and provide feedback if necessary. Action: As I examined the proposed leakbox sketches and the weld symbols in the package, I noticed an inconsistency. The weld symbol at the leakbox to vessel shell weld specified GTAW (Gas tungsten arc welding) welding at the tail of the symbol. Having reviewed similar packages before, I thought SMAW (Shielded Metal Arc Welding) would be a more appropriate process for this application. I quickly reached out to the mechanical engineer and pointed out the potential error. Result: Upon my observation, the engineer confirmed it was a typo and promptly corrected the welding process in the package. My interpretation and advice on the welding symbols ensured the use of the most suitable welding process for the task.
Assist in design review for civil projects. *(Civil competency sample - indicator 2.13)*	In *(year)* , during the construction of the water distribution system project, we reviewed the original design for the pipeline alignment as it was to be built in the middle of the road. After reviewing the alignment with local designates and the contractor, it was found that the alignment would be moved in the road ditch to avoid disturbing the newly built road.
Conduct required discipline specific safety tests in accordance with regulations, codes and best practices. *(Biomedical competency sample - indicator 2.13)*	Electrical safety test is a critical component of medical device maintenance and it is required by the CSA standard. For example, the CRRT has parts that come into contact with the heart or bloodstream, and therefore it is classified as type cardiac floating (CF) equipment. According to the Canadian Standard Association (2015), Table 2 of CSA-Z32-15 - Electrical Safety and Essential Electrical Systems in Healthcare (4th ed.), the electrical safety requirements for allowable patient leakage currents would be 10μA under normal conditions, 50μA under single-fault conditions. After a corrective maintenance or during preventative maintenance (PM), I would use the Fluke ESA615 (which is capable of measurements per IEC 60601-1) to test various electrical parameters e.g. leakage current, insulation resistance and ground conductivity; and would make sure the test results are within the acceptable range.

Compile technical documents and supporting information in a formal report. *(Electrical competency sample - indicator 2.13)*	For all projects, surveys, commissioning surveys, pipelines, or constructions projects that I have been on come with a formal report before turnover. These formal reports are a full compilation of the project to a whole. These formal reports will include the deliverables that expects, the data that was collected, the commissioning data and reports, and also the quality control paperwork from all aspects of each deliverable. By the time this report is formatted it allows us to paint a clear picture from start to finish of each project. This proves that the work completed was done correctly, and up to the standard and specifications that were tasks at the beginning of the project. These reports are the final piece of the puzzle that complete turnover to clients, and hands over our work as subcontractors to the client. Some items I have provided for many different projects would be field data, field pictures, quality control paperwork, commissioning data, field reports, and calculations for field data. I have provided all the necessary pieces to formulate a report, and help learn the structure and formatting of all technical documents. By being on both end, the field and engineering side of technical reports it has allowed my skills to develop strong skills needed to complete report writing on my own well being supported by my P.Eng supervisors in the future.
Maintain databases of spatial information, including coordinate, descriptive, or quality assurance data. *(Survey and Geomatics competency sample - indicator 2.14)*	An ongoing duties that I have is maintaining/reviewing data over multiple projects across different counties. This geographic data needs to be correct to the operating region so for each project I go through and confirm that projections and datums are correct. I flew a LiDAR and camera above *(location name)* and as a one man crew at the time I had to QC my own data. This consisted of processing the data in the evening and then using multiple outputs from the processing (alignment, point density, solution, etc.) I was able to determine whether or not that days collection was valid and that I was safe to continue the survey. I saved the QC outputs and my analysis as a record that the checks did take place and that the data is within tolerance.
Size, specify and select appropriate control and on-off valves. *(Instrumentation competency sample - indicator 2.15)*	Part of our department's responsibilities as the MOC team is to update obsolete equipment to newer models as they fail. Recently we had some *(company name)* on/off valves fail on our brine saturation air-purge system. The models used were obsolete, so I had to compare their specifications to the newer offerings from *(company name)* and select a model based on cv, construction material, electrical area classification, and voltage rating. I was able to find a suitable model and ensured to update the data sheet and ordering information for the new model.
Incorporate into one's design the information from drawings produced by other disciplines. *(EDDT competency sample - indicator 2.15)*	When working on a parking lot that was intended to provide river access we needed to work with structural engineers to design a staircase that would go down the river bank and provide access to the river. To ensure we were correctly representing the structural engineers design into our design and project we referenced his drawings to ensure we were accurately portraying the information and after asked the structural engineer to review the drawings to confirm that the structural engineering portion of the project was correctly portrayed in our drawings.

Size, specify and select appropriate measurement instruments (e.g., flow, pressure, temperature). *(Instrumentation competency sample - indicator 2.16)*	*During (month/year)* , I was supporting the commissioning of one of our multi-unit fit up rollers. While programming, I noticed that the Banner QX4 series 5m range laser distance sensors could not provide us the range needed to span to maximum length between units. When out of range, the sensors would send an 'off' signal, and act as if tripped. I requested the ordering of sensors within the same family for a 10m range which covered the full possible distance between the units.
Coordinate design with other engineering disciplines internally and/or externally. *(Mechanical competency sample - indicator 2.17)*	Each compressor project would require a number of analysis to be completed by a third party engineering company. These Analysis, or studies would typically include a Torsional, Acoustical and Mechanical analysis. It is my responsibility to coordinate with the third party engineering company, and my own internal Engineers and designers. I would communicate the scope of work to be completed to all parties. I would compile all required information and issue to the third party to complete there analysis ie. Compressor performance, Engine or Motor performance / drawings, Compressor package P&ID, Compressor Package 3D model etc. Upon completion of the analysis and issuance of analysis recommendations and report, I would work with the internal engineering and design group to ensure all recommendations were implemented accordingly.
Prepare technical documents, such as drawings and reports, for approval and implementation. *(Petroleum competency sample - indicator 2.26)*	Within my role as field services manager within *(company name)* I was tasked with creating the technical running procedures for all of our service equipment for downhole completions. These procedures were used by all field staff within the company and they were published in out company database.
Consider impacts upon security design (confidentiality, availability, and integrity) and consult with security and business owners to ensure requirements are met. *(Information competency sample - indicator 2.26)*	By proposing to have our data hosted on a third party company data server, I researched their security implementations to ensure that our client data would be secure as well as having a high standard of server uptime for accessibility. By providing these information in the report, I consulted with the CFO and CEO for their advice and approval to ensure there were no missing requirements.
3. Technical Evaluation Competency	
Describe a situation or activity in which you followed and/or evaluated established processes and procedures to ensure that quality control and quality assurance standards and specifications are being met.	
Indicator	Competency Logbook Entry Examples

