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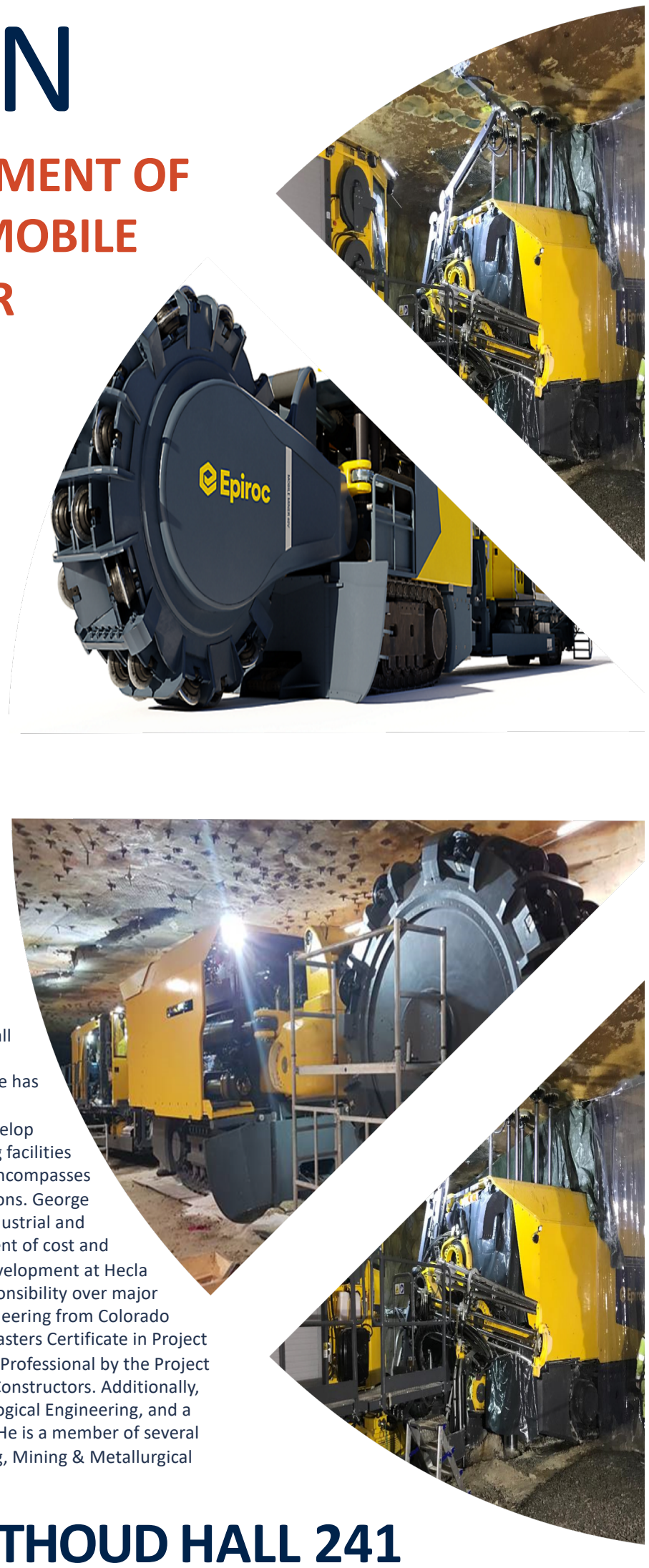
HECLA AND EPIROC: THE DEVELOPMENT OF THE HARD-ROCK, NARROW VEIN MOBILE CONTINUOUS MECHANICAL MINER



November 6th, 12-1PM

Berthoud Hall Room 241

In 2014, Hecla initiated a project investigating innovative technologies being deployed within the mining industry. The objectives of this project were defining and implementing those proven or emerging technologies that could add value to the company from safety, economic and environmental standpoints. As an outcome of this technology push, one of the most distinctive and "home-grown" innovations is a hard-rock, narrow vein mobile continuous mechanical miner being developed jointly by Hecla and Epiroc. This new machine, with its novel design and its potential step-change array of benefits, is currently undergoing performance testing underground in Sweden. In 2020, this 'first of its kind' machine will be shipped to Hecla's Lucky Friday Mine where it will be reassembled underground and begin an extensive site test before full deployment in a production environment. This presentation will describe aspects of the collaborative design process, performance testing, and the wide-reaching preparation underway by the Lucky Friday team to successfully implement and support this game-changing new technology that will reinvent the mine's future.

George Sturgis is a successful executive manager and project management leader with 40 years of experience in engineering, construction, construction management, evaluation, design and overall project management for surface and underground mining and civil operations in the US, Canada, Mexico, Africa, Europe, and Asia. George has a track record of establishing numerous multi-million dollar project management systems and working directly with facility owners to develop efficient budgeting plans and feasibility plans for expansion of existing facilities and the development of new projects. George's executive and project management skillset encompasses project controls, project management plan creation, resource management and field operations. George has subject matter expertise in heavy civil construction, as well as extensive experience in industrial and commercial construction. George pioneered the use of Monte Carlo simulation as a component of cost and schedule risk management planning. George recently retired as Vice President for Project Development at Hecla Mining where he was specifically recruited to lead a newly formed division and hold full responsibility over major project selection and execution. George obtained his Bachelors of Science in Geological Engineering from Colorado School of Mines. He holds an MBA from the Whitman School at Syracuse University and a Masters Certificate in Project Management from George Washington University. George is a certified Project Management Professional by the Project Management Institute and a Certified Professional Constructor by the American Institute of Constructors. Additionally, George serves as an Industry Advisor to the WIPP facility, an ABET Program Evaluator in Geological Engineering, and a member of the Colorado School of Mines Mining Department Industry Advisory Committee. He is a member of several professional organizations including the Association for the Advancement of Cost Engineering, Mining & Metallurgical Society of America, and the Society for Mining, Metallurgy, and Exploration.

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LUNCH WILL BE PROVIDED

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