The Marwell Tar Pit, located in Whitehorse, is the Yukon Territory's largest single-source hydrocarbon contaminated site. The Tar Pit dates back to the 1940’s when the site was used as a disposal location for waste tar generated from a decommissioned World War II oil refinery. Over the years, the pit became an unpermitted dump site for liquid wastes, and remained exposed until the early 1960’s when it was finally capped with gravel.

Ongoing environmental assessment of the Marwell Tar Pit began in 1990, and in 2011, the governments of Canada and Yukon commissioned a multi-phase remediation project on the tar pit. Milestone and technical partner Iron Creek were awarded a contract in 2018 to complete the cleanup of this legacy contaminated site.

To remediate the tar-saturated soils, Milestone deployed an innovative Enhanced Thermal Conduction (ETC) technology, developed by Iron Creek. Using this unique thermal process, Milestone & Iron Creek were able to effectively break down the recalcitrant hydrocarbons associated with tar. Moreover, soils treated through the ETC process were clean enough to be placed back in the excavation, avoiding the need for offsite disposal of soils. Many challenges were encountered during the remedial program, including technical issues and extreme northern weather events.

This presentation will highlight the successes and lessons learned during the remediation of this challenging site. Finally, it will demonstrate how the ETC process provides a versatile, reliable, and effective solution to treat highly contaminated soils, including tar-saturated soils, and may be utilized on remote sites and in extreme climates.

Josh Howardson
Josh Howardson is a project manager at Milestone Environmental Contracting and has over 18 years of experience in the environmental contracting sector. He has led a wide variety of complex remediation projects including site decommissioning, barrier wall installation, thermal desorption systems, chemical injection systems, contaminated soil excavation/shoring, landfill capping, sediment and lagoon remediation, building demolition, in-situ remediation and disposal of contaminated soils, lead and asbestos abatement, design-builds, engineered water storage/treatment pond construction, and water treatment system operations. Josh’s extensive technical, field and project management experience has resulted in the successful completion of projects ranging from $5,000 to $40,000,000 in value.

Chad Belenky
Chad Belenky is the President of Iron Creek Group Inc. where he is responsible for the management and oversight of all aspects of the business. Chad has been active in the environmental field since 1996 working on energy and resource industry sites throughout Western and Northern Canada. With 23 plus years of experience managing a diverse portfolio of projects, he brings a broad range of experience to Iron Creek. This includes extensive background in both soil and groundwater remediation, all phases of site reclamation, property transfer activities and project management.