Assist in identifying lessons learned. *(Mechanical competency sample - indicator 3.01)*	I had experience assist the team and provide lessons learned excel sheet during the project closeout phase, I collaborated with the project team lead to compile the lessons learned report. This report highlighted key findings, identified critical issues encountered, and outlined recommendations for improvement. By sharing this report with the project team lead, we fostered a culture of continuous learning within the organization, promoting better decision- making and enhanced project outcomes. Through a transparent and collaborative approach, I presented the lessons learned excel sheet to the client, emphasizing the value it brings in terms of future project success and customer satisfaction.
Check drawings prepared by others for accuracy of dimensions and notes. *(Architectural competency sample - indicator 3.01)*	*(development name)* is a multi-family development on a 3-storey below grade parkade in *(location name)* . The time frame of my involvement in the project was from *(timeframe)* . It is a requirement that I check over drawings that are prepared by other for accuracy of dimensions and notes. If a dimension is off, this will affect the how the scale is set and therefore my quantities.
Generate and maintain records. *(General competency sample: Materials - indicator 3.02)*	In my QAT position all data is generated through destructive testing. This data is then maintained both manually on paper and digitally in CREW database. As an NTC, I am involved in maintaining records from both production and management. All records are filed on paper and entered in the CREW database. QA managers take all the monthly data and create a Month End report to summarize and compare the current month to previous months. I am also involved in this process.
Evaluate drawings as it relates to quality planning. (ex: mechanical, structural, pressure equipment, piping, etc.) *(Welding competency sample - indicator 3.02)*	Multiple reviews completed of design drawings completed by Engineering and Procurement contractors and their suppliers. Reviews completed to ensure all required data is included.
Use software to process, organize and evaluate data. *(Environmental competency sample - indicator 3.03)*	During the completion of summary reporting of a long-term monitoring program at a remediated produced water spill within the legal land description *(location name)* , I utilized the GSI Mann-Kendall Toolkit extension for Microsoft Excel to perform Mann-Kendall statistical analysis of whether statistically-significant trends were present at each monitoring well sample location over a 3 bi-annual monitoring periods. Using the software in this manner allowed me to successfully evaluate chloride concentration trends for the site.

Verify that processes and procedures are carried out in compliance with applicable standards, regulations, and codes. *(General competency sample: Geoscience - indicator 3.04)*	I oversaw the training of new student employees while working at *(company name)* . By reviewing the standard operating procedure (SOP) before and during the task I was able to introduce the students to how to perform the work. By then demonstrating the work in the field, I could show what the work would look like and give them a sense for how long the task may take or what kind of challenges they could expect. Then, by having the new student perform the task with me I can verify their understanding of the task in a controlled manner. Finally, by observing the students performing various instrumentation tasks while minimizing how much guidance I offer, I was able to verify that they are properly performing the task and that they are compliant with the associated SOP.
Assist with the final review of integrated contract documents produced by all disciplines and specialites. *(Architectural competency sample - indicator 3.05)*	*(development name)* is a two tower multi-family development on a 3-storey below grade parkade in *(location name)* . The time frame of my involvement in the project was *(timeframe)* . For each drawing set that was issued, I would go through and do a page turn to see what was integrated into the contract documents produced by all disciplines and specialties.
Generate and maintain records (e.g., log books). *(Chemical competency sample - indicator 3.06)*	Based on laboratory SOPs, I organized the information on instrument status checks, data acquisition, and maintenance logs for each instrument (e.g., IC, TOC, ICP, TGA/DSC, UV-Vis, FTIR, GC, CHNS, etc.). I also tracked the sample and solution preparation (chemical, weight, volume, concentration, expiration date, etc.) in logbooks. These tracking procedures ensured data traceability and helped tackle potential issues during troubleshooting.
Provide guidance for implementation, installation, and maintenance of electrical systems under supervision. *(Electrical competency sample - indicator 3.07)*	I have completed the competency of providing guidance for implementation, installation, and maintenance of electrical systems under supervision through my work experience. As an electrical engineer tech, I have been responsible for overseeing the installation and maintenance of electrical systems in various projects. In my current role, I worked on large-scale projects, where I was responsible for overseeing the installation of the electrical/cathodic systems. I provided guidance to the students or Jr techs on the installation of components such as wiring, survey, and technical design. I ensured that the installation was done according to the specifications and standards set by the project. Additionally, I supervised the maintenance of the electrical systems and ensured that they were functioning optimally. I have also worked as a senior tech on various projects where I provided guidance on the implementation of cathodic systems. I worked with clients to understand their needs and requirements and provided deliverables for the most suitable cathodic systems for their projects. I provided guidance to the contractors on the installation and ensured that the systems were installed and maintained properly. Overall, my work experience has provided me with the skills and knowledge necessary to provide guidance for implementation, installation, and maintenance of electrical or cathodic systems under supervision. I have a very strong understanding of CP now.

Mark up existing drawings with as built information. *(EDDT competency sample - indicator 3.08)*	In this project, I use BIM track for tracing existing document, between Revit, AutoCAD, Navisworks, PDF. Basically I can make the markups on a PDF which directly show up on same location on Model or CAD drawings. I can add the comments on PDF or Navisworks after I site visit and bring as built information, marked on BIM track and assign to one of the modeler to make changes and reference to related engineers, which follow the BEP standard work-flow.
Participate in as- built evaluations. *(Construction competency sample - indicator 3.08)*	During the summer of *(year)* while assisting in the material storage facility construction I conducted a final site review of the project with the project manager, superintendent and contractor. During this reviews we ensured that all as built drawings were correct with all components included in the drawings.
Utilize field screening results/observations to adjust field program in realtime *(Environmental competency sample - indicator 3.10)*	As environmental coordinator at *(company name)* in *(timeframe)* , I took hand auger/excavator soil samples and completed field vapour screening of soil samples stored in sealed plastic zip loc bags at room temperature with air space, using a photoionization device (PID). This PID was calibrated as per the manufacturer's instructions with each calibration documented prior to each sampling event. If this field screening results showed presence of organic vapours in the air space of the soil bags, soil samples from the same sampling location were collected in sampling glass jars as per laboratory requirements and submitted to an accredited laboratory as per their documentation and storage requirements for chemical analysis.
Evaluate phases of the medical device deployment and ensure processes are in compliance with medical device requirements. *(Biomedical competency sample - indicator 3.10)*	Although I do not have any experience on device manufacturing, I understand the different phase of medical device deployment. Stages including the prototype design, testing, trials, regulatory approvals, manufacturing, distribution and post market surveillance. We as biomed professionals play a crucial role in the stage of post-market surveillance. I ensure any adverse events, such as device failures or malfunctions, are reported and addressed. For example, I noticed a significant difference on the temperature readings when I performed the Temperature Probe Verification test with two different operation modes. I emailed *(supervisor name)* for their clarification on the vital signs monitor temperature testing procedure. I also asked if they could provide some recommendations about using different modes in different clinical settings. Eventually in *(month and year)* , *(company name)* opened a product enhancement case with the information I provided, and it would be reviewed by their Product Assurance team.
Assess data to identify anomalies in chemical engineering processes or equipment operation. *(Chemical Engineering sample - indicator 3.10)*	SCADA and the CPM leak models continuously receive and output data that is analyzed by the control center operator. This data is used to identify anomalies. An example of an anomaly is a leak alarm generated by a transient event such as a pump shut down. The data (pump shut down, flow rate change, pressures, etc.) from the leak model is then assessed to determine the cause of the alarm.

Assess data and prepare recommendations in relation to changes of versions and configurations *(Information competency sample - indicator 3.11)*	To add an additional layer of security in our network, it was decided that we would implement VPN into our router. I had to research into the implementation process through a third party company that offered VPN service and whether or not our router was compatible with the settings. After that, I had to look into the appropriate VPN server to implement as well as ensure that our network stability will not be affected. Running tests over the weekend, I recorded the results and provided the data to my boss to get the approval before going ahead to making the configuration changes on our router.
Conduct independent data checks using other data sources. *(Survey and Geomatics competency sample - indicator 3.13)*	In order to conduct an independent data check I will start off by locating all site control via the survey plans. Next I will locate at minimum two ASCM's that are in good standing based on the datasheets. I will then shoot the control that is existing on site and calculate those point coordinates out. After which I will check between the published site control and my own measurements. If there are discrepancies I have to investigate further and if not I can be confident in the survey. In order to validate data that is provided in vector/raster format, I start by loading that data into a GIS. I also load some externally validate control or ASCM's and I can begin to do an initial visual inspection. I will then compare the unverified data to the verified control through geometry checks as well as comparing coordinates if they are available. Metadata is a very useful check as it will tell me if anything such as projection or datum is incorrect as well as any other notes left.
Conduct construction layout using basic surveying techniques. *(Civil competency sample - indicator 3.16)*	Often on worksites we use rudimentary measurement checks to ensure that points are in the correct location and that reinforcement and forms are in the correct spacing and orientation. Other times we use more complex instruments like a total station or robotic total station to layout form corners or double check point layouts.
Prepare regulatory reports for submission to appropriate authorities, such as Alberta Energy Regulator. *(Petroleum competency sample - indicator 3.17)*	It has been my job at *(company name)* to deal with all and any regulatory requirements needed to both begin operations as well as continue them. This includes meeting AER requirements throughout operations. Recently at *(company name)* we had a wireline retrievable plug down hole which does not meet requirements for a proper zonal barrier when abandoning a well. The set of perorations which were above the WR retrievable plug were in the same formation. Therefore, I applied for a special exemption with the AER to leave the plug and balance cement to 15m above the top set of perforations. This is one of many example's where reporting to the AER has been part of my job during operations. I also submit to DDS regularly in order to upkeep *(company name)* wells in government related sites.

Complete system-level testing (e.g., SAT and FAT). *(Instrumentation competency sample - indicator 3.18)*	*During (month/year)* , I went down to install a couple of machines in *(location name)* . After putting down the mechanical and running power to the machines, I noticed some issues with one of the machine's wire feeders. It seemed like the motor was damaged during transit, and needed a replacement. I requested a replacement and set out to finish the rest of the install. I finished by the time the new parts came and after installing it, I got a SAT signed from the shop's supervisor acknowledging operation of the machine and any deficiencies that needed attention.
Verify that technical documentation is written in accordance with organizational quality control standards. *(Electronics competency sample - indicator 3.26)*	My role at *(company name)* includes reviewing technical documentation such as acceptance test procedures or detailed design documents, to verify they are accurate and meet our organizational standards. I follow our internal review checklist as well as verifying the documentation compliant with our internal templates. Additionally, I participate in team reviews and present clear and actionable feedback from my own review which is discussed by myself and colleagues. An example of this was during the *(project name)* project where I reviewed the acceptance test procedure to verify they met our organizational standards. Throughout my review I used Microsoft Word's built-in review function to comment on sections so the document Owner could make changes. If I did not understand the objective or scope of a test, I discussed it with the projects technical lead and the document Owner for clarification. My feedback was reviewed by my supervisor and then implemented into the test procedures.
4. Project Coordination Competency	
Describe a situation or activity in which you assisted with the management of the project to ensure high quality of deliverables, client satisfaction, and adherence to schedules and budgets.	
Indicator	Competency Logbook Entry Examples
Plan environmental solutions to align with client goals and/or regulatory requirements. *(Environmental competency sample - indicator 4.01)*	As a environmental advisor at *(company name)* for *(years)* , I completed Environmental Site Audits at operating centres/stations sites and pipeline construction sites to check compliance with regulatory and internal Environmental Management System requirements. During these environmental items e.g., site restoration/reclamation and waste handling were assessed with field notes/photos taken as evidence. I documented audit results in reports with opportunities for improvements and nonconformances noted and developed and proposed recommended solutions to project engineers/site supervisors e.g. improved liquid waste secondary containment storage units to align with *(company name)* 's goals and objectives as well as regulatory requirements.

Establish and maintain effective working relationships with internal and external clients. *(General competency sample: Geoscience - indicator 4.02)*	This is regarding a project near *(location name)* . The project consisted of drilling boreholes and monitoring wells. Some of the boreholes were completed for another department in our company. This occurred in *(month and Year)* . During this project a co-worker and I were asked to complete a few boreholes for another department in our company, we were also asked to complete SPT testing in a few of the boreholes, all in addition to the work we already had planned. We completed the work and updated the project manager in the other department daily. This was my first introduction to working with the other department and since then I've completed a few projects in collaboration with them.
Establish and maintain effective working relationships with internal and external stakeholders. *(Welding competency sample - indicator 4.03)*	Part of my job is working with students in the WET program. This leads to graduates going out into industry. These relationships start off as internal but every year we have 24-32 new external relationships. I also spend a large portion of time building relationships at industry meetings and seminars.
Establish and maintain effective working relationships with internal and external clients. *(Survey and Geomatics competency sample - indicator 4.03)*	As a professional it is important to conduct oneself appropriately. For me this means being able to politely and clearly bring up issues/solutions that arise during a project as there are many moving parts. Being able to discuss ways of doing things may often lead to conflicting ideas/perspectives. So I make sure to be fair and try to understand the merit of every idea and weigh the pros and cons from an unbiased perspective. I spend a great deal of time working with clients in the form of meetings, emails, in person review, data delivery and acquisition schedules. I am sure to act professionally and respectfully as I am a representative of my company and need to do my best to maintain/bolster our image.
Explain the value of workplace safety legislation. *(Chemical Engineering competency sample - indicator 4.04)*	During all pre-job meetings the Occupational Health & Safety regulations are discussed. As the control center representative during these meetings, it is my responsibility to illustrate how they apply to the control room.
Explain the value of workplace safety legislation. *(General competency sample: Materials - indicator 4.05)*	Workplace safety legislation ensures safe working conditions for personnel engaged with the implemented safety programs. Engaging in workplace safety legislation protects workers from accidental trauma, injury or death. During the training of my co-worker, I have identified, taught and demonstrated *(company name)* specific safety regulations as well as OHS legislation. I am responsible to provide safety leadership in my work environment and have explained to many employees the importance of safety in the work environment.

Research equipment or component needs, sources, competitive prices, delivery times, or operational costs. *(Petroleum competency sample - indicator 4.06)*	At *(company name),* when putting together a quote or program for large scale projects, it falls on the technical team to order bags of cement, bridge plugs, coil connectors, anti freeze, friction reducer, and much more. When doing this, to ensure we are both making the most money possible, as well as been able to deliver these services in a timely manner, delivery times, prices, what's required, transportation costs, all need to be taken into account when choosing your supplier. It is my job to decipher how much, and of what we will need in order to complete the job at hand which has been laid out by our customer. Getting these products to our shop and ensuring we have a plentiful supply falls on my shoulders. This is an ongoing, weekly part of the job.
Assist in monitoring progress on projects. *(Mechanical competency sample - indicator 4.07)*	I update schedules each week. I meet with all stakeholders for the project team (Engineer, designer, purchaser, Fabrication and assembly supervisors) to confirm upcoming completion dates are accurate. any changes to schedule were marked accordingly and passed along to our schedule for formal update. Each week, I run a material status report to ensure materials are on time. If any materials have been delayed, I ask the expeditor to contact the supplier, or contact myself to identify options for better delivery.
Comply with workplace safety legislation. *(EDDT competency sample - indicator 4.07)*	I am responsible for my own and my team's safety on the job. This means that we have the right to refuse to do any act or operate any tool, appliance, or equipment when you have reasonable cause to believe that to do so would put you in danger. I need to fill in a safety checklist and audit by the safety supervisor every month. Trained by company and government before going into the worksite to fulfill the law requirements.
Participate and manage solving complex technical problems. *(Biomedical competency sample - indicator 4.08)*	After the installation of the new bedside monitors in *(month and year)* , clinicians reported that they could no longer remote view telemetry data from a bedside monitor. At first, I checked multiple monitors and confirmed that the problem was system wide and not device specific. All bedside monitors could remote view other bedside monitors, but could not view any of the telemetry data. I then checked the network configuration settings, which I noticed the telemetry and bedside were setup on different VLAN. One possible solution was to move the telemetry and beside monitors into the same network. I consulted IT and the vendor for their professional opinion, and decided to testing our theory with one beside monitor first. I worked closely with the clinicians and IT to change the VLAN setup on one monitor and to confirm if the vital signs data was transferred properly onto the electronic record. Then we planned an temporary outage and switched everything to be on the same VLAN. In the end, staff were then able to remote view telemetry data on the bedside monitors.

Provide cost analyses and obtain quotes from suppliers. *(Information competency sample - indicator 4.09)*	When *(company name)* wanted a different option for security protection on our workstations, servers and laptops, I was tasked with researching different options and pricing from vendors that I believed fit our needs. My research was based on the importance of cost, effectiveness of the program, and whether it would make sense to go with regular antivirus or more advanced versions that included firewalls and other protections such as encrypting files and photos. After researching I provided my supervisor with my findings to show that based on cost and what our requirements were, we went with ESET Nod32 antivirus as it fit within our budget and fulfilled our company needs.
Establish and maintain effective working relationships with internal and external clients. *(Chemical competency sample - indicator 4.10)*	I build the network between research centres within our department by recognizing and matching the needs and capabilities of different centres. I also explored the possibilities of collaborating with other departments to optimize the project outputs. I also have a wide connection with vendors' sales and technical support staff. I get bridged to other facilities with some of our desired instrument assets and techniques through the vendors. New collaborations are sometimes initiated under agreements.
Quantify one's work that is completed todate. *(Instrumentation competency sample - indicator 4.11)*	I have several ways that I can quantify my work. I regularly will have secondary reviews done of my work from co-workers who will comment on the quality of my deliverables. I will use that feedback to correct or add to my documents or program as well as make notes to myself on how to apply that learning to future projects. Another way I can quantify my work is by getting feedback from customers. Once a unit has been started, often feedback comes from the customer as well as the service tech on the program and operating philosophy documents. They are not shy to point out any issues or discrepancies and I use that learning to better myself for future projects. Lastly, we have regular performance reviews, where I will discuss with my manager feedback from co-workers and customers to see where improvements could be made, or where the work is satisfactory and above.
Establish effective working relationships with internal and external clients. *(Petroleum competency sample - indicator 4.12)*	In the *(company name)* team, I deal with the various teams who use Mosaic for reserves. I help to foster open communication by being forward in communicating outages, and staying on top of performance issues until they are resolved. This helps to build a level of trust with the teams. I also manage a good working relationship with our Mosaic software vendor, *(vendor name)* . I do this by keeping open communication about issues were experiencing, upcoming upgrades, and seeing them in person at user group meetings.
Assist in project coordination and administration. *(Architectural competency sample - indicator 4.12)*	The primary function of my current role is to coordinate all project activities, communications, and administration throughout the project life cycle of each project I am working on. This is more frequent during construction when I am scheduling the construction activities with the impacted areas of the facilities, and reviewing invoices for progress payments.

Assist in communicating project information to internal and external clients. *(Electronics competency sample - indicator 4.12)*	My role as part of the design team at *(company name)* includes the responsibility of communicating project information such as design requirements, task progress, encountered blocks, or test results. I present this information using a combination of presentations, spreadsheets, documentation such as reports or schematics, and emails. Information that is to be released internally or externally is reviewed by my supervisor and additional colleagues. An example of this was during the *(project name)* project where I provided weekly updates to project stakeholders including the Project Manager, the Technical Lead, and other members of the team. I communicated progress on tasks verbally and through emails so the Project Manager could update the schedule. Additionally, I communicated technical details such as test results or design requirements by visualizing test data in Excel, or by presenting in-progress documentation and schematics to the team involved.
Assist in managing expectations of internal and external clients. *(Electrical competency sample - indicator 4.13)*	Internally and externally the expectations can differ widely. As a project lead it is always my duty to make the expectations clear when it comes to project deliverables and project objectives. All the way from an overall long term timeline expectation of how we are going to be completely the project, right down to focusing in day by day what deliverables are expected of that day in order to keep the project going smoothly. An example would be my annual survey project, Long term I have a goal set of what the should be able to accomplish in a certain time period, well short term in the field I setup plans and survey areas that are sent out to my workers nightly where we are surveying next, and what is expected of them that day. Externally the expectations are more base level from my experience. Before a projects starts I expect to have work agreements, permits, orientations, JHA assessments, safe operating procedures, engineering drawings, all sent to me. These documents are sent out prior to work commencing, and I expect that when these clients have changes that the information is properly relayed back to me. This way I can successfully make changes to the work deliverables. As long as the expectations from external clients are blended with our expectations to complete the work within proper scope and time, following a safe manner at the highest quality of work, then I am able to run a successful project to its fullest extent.
Adhere to project budget and prepare and present information or updates. *(Information competency sample - indicator 4.14)*	In *(year)* , one of my tasks was to replace an existing server that was nearing it's end of life. I was provided a budget to find a replacement server and could not exceed the budgeted amount. Keeping the price in mind, I researched prebuilt servers vs buying parts separately and building the server in house. After looking at multiple websites for prebuilt servers and recording down prices and specifications on excel, I checked local hardware websites and did custom builds while recording the price for similar specs. I kept my supervisor up to date during the research phase, asking for their input as well. In the end we found a barebones server that I could purchase parts locally and built the server in house for set up which saved reduced costs and kept the build within budget while meeting the required specifications.

Assist in the development of material takeoffs, cost estimates and pricing, including the review of quotes. *(Construction competency sample - indicator 4.15)*	During the spring of *(year)* I was responsible for creating a budget based of a planned erection and population of a site based office/crew living complex in an active highway maintenance yard. I performed take offs estimating the required material needed for a gravel section build up and receiving quotes and estimates from contractors on the planned complex work. From this information, I created a project budget by selecting the appropriate quotes for the planned services, ensuring that all required work pricing was accounted for.
Provide mentorship to peers. *(Civil competency sample - indicator 4.17)*	After the project was completed, I performed a presentation to my internal team at work to review the project. This allowed me to demonstrate the various work involved in the construction of a reservoir and answer questions from my peers. Additionally, I was able to show pictures of installed valves and systems which helped the design and AutoCAD group better understand the detailed drawings they were tasked with developing. Additionally, I was involved in a cistern inspection program for a *(company name)* last fall *(timeframe)* . During this time, I lead a local team of 4 individuals in completing cistern inspections as well as cleaning and disinfecting the tanks. I organized and had the team participate in daily toolboxes where we discussed and recorded potential hazards for the day.
5. Professional Accountability Competency	
Describe a situation or activity in which you applied professional ethics and identify the social, cultural, or environmental impact of this situation or activity as well as how you accepted professional responsibility for the outcome.	
Indicator	Competency Logbook Entry Examples
Adhere to federal and provincial legislation pertinent to one's practice (e.g., Engineering and Geoscience Professions Act and ASET Regulation). *(General competency sample - Materials - indicator 5.01)*	When posed with customer and clients that are seeking engineering opinions I gather the data required and background history to provide to my EOR *(employer name)* as I cannot ethically give any engineering opinions as per the Engineering and Geoscience Professions General Regulation Alta Reg 150/1999. Nor have I represented myself as an engineer or provided engineering opinions and all work completed is under the supervision of a professional engineer.

Hold paramount the safety, health and welfare of the public and the protection of the environment. *(Welding competency sample - indicator 5.02)*	Situation: As part of the QA team in the hydro treating area, I volunteered to support an ongoing outage as the assigned nightshift QA. One of the tasks during the outage involved performing gasket seating surface (GSS) inspections on some vessel nozzles, which I had no prior experience with. Task: My objective was to ensure that I could effectively perform GSS inspections by obtaining the necessary training and knowledge, rather than taking on the responsibility without being qualified. Action: I informed my leader that I was not trained in GSS inspections and would need guidance to complete the task successfully. In response, my leader walked me through the process, provided me with reference materials such as ASME PCC-1 and previous inspection reports, and demonstrated how they would perform the task. I used these resources to learn and build my competency in GSS inspections. Results: By acknowledging my lack of experience and seeking training, I was able to develop the necessary skills to perform the GSS inspection during night shifts successfully. This approach ensured that I only took on professional assignments for which I was qualified by training and experience, thereby maintaining the quality and integrity of the work
Hold paramount the safety, health and welfare of the public and the protection of the environment. *(Chemical competency sample - indicator 5.02)*	Daily, when I analyze sulphur samples for odorization, I ensure that the operator who took the sample performed an odorometer test. As per CSA Z-662 odorant in natural gas must be detectable at 1% gas in air for customer safety. This task that I perform aligns with Principle 1 of Aset. This task started in *(month and year)* . If the sample results I obtained are below the threshold limit, I notify operators of the area that the odorizer resides in so that they can make an adjustment.
Accept responsibility for professional assignments only when qualified by training and experience. (1.01) *(Petroleum competency sample - indicator 5.03)*	At *(company name)* I am often asked to put together programs and estimates for a variety of operations. It is my name that goes on these programs and if I am to do something that's incorrect, I have to be ready to except responsibility to both my employers, as well as my clients. At *(company name)* we have a vast line of services that includes heavy haul for decommissioning, as well as N2, among other services. Given that my experience in the oil patch thus far has had less involvement in the heavy haul, and N2 portions of the industry, I except the help from my supervisors when putting these programs together. Before excepting the responsibility of these programs I make it known that I may require assistance as my training hasn't led me to be as technically versed in these two areas. Therefor, I do not except entire responsibility as I do with downhole equipment, coiled tubing, and rigs.

Accept responsibility for professional assignments only when qualified by training and experience. (1.01) *(Chemical Engineering competency sample - indicator 5.03)*	About halfway through the duration of testing, the LM has repeatedly skipped and ignored safety protocols including but not limited to starting the S.W.A.T test without a man-watch or any use of PPE. Management has put a stop on the testing and has reassigned the project to me. During the transition, I was constantly subjected to pressure to perform the test "the old way" by the LM. Threats of me losing my job was made if I don't follow my superiors which violates all safety and quality protocols. It was a risk I was willing to take, then be responsible for fatalities if there was an accidental release. Overall, the client was impressed with the communication and continuous improvement devoted to developing safety systems and using Stop the Work when it was necessary. I took charge of the lab and maintenance of procedures and systems.
Accept responsibility for professional assignments only when qualified by training and experience. *(Civil competency sample - indicator 5.03)*	I have recently been learning WaterCAD and conceptual design of a regional water system expansion. During this project, I worked closely with a professional engineer which had several years of experience in developing water and wastewater infrastructure. I accepted the opportunity to learn this level of design but was clear with my team that I am new and needed supervision and oversight to ensure the proper data was used and implemented.
Provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction. *(Biomedical competency sample - indicator 5.04)*	I always make sure all required tests are completed before returning a device for patient use. If I have questions or doubt, I would always verify with the vendor and my manager. I would seek advice from my teammates and other experts. I would not give personal opinion if I am not sure on the subject and I would re-direct the question to the appropriate team/person. For example, if someone asked for my recommendation on the equipment replacement options, I would only provide the information that we have, and I would ask them to contact the purchasing team directly for more equipment options and information.
Provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction. *(Architectural competency sample - indicator 5.04)*	Several of the projects I have worked on, often include components or elements within a discipline that is outside of my area of expertise. I have to be honest with others if I do not have the proper knowledge to provide an opinion and must consult with the subject matter experts before I can give a response. I do not provide any opinions on these areas outside of my expertise unless I am speaking on behalf of others with their permission and relaying their message.
Act with integrity towards clients or employers, maintain confidentiality and avoid a conflict of interest but, where such conflict arises, fully is close the circumstances without delay to the employer or client. *(Environmental competency sample - indicator 5.05)*	While talking with the contractor, investigation records were made and information was gathered. While communicating the issues with the Permit to Release and Safety issues it was strictly those who needed to be involved, no additional parties. Communications that were made were done so in a confidential manner to avoid any conflicts of interest. The information was kept only available to that hired contractor and files were recorded in a manner that ensured there was no release of sensitive information.

Act with integrity towards clients or employers, maintain confidentiality and avoid a conflict of interest but, where such conflict arises, fully disclose the circumstances without delay to the employer or client. *(Construction competency sample - indicator 5.05)*	During *(year)* while sourcing paint for the seasons pavement marking program I had to maintain confidentiality on the payment from our client for supply coming at cost +15% to our suppliers for any price markup was not added. We also provided a quote summary from multiple suppliers to provide backup that pricing information was not being shared unethically. This was done due to remove any perception that an increased paint price would increase our total revenue from the 15% return on cost from the client.
Uphold the principle of appropriate and adequate compensation for the performance of their work. *(Civil competency sample - indicator 5.06)*	I keep track of my hours spent on each project to ensure these are tracked accordingly and ensure the project is charged adequately for the work performed. I have also been heavily involved in all projects in quantifying the progress claims and reviewing change orders submitted by the contractor to ensure its accuracy and fair payment for the work completed.
Keep informed to maintain proficiency and competence, to advance the body of knowledge within their discipline and further opportunities for the professional development of their associates. *(Information competency sample - indicator 5.07)*	As technology advances quickly, part of my job is to stay up to date with the changes of technology in the world. As such every few years I would request to take courses to advance and update my knowledge on current technological advances. I have previously completed the further education of network security from SAIT, and recently took courses to attempt the A+ certification as well as studying in network+ and cybersecurity so that I can apply that knowledge at work as well.
Keep informed to maintain proficiency and competence, to advance the body of knowledge within their discipline and further opportunities for the professional development of their associates. *(Mechanical competency sample - indicator 5.07)*	As a mechanical consultant, I made it a priority to stay up-to-date on the latest technologies, trends, and best practices in the field. I try to attend industry conferences, seminars, and webinars to learn about new advancements and network with other professionals. In addition I make sure to share my knowledge and expertise with my colleagues and associates. Lastly i have to attend all the trainings and lessons and learns provided by the company.

Keep informed to maintain proficiency and competence, to advance the body of knowledge within their discipline and further opportunities for the professional development of their associates. *(Geoscience competency sample - indicator 5.07)*	This is regarding a email with a company where I have purchased supplies from. This occurred in *(timeframe)* . I received an email from a company we order and rent equipment and supplies from. They were advertising a webinar where they would demonstrate how to use a few instruments and the different uses for them. It was interesting to learn how to use the equipment in new ways and opened some possibilities of how to use the technologies in other ways.
Conduct themselves with fairness, honesty, courtesy and good faith toward clients, colleagues and others, give credit where it is due and accept, as well as give, honest and fair professional comment. *(Electronics competency sample - indicator 5.08)*	In my role on a design team, I conduct myself with fairness, honesty, courtesy, and good faith towards clients and colleagues by actively promoting a teamwork, personal responsibility, and the mindset that the success of others advances the team. I provide fair and honest professional comment by drawing from my technical expertise and experience, while providing transparency around possible biases. An example of this was during the first phase of the *(project name)* project where I gave credit to an Applications Engineer who was responsible for identifying significant gaps in our understanding of the existing system wiring and procedures. I addressed this knowledge gap with my supervisor and commented that the Applications Engineer that should lead the changes to the system wiring required for the project while I focused on acceptance testing and supported them by reviewing changes.
Present clearly to employers and clients the possible consequences if professional decisions or judgments are overruled or disregarded. *(EDDT competency sample - indicator 5.09)*	During one project we needed to design a large series of storm pipes to safely accommodate high runoff flows in the area. The infrastructure required was three one meter in diameter storm pipes. It was clearly communicated to the client that the infrastructure would protect the rest of the development from the damage the storm water could cause if it was not mitigated against. The risk was damage to the proposed infrastructure and potential environmental damage. The client understood this and agreed to follow our professional judgement.
Report to the appropriate agencies any hazardous, illegal or unethical professional decisions or practices by other members, or others. *(Survey and Geomatics competency sample - indicator 5.10)*	It is my duty to report a situation that I believe to endanger the safety or welfare of the public in any way. When surveying I am always scanning for potential hazards and unsafe practices as well. If I do notice any of these I am to report it to the appropriate authority whether it be the safety officer, site supervisor or to the ASET regulatory board as well if it is a regulated member. It is also a duty that I take all measures required to correct or block said conduct that. This does not only apply to the workplace as members hold a responsibility to report unethical practice, unskilled practice and unprofessional conduct if I come across it in another regulated member.

Report to the appropriate agencies any hazardous, illegal or unethical professional decisions or practices by other members, or others. *(Electrical competency sample - indicator 5.10)*	Since graduating and beginning my career as an electrical engineering technologist I have not needed to report any hazardous, illegal, or unethical acts by other ASET or APEGA members. All of my coworkers, along with other engineers I have worked with from external companies, have always held themselves to professional standards. I am always alert, and make sure that these decisions or other decisions made by other people are ethical and ensure the safety of workers, the public, and the environment. Keeping an eye out for public safety is number 1 on the list of the engineering practice, and it is crucial to maintain this high level of standard.
Promote public knowledge and appreciation of applied science, information and engineering technology and protect the Association from misrepresentation and misunderstanding. *(Instrumentation competency sample - indicator 5.11)*	When out in public I do share the good impressions I have being an automation technician with others. Especially with younger people looking for guidance on a career path. I feel like the automation field is one of the fastest growing and most exciting fields to be a part of. I find a positive attitude and some enthusiasm goes a long way to promote the field. I feel like a lot of the general publics concerns about industry can be resolved with technology (energy savings/emissions) and having intellectual conversations about these subjects with people can go a long way to improve the public perception of companies and professional associations alike. Keeping statistics and facts accurate are very important parts of discussions with individuals. Most of the conversations I have with people about technology are constructive and have a net positive outcome.
Promote public knowledge and appreciation of applied science, information and engineering technology and protect the Association from misrepresentation and misunderstanding. *(Construction competency sample - indicator 5.11)*	Through *(timeframe)* I have been the sole ASET member within my project as a T.T. During this time I have educated my colleagues of ASET and the different certifications that are held by its members. I have also explained the different teachings I have received under my engineering technology degree including structural engineering fundamentals, drawings interpretation skills, understanding of project planning, contract administration, and project coordination.
6. Communication Competency	
Describe a situation or activity in which you listened effectively to others and applied the clear and concise use of language and/or media appropriate to the purpose of communication and target audience.	
Indicator	Competency Logbook Entry Examples
Use active listening skills when communicating with others. *(Welding competency sample - Indicator 6.01)*	Listening is key to communication. I use active listening skills daily when in meetings, when having face to face conversations, or during phone conversations. I am usually the individual responsible for problem solving technical issues and it is critical that I listen carefully to ensure I have a full understanding of the problem being presented.

Listen to seek understanding. *(Petroleum competency sample - indicator 6.01.1)*	It is nearly impossible as we all know to understand a situation entirely unless you have listened first. In order to understand the operations taking place on a service rig during my time at *(company name)* , it was imperative for my own safety to ensure I was performing tasks correctly. In order to perform my job specific tasks which started as a green hand and found me relief drilling, it was imperative that I listened to the up most when been shown how to properly use the equipment in front of me. When learning to work the brake handle, my driller would explain to me when, and why you do certain things to ensure both safety and speed. Upon listening in detail to the point that I understood the specific requirements, I then took to the brake handle under close supervision.
Listen to seek understanding. *(Mechanical competency sample - indicator 6.01.1)*	When working on one of the design build school project in *(location name)* . Our piping contractor often suggests an alternative method for pipe routing, this is usually due to cost saving or site situation. I take the time to carefully listen and understand their reasoning behind the suggestion. By doing so, I gain insights into their expertise and considerations, which may reveal valuable information that can enhance the overall design.
Re-state the information to confirm own understanding of what has been said. *(Civil competency sample - indicator 6.01.2)*	This communication tactic has served me well over the years. I regularly apply this method to ensure I have properly understood the situation and will often re-state the information using my own voice and new words to ensure I am on the same page as everyone else around the table.
Re-state the information to confirm own understanding of what has been said. *(Biomedical competency sample - indicator 6.01.2)*	To confirm my understanding of the situation, I would paraphrase the information or summarize key ideas in the meetings. I would restate the key points to make sure that I clearly understood the task requirement.
Clearly communicate expectations to others. *(Geoscience competency sample - indicator 6.02)*	This is regarding a long term project where we have over *(number of sites)* in *(location name)* , separate reports for each site is to be completed each year. Each report needs an Auto-Cad figure to be updated. This particular occurrence was in *(month and year)* . I was writing the annual groundwater monitoring reports for numerous sites, and I needed some drafting of the figures for the reports to be completed. Our company has a small drafting department I could utilize. I drafted an email with clear, concise instructions on: -where to find the drawing files, -where to save the completed figures, -how much time was budgeted for them to complete the drafting, -and when I required the figures to be completed. Our drafting department completed the drafting on time, and on budget for each site.
Clearly communicate expectations to others. *(Chemical Engineering competency sample - indicator 6.02)*	When training new CCOs, especially at the beginning of the training, at the beginning of the shift I review the shift handover and determine the day's activities. Then I let the trainee know how I think the day will unfold and what actions they will need to take.

Communicate complex information in a language that is easily understood by the general public. *(Electronics competency sample - indicator 6.03)*	In my role in the New Product Introduction team, I communicate complex information in a language that is easily understood by the general public by using visual aids like charts or diagrams to explain the high-level concepts and test results, as well as using simple language that isn't overly technical. An example of this was during the *(project name)* project where I wrote the acceptance test report for the verification the battery switch board being tests. The report was reviewed by Engineers of various disciplines, as well as colleagues outside the engineering discipline. I used diagrams to explain test setups and charts to clearly visualize test results. Additionally, I summarized the acceptance criteria and test results using simple language that could be understood by colleagues outside of the discipline. Test results that required an in- depth technical explanation of the results were written in an appendix and noted in the conclusion.
Seek input from others on own work or ideas. *(Chemical competency sample - indicator 6.04)*	During the project kickoff meetings and work procedure drafting, I considered a project's final delivery and how we could approach it. Hence, I consulted research chairs for training resources. I communicated training requirements with project leads. After learning the process, I shared it with technicians and guided them to revise the procedures specific to the project.
Use data and examples to support own ideas and conclusions. *(Survey and Geomatics competency sample - indicator 6.05)*	I conduct analysis on data and processes daily so I have to be able to communicate this effectively with all those in upper management that require these reports. So in my reports I reference exactly the information that I am using for the analysis. I support the analysis by comparing that day of analysis to older sample sets and explaining the differences. I compare any statistics and graphs I have to previously reviewed and quality controlled analysis that I or others have done. To support the conclusions that I make I correlate the graphs and statistics and write out an explanation as to why what I am seeing is occurring and if I am able to I will offer potential solutions.
Use data and examples to support own ideas and conclusions. *(Environmental competency sample - indicator 6.05)*	While working on the *(project name)* project in *(year)* , an *(location name)* based client wanted to investigate a wallmounted solar array as a test pilot, however they were having difficulty in deciding whether or not to proceed with the work. In this instance, I conducted a site assessment to gather facility electrical equipment nameplate data, reviewed building drawings, and created an energy model in a design program called Helioscope. The data generated by this process included monthly energy output values. I then used this data to compare to the facility's electrical energy consumption, and compiled the information in a technical report. My report concluded that deployment of solar on the building façade was feasible from a technology integration and energy performance standpoint.

Respect crosscultural differences when communicating with others. *(Instrumentation competency sample - indicator 6.06)*	On my team, I work with many people from different walks of life and cultures. For me respecting cross-cultural differences when communicating means treating everyone professionally and with the same level of respect. When I keep my communications professional and related to our work, there is almost no opportunity to say or do anything that could be considered offensive. When I do communicate with co-workers on a more social, less official level, I always keep in mind that others may see the world differently and I respect their opinions. I refrain from saying anything that could be misunderstood as offensive or edgy.
Select communication media (e.g.,phone, email, inperson meeting) appropriate to the situation. *(Architectural competency sample - indicator 6.07)*	Since COVID-19 many or most of our communications have moved from being in person to now being done through virtual meetings, or through email. I will have virtual bi-weekly meetings for our projects to discuss the progress, schedule, risks, and safety. High priority or high importance communications that are not brought up in those meetings are done through phone call, and followed up by email so they can be documented.
Use appropriate non-verbal communication. *(Construction competency sample - indicator 6.08)*	Throughout the spring *(year)* , I was directly managing the erection and population of a site based office/crew living complex in an active highway maintenance yard. During this time I assisted in offloading material from a truck due to crew resources being tied up elsewhere. Through this I used non verbal hand signal to the equipment operator to assist in the unload and placement of materials. It was also crucial to keep the operator in the line of site and that all signals were understood prior to the unloading.
Use appropriate non-verbal communication. *(Environmental competency sample - indicator 6.08)*	During the training sessions that I developed and led, as discussed in 6.04, I used nonverbal communication such as the loudness and my tone of voice, professional facial expressions and body language, including gestures to get important information across.
Present one's ideas to others clearly and using appropriate language. *(EDDT competency sample - indicator 6.09)*	When communicating my ideas to others I will consider what words to use when talking. I try to use words that clearly communicate what I am saying. For example instead of saying "Ditches should probably be sloped at something like 2% to have water probably keep flowing." I would say "Ditches should be sloped at 2% to maintain positive water flow."
Record work activities and outcomes (i.e., test data) accurately and at the required level of detail. *(Electrical competency sample - indicator 6.10)*	At the end of my shift, I log work activities such as motor's insulation resistance (IR) test, motor's winding resistance. Every two hours I log electrical substation's ampere, frequency, voltage, and power in order to monitor effectiveness of the system. I record activities at minute details in order to understand the differences in various parameters and mitigate if required.
Record work activities and outcomes (i.e., test data) accurately and at the required level of detail. *(Information competency sample - indicator 6.10)*	During our move to the new office, I built and recorded the data for each tested network cable that lead from the server room to each port in every office and lab, tested each individual port to ensure that they are functioning properly with no noise in the cables. Then I updated the blueprint of our office with numbering of each port to know where each one leads to so that in the future it will be easier to connect and troubleshoot the ports if there are any network issues.

Prepare clear and concise technical documents using appropriate language. *(General competency sample: Materials - indicator 6.11)*	Creating clear and concise material analysis report such as Photomicrograph, Photomacrograph, hardness testing, spark testing, Magnetic particles testing documents using appropriate language.
Prepare clear and concise technical documents using appropriate language. *(Civil competency sample - indicator 6.11)*	During the *(project name)* project in *(year)* , I had to write a technical memorandum to confirm the water usage and demands expected on the newly built reservoir as this would impact the water demands upstream and the local water commission would require this information to ensure their own system setpoints and operations were in place for the additional water demands. The memo was concise and provided the adequate information for the intent required